

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: Findings from the Evaluation of the D.C. Superior Court Drug Intervention Program

Author(s): Adele Harrell ; Shannon Cavanagh ; John Roman

Document No.: 181894

Date Received: April 17, 2000

Award Number: 94-IJ-CX-K011

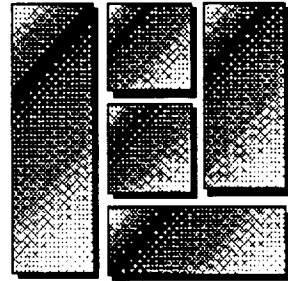
This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

181894

FINAL REPORT

FINDINGS FROM THE EVALUATION OF THE D.C. SUPERIOR COURT DRUG INTERVENTION PROGRAM



The Urban Institute
2100 M Street, N.W.
Washington, DC 20037

May 1999

Adele Harrell
Shannon Cavanagh
John Roman

PROPERTY OF
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000

181894

This research was supported by the National Institute of Justice under Grant No. 94-IJ-CX-K011. Funds were provided by the Center on Substance Abuse Treatment of the Substance Abuse and Mental Health Services Administration of DHHS under interagency transfer. Points of view or opinions in this document are those of the authors, and do not necessarily represent the official position of the U.S. Department of Justice or the U.S. Department of Health and Human Services.

The nonpartisan Urban Institute publishes studies, reports, and books on timely topics worthy of public consideration. The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders.

TABLE OF CONTENTS

CHAPTER 1	
INTRODUCTION	1
The Superior Court Drug Intervention Program	1
CHAPTER 2	
COURT-BASED DRUG INTERVENTION PROGRAMS	4
The Evolution of Court-Based Interventions with Drug-Involved Defendants	4
The Legal Context of Court-Based Drug Intervention	5
The Research Rationale for Specialized Drug Dockets	7
Combining Treatment and Supervision	9
CHAPTER 3	
The Evaluation Design and Methodology	11
The Process Evaluation	11
The Impact Evaluation	13
The Analysis of Costs and Benefits	22
Plea Offers	26
Identifying Drug-Using Defendants	27
The Standard Docket	31
CHAPTER 5	
THE GRADUATED SANCTIONS PROGRAM	35
The Program Model	35
Recruitment	35
Case Management	37
Drug Testing	38
Judicial Monitoring	39
Use of Sanctions	40
Program Retention and Completion	44
Defendant Opinions about the Program	44
Lessons on the Sanctions Program	46
CHAPTER 6	
THE IMPACT OF THE SCDIP GRADUATED SANCTIONS PROGRAM	47
The Impact of Program Participation on Drug Use	48
Reduction in Drug Use during the Year after Sentencing	50
The Impact of the Sanctions Program on Crime	53
The Impact of Program Participation on Other Outcomes	62
Use of Drug Treatment Services	64
Differential Effects of the Sanctions Program	67

CHAPTER 7

THE TREATMENT PROGRAM	69
The Treatment Program Model	69
The Treatment Content	69
Recruitment	71
Judicial Monitoring	76
Treatment Attendance	79
Program Completion	80
Sentences	81
Participant Opinions about the Program	82
Lessons on Court-Based Treatment	85

CHAPTER 8

THE IMPACT OF THE SCDIP INTENSIVE OUTPATIENT TREATMENT PROGRAM	87
The Impact of Program Participation on Drug Use	88
Reduction in Drug Use During the Year after Sentencing	90
Reductions in Self-Reported Criminal Activity in the Year after Sentencing	97
The Impact of Program Participation on Other Outcomes	101
Differential Effects of the Treatment Program	103

CHAPTER 9

PROGRAM COSTS AND CRIME REDUCTION BENEFITS	105
Overview	105
Costs of Operating the Treatment and Sanctions Programs	106
Project Costs	107
Court Costs	108
Partnerships/In-Kind Contributions	110
Total Program Costs	111
Per Participant Costs	111
Benefits of the Treatment and Sanctions Programs	114
Calculating Benefits	115
Estimating the Value of Costs Associated with Criminal Incidence	117
Estimating the Value of Benefits from Averted Incidence	118
Estimating the Value of Costs Associated with Arrest and Conviction	120
Estimating the Value of Costs Associated with Corrections	121
Cost of Prison Sentences	122
Estimated Cost of Jail for Various Crimes	123
Cost of Probation for Various Crimes	124
Average Cost of Conviction for Various Types of Crimes	125
Estimating the Value of Benefits From Averted Corrections Contact	126
Total Benefits of the Graduated Sanctions Program From Averted Crime	127
Cost-Effectiveness	127

CHAPTER 10

SUMMARY AND DISCUSSION 130

 The Standard Docket 130

 The Graduated Sanctions Program 130

 The Treatment Program 133

 The Evaluation Design 134

 Reductions in Drug Use 135

 Reductions in Criminal Activity 135

 Social and Economic Impacts 137

 Influences on Program Impact 137

 Interpreting the Findings 139

REFERENCES 141

GLOSSARY OF RESEARCH VARIABLES 146

APPENDIX A: SUPPLEMENTAL TABLES

CHAPTER 1 INTRODUCTION

The Superior Court Drug Intervention Program

In 1993, the D.C. Superior Court embarked on an ambitious experiment to test court-based interventions for drug-involved defendants.¹ The experiment, known as the Superior Court Drug Intervention Program (SCDIP), was based on a comparison of the drug use and criminal activity of drug felony defendants who were randomly assigned to one of three dockets. The *sanctions docket* offered drug-involved defendants a program of graduated sanctions with weekly drug testing, referrals to community-based treatment, and judicial monitoring of drug use.² The *treatment docket* offered drug-involved defendants weekly drug testing and an intensive court-based day treatment program. The third docket, the *standard docket*, offered drug-involved defendants weekly drug testing, judicial monitoring, and encouragement to seek community-based treatment programs. However, standard docket participants were not allowed to transfer to the dockets offering the graduated sanctions or day treatment programs. Drug-involved defendants were identified on the basis of a positive drug test at arrest and two subsequent drug test failures during pretrial release (or other evidence of drug dependence presented at a pretrial hearing).

SCDIP interventions were designed to develop court-based procedures to routinely identify drug-involved offenders as soon as possible after arrest and encourage drug desistance using a combination of treatment, incentives, and sanctions. Key features of the SCDIP programs include: 1) early intervention, 2) judicial involvement in monitoring defendant progress in the program, 3) frequent drug testing, and 4) immediate access to information on defendant drug use. The two experimental programs tested alternative approaches to these objectives. One provided a comprehensive treatment program designed to provide the skills, self-esteem, and community resources necessary to help drug-dependent individuals leave the drug-using criminal life. Defendants received psycho-educational interventions designed to introduce them to central treatment issues as well as individual and group counseling and supplemental services. Program topics included Substance Abuse, Relapse Prevention, Anxiety/Anger Management, Effective Social Communication, and Ethnic Contributions to Civilization. The other experimental docket closely monitored defendants' drug test results. Failure to appear and test drug free twice each week resulted in the swift and certain applications of clearly defined penalties. In this program, defendants received case management and were referred to community-based treatment if needed.

¹ Funds for the program were provided by the Center for Substance Abuse Treatment (CSAT) through an interagency agreement with the National Institute of Justice (NIJ). The evaluation was supported by CSAT and NIJ.

² The programs were operated by the D.C. Pretrial Services Agency.

Like drug courts, the SCDIP experimental dockets were designed as a pretrial program for drug-involved defendants that encouraged desistance from drug use. However, the two experimental dockets differed in important respects from most drug courts. The SCDIP did not exclude any participants based on prior violence or criminal history. It did not limit participation to addicts, but served a mix of casual users and addicts. There was no early assessment used as a basis for determining eligibility. Thus, the findings need to be generalized to drug courts with care. A second caveat regarding the generalizability of the research findings is that the standard docket used as the control group in this experiment included frequent drug testing and far more judicial supervision of drug use than most traditional courts use in processing drug felony cases. As a result, the experiment actually measures the impact of adding either graduated sanctions or intensive treatment to judicial monitoring and drug testing.

The evaluation is based on SCDIP operations between September 1994 and January 1996. During these months, extensive process, impact, and cost data were collected to provide a basis for assessing the programs and to guide the development of effective court-based interventions. The process evaluation examines the following questions:

- What services and interventions were provided on each docket? By whom and how?
- What policies, practices, and procedures governed who was eligible for the intervention and when and how were services delivered or sanctions imposed?
- How were the intervention programs managed and staffed?
- To what extent were the interventions implemented as planned? What changes in plans were made and why? What obstacles to program implementation were encountered and how were these resolved?
- What was the role of judges? What was the range in judicial handling of cases, particularly in dialogue with the offender and responses to violations? What plea offers were allowed? How did program performance affect sentencing?
- What did defendants think about drug testing, judicial monitoring, case handling and the intervention programs?
- What effect did the interventions have on case flow and use of court resources?

The impact evaluation assesses the extent to which the sanctions and treatment programs: 1) reduced drug use and criminal activity, 2) increased voluntary participation in drug treatment or aftercare following program participation, and 3) improved the economic and social functioning of participants in the year after the program, relative to the standard docket case handling procedures. Questions guiding this portion of the evaluation include:

- Did the interventions reduce the probability of criminal involvement and substance abuse during and after program participation, compared to the standard expedited drug docket?
- Did the interventions produce gains in legitimate employment, family life, and residential stability, compared to the standard expedited drug docket?
- How did features of the services/interventions received -- the type, duration, and intensity -- affect outcomes for offenders?
- Were some types of offenders helped more by the interventions than others?

The impact evaluation also examines the effects of these services on court operations, the costs of resources devoted to the interventions, and the value of benefits to program participation. Questions addressed include:

- How did the interventions affect the use of criminal justice resources -- the duration of cases, the number of hearings, warrants, and days in jail, and the likelihood of a prison sentence -- and what was the cost?
- What treatment and other services were used by defendants in the programs and what was the cost?
- What was the value of benefits identified in the impact analysis and how do the benefits compare to the costs of program operation?

The report is organized in the following way. Background on court-based interventions for drug-involved defendants is presented in Chapter 2, followed by a description of the study methodology in Chapter 3. Chapter 4 describes the standard case processing of drug felony defendants in Washington during the experiment. Chapters 5 and 6 describe the operations and impact of the intensive day treatment program, while Chapters 7 and 8 present findings on the operations and impact of the graduated sanctions program. Chapter 9 estimates the costs and benefits in terms of averted costs of crime for the two intervention programs. Discussion and recommendations are presented in Chapter 10.

CHAPTER 2

COURT-BASED DRUG INTERVENTION PROGRAMS

The Evolution of Court-Based Interventions with Drug-Involved Defendants

Court-based interventions for drug-involved defendants have spread rapidly with the growth of drug courts. Drug courts assign addicted defendants to specialized dockets. They are designed to encourage drug-involved offenders to enter treatment and abstain from drugs. Drug courts began as a grassroots movement in local jurisdictions overwhelmed by rising numbers of drug-related cases and dissatisfied with the apparent lack of effectiveness of traditional case processing procedures. Many drug-using offenders were not deterred by arrest and conviction, continuing their drug use and criminal activity despite increases in the severity of penalties and mandatory minimum sentencing laws in most states. Police and prosecutors reported that a seemingly inexhaustible supply of new drug dealers appeared ready to take the places of those that were locked up, while those not incarcerated moved through the system repeatedly. Corrections officials complained that violent offenders had to be released from prisons to make room for drug offenders. Judges began to speak out against mandatory sentences, arguing that they were arbitrary, inappropriate, and ineffective. Collectively and collaboratively, these agencies began to take steps to interrupt the 'revolving door' of addicts coming through the courts as they were arrested, locked up, released and rearrested.

The first drug court was established in Dade County, Florida, in the summer of 1989 when Janet Reno was the prosecutor. Drug-involved offenders could get their charges dismissed if they completed a one-year treatment program successfully. The idea spread rapidly across the country, facilitated by sentence structure under the leadership of the National Association of Drug Court Professionals. For the last few years, the federal government has been funding new drug courts under the Crime Control Act of 1994. As of June 1998, almost 300 were in operation, 175 were in the planning stage, and 14 additional jurisdictions (covering 48 states, the District of Columbia and Puerto Rico) were considering drug courts (Office of Justice Programs, 1998).

Court-based interventions for drug using defendants vary in how they operate. Some are limited to misdemeanor cases or first time offenders. Others, like SCDIP, accept felony cases and offenders with long criminal histories. Some offer diversion for successful completion. Others offer pleas to lesser charges or, like SCDIP, reductions in the severity of the sentence. Despite wide variation, these programs share the following four characteristics:

- **Offenders are offered a reduction in criminal penalties upon successfully completing treatment and demonstrating through drug testing that they are drug-free.** The reduction in penalties depends on the severity of the charge and the preference of the court. Defendants may be allowed to plead guilty to a lesser charge, or they may be offered a lighter sentence -- probation instead of prison, a shorter time on probation, or even dismissal of all charges. In SCDIP, the judges told defendants that they would be reluctant to consider probation rather than

prison at sentencing unless the defendant could demonstrate they had stopped using drugs.

- **Participation is voluntary.** Defendants can choose to go to trial or serve their time if they don't want to participate in treatment or stop using drugs. In SCDIP, defendants were allowed to remain in the treatment program even if they chose to go to trial. However, sanctions program participants could not continue in the program if they elected to go to trial because different judges handled their court appearances.
- **Drug treatment is made available to the offender and attendance is usually mandatory.** In the SCDIP, defendants in the treatment program were required to attend treatment in the court-sponsored program; those in the sanctions program were encouraged to enroll in community-based treatment programs and received assistance from case managers in gaining admittance.
- **Drug use is closely monitored with frequent drug tests.** In SCDIP, drug-involved defendants were tested at least twice a week and results were made available within a half-hour on the computers located at the bench in each courtroom.

The Legal Context of Court-Based Drug Intervention

Court-based interventions for drug-involved defendants represent a shift from a criminal justice focus on offender punishment to a focus on protecting the community (see McColl, 1996). In drug courts, rehabilitation and punishment are used as strategies for reducing crime in the community. This shift from traditional retributive or rehabilitative models of justice to a social defense model of justice has profound implications for the operational rules and procedures within the courtroom and the agencies with which the courts work.

Under a retributive model of justice, the court determines if the defendant is blameworthy and deserving of punishment and sets an appropriate punishment. Corrections agencies are expected to impose the penalty and law enforcement agencies are expected to apprehend those who do not comply with the conditions of the punishment. This approach is expected to reduce crime through incapacitating offenders and deterring them from future illegal activities once they are released to the community.

Under a rehabilitation model of justice, the court determines if the offender's behavior is illegal and in need of reform. Corrections or treatment agencies are expected to decide which services are needed to achieve reform, provide these services, and monitor progress towards behavior change. Law enforcement agencies are responsible for apprehending those who fail to reform. This approach is expected to reduce crime by resocializing or enabling offenders not to commit illegal activities in the future.

Under a social defense model of justice, specialized drug dockets focus on the protection of society as the central goal of the justice process. The court combines rehabilitation, deterrence, and incapacitation as needed in a coordinated effort to get offenders to desist from drug use and illegal activity. Judicial attention shifts from determining individual blameworthiness to ensuring personal accountability. Minimizing risk to the community gains in importance relative to traditional justice goals of apportioning punishment and blame.

The implications for court procedures are profound. In the traditional adversarial legal system, defendants (through their attorneys) and the state (through prosecutors) follow an objective set of rules. The defendant and the state defend their positions and interests: there are clear cut winners and losers with the outcome determined by a neutral judge on the basis of the facts they present concerning specific criminal acts. In specialized drug dockets, the judge, the prosecutor, and the defense attorney work collaboratively to deliver that mix of treatment and punishment that seems most likely to produce the desired reduction in drug use and criminal activities.

The procedures involve more active judicial monitoring of defendant behavior. Under the rehabilitation and retribution models, the judge focuses on deciding the case and determining a sentence, while others (pretrial services, probation, TASC agencies) assume responsibility for monitoring behavior and reporting violations to the court. In specialized drug dockets, the judge retains a central role in monitoring treatment progress and compliance with requirements. Specialized drug docket judges set clear requirements for reporting and enforcement and may include specific treatment assignments in court orders. The specialized drug docket judge is supported by collaboration from the prosecution and defense, reducing the adversarial nature of the process. Prosecutors often reserve the right to exclude selected cases (high risk offenders, cases linked to other cases, cases with high public visibility such as drug dealing on school grounds), but generally agree to structure plea offers that allow the specialized drug docket to apply a combination of treatment and penalties to achieve drug desistance with most defendants. Defense attorneys usually agree to allowing their clients to enter specialized drug docket if they view their clients as seriously addicted and thus at high risk of recidivism and/or believe their client is very likely to be convicted on the basis of the evidence.

In specialized drug dockets, the defendants have an active role in this collaboration. At the heart of increased accountability is the forging of an understanding between the court and the offender on behavioral requirements and consequences. When specialized drug docket defendants enter into an agreement with the judge, they accept a 'contingency contract' which makes them accountable for participating in treatment and complying with a known set of rules. The rules offer sanctions and incentives which they can control through their behavior (see Inciardi et al., 1996; Pendergast et al., 1995). These arrangements offer offenders the chance for a better "deal," but include the risk of severe consequences, possibly more severe than might otherwise be incurred, for failure to comply with treatment conditions. These agreements increase judicial discretion and the indeterminacy of a sentence, limited by up-front conditions spelled out before the defendant agrees to the program.

The challenge to the courts will be avoiding the risks of indeterminate sentencing and a loosening of the link between the severity of the original offense and the severity of the consequences. Specialized drug dockets must, if they are to succeed, balance efforts to rehabilitate offenders with competing goals of equity in sentencing and punishment commensurate with the offense in severity.

The Research Rationale for Specialized Drug Dockets

Specialized drug dockets have been supported by research indicating that: 1) drug use and crime are related, 2) stricter laws and law enforcement efforts do not sufficiently deter drug offenders, 3) drug treatment is effective, 4) court monitoring can increase participation in drug treatment, and 5) drug treatment is a good public investment. Key findings include:

- **Drug use is directly linked to crime.**

Drug-involved offenders have high rates of criminal activity, with the frequency and severity of criminal behavior perpetrated by the user increasing as levels of personal drug use increase (Anglin & Maugh, 1992; Vito, 1989).

Drug addicts commit more crimes while they are addicted -- some four to six times higher than when they are not abusing narcotics (Gropper, 1985), a pattern that is even more pronounced among habitual offenders (Vito, 1989:65).

- **Higher rates of drug arrests, stricter laws, and more aggressive sentencing policies do not deter many drug users exposed to these penalties.** This leads to a revolving door pattern in which drug-involved offenders appear repeatedly before the courts.

One study found that 60% of federal parolees who were opiate dependent were reincarcerated within six months of release -- virtually all for opiate related crimes -- at a cost of more than \$27,000 per person, per year for incarceration (Metzger et al., 1996).

- **Contrary to popular opinion, drug treatment is effective -- not for everyone and not all the time, but on average it works.**

The Drug Abuse Treatment Outcome Study (DATOS) showed that the percentage using cocaine regularly dropped from 66% in the year before treatment to 22% in the year after treatment among those receiving long-term residential treatment, while the percentage reporting predatory illegal activity dropped from 41% to 16%.

The National Treatment Improvement Evaluation Study (NTIES) found that 40% to 50% of regular cocaine and heroin users who spent at least 3 months in treatment were almost drug-free in the year after treatment, regardless of the treatment type. This five year study of over 4,000 drug treatment clients found large and significant decreases in alcohol and drug use, criminal activity, AIDS risk, and homelessness, and increases in employment, income, and physical and mental health one year after discharge.

At least three major studies indicate that clients who stayed in drug treatment for 3 months or longer reported greater reductions in drug use than those who received less treatment, regardless of treatment type (GAO, July 22, 1998).

- **Criminal justice intervention with drug-involved offenders can increase participation in treatment and reduce crime.**

Studies from the California Civil Addict Program, community-based methadone maintenance programs, therapeutic communities, and drug court outpatient programs found lower rates of crime among offenders who received drug treatment (Anglin and Maugh, 1992; Field, 1989).

An American University survey of the 200 oldest drug courts found that 70% of those who entered remained active in treatment at the end of one year (Cooper, 1998). GAO estimates that 48% of those who enter drug court go on to graduate successfully (GAO, 1997).

In Dade County, drug court defendants were less likely to recidivate and had longer periods to rearrest than other felony drug defendants (Goldkamp, 1994). Treatment combined with urinalysis and court monitoring with sanctions is more likely to be successful than treatment alone (Falkin, 1993).

- **Criminal justice intervention is a good investment of public funds.**

The Honolulu Drug Court estimated that it saved between \$677,000 and \$854,000 in averted prison costs for offenders who would have been incarcerated if not successfully treated (cited in Belenko, 1998).

The Multnomah County Drug Court saved nearly \$2.5 million in criminal justice costs. When savings in victimization, theft reduction, public assistance and medical costs were added, the payoff rose to just over \$10 million (Finigan, 1998).

Combining Treatment and Supervision

Unfortunately, not all drug intervention programs are effective. Research is accumulating on the components required for success. The importance of adding drug treatment to the use of random drug testing and more intensive monitoring of drug felony offenders is highlighted by the RAND evaluation of intensive supervision programs for drug felony offenders on probation or parole. In programs which used small caseloads, strict enforcement of probation/parole conditions, community service, curfew, and random drug testing, a higher proportion of Intensive Supervision Probation (ISP) offenders had technical violations (primarily for drug use), similar rates of arrest, and higher rates of incarceration, compared to a control at one-year follow-up. However, ISP was more successful when programs included treatment. Study of ISP programs in California found that programs that combined treatment with strict surveillance reduced recidivism by as much as 15 percent over surveillance-oriented probation alone, leading to recommendations that treatment be included as part of efforts to reduce criminal activity among drug felony offenders (Petersilia and Turner, 1992; Petersilia, Turner and Deschenes, 1992). Drug court participants in Maricopa County did not differ from traditional probationers in positive urinalysis or recidivism rates following the court intervention (Deschenes et al. 1995). However, these drug court participants had fewer contacts with justice personnel and fewer alcohol and drug tests administered than the control group.

Judges are central to court-based interventions, since they are directly involved in the treatment and supervision of drug court defendants. Not only do judges facilitate cooperation between court officers and agencies in providing defendants with treatment services, but they closely monitor progress in order to provide appropriate sanctions and rewards. Defendants surveyed in the final phases of various drug court programs have indicated supervision and encouragement from drug court judges, along with treatment services and strict monitoring, promoted program success (Office of Justice Programs, 1998).

A unique characteristic of specialized drug docket judges is that they are allowed to act beyond traditional judicial roles in order to develop a more personal relationship with defendants. The psychological impact a drug court judge can make on drug court participants goes beyond the formal court exchange of what is being said, but extends to how it is being said, and to whom. For instance, judges employ a number of tools -- speaking directly to defendants, ordering cases, minimizing noise and distractions in the courtroom, creating a sense of community in the courtroom, and other unconventional methods -- in order to manipulate the 'courtroom theater' (Satel, 1998). Because of the integral and often unconventional role judges play in drug court cases, it has been hypothesized that judges may be more vulnerable to their own biases (Satel, 1998) and that drug court success rates may vary depending on the judge. While these are untested hypotheses, judicial leadership is widely viewed as essential in the success of drug court participants.

Many criminal justice experts argue that the consistently applied rules which are well understood by defendants are critical to behavior change (see Inciardi et al. 1996). If the program is to have a deterrent effect, the defendant needs, by definition, to know what the program is.

Many offenders are unaware of criminal justice policy and practice. This is not necessarily a matter of offenders not being well-read, but that the rules set by the criminal justice system are often obscure, incoherent, ineffective, and even self-defeating (Kennedy, 1997).

Key elements in making contracts between the court and defendant effective in shaping behavior are believed to be: 1) the clarity of the agreement to the defendant; 2) the consistency with which incentives and sanctions are applied (the certainty); 3) the immediacy (celerity) of the penalty or reward; and, 4) the salience of the rewards or penalties to offenders. Graduated sanctions, compliance hearings, and more frequent drug testing have been used to respond to violations of the contract. Similarly, incentives such as ceremonies, token gifts, and reduced intensity of drug testing, monitoring, and treatment have been used to reward treatment progress and compliance with requirements of drug testing. Sanctions that are treatment oriented (e.g., remand to detox or more intense treatment) have been shown to hold great promise (Lipton, 1994; Anglin and Hser, 1990).

Urinalysis plays a central role in the supervision of drug-involved offenders. It can provide objective information on drug problems for use in treatment placement decisions and in monitoring drug abstinence. It reduces denial on the part of addicts and can serve as a check on the risk of releasing offenders to the community. In the District of Columbia, the Pretrial Services Agency found that urinalysis alone reduced the failure to appear rate and provided judges with essential information that often resulted in orders to drug treatment (Visher, 1992). However, system wide drug testing which was not linked to systematic monitoring, sanctions, or treatment was found to have no impact on recidivism in Multnomah County (Cavanagh and Harrell, 1994).

This evaluation extends these findings by examining the use of judicial monitoring, frequent drug testing, treatment and graduated sanctions, and early intervention with drug-involved defendants in Washington, D.C.

CHAPTER 3

THE EVALUATION DESIGN AND METHODOLOGY

The comprehensive evaluation plan for SCDIP includes process, impact and cost benefit analysis. The research procedures are described in the following sections.

The Process Evaluation

Data for the process evaluation were collected from a number of sources. Computer systems maintained by Pretrial Services Agency (PSA) and the court provided data on defendant characteristics, criminal history, case processing and drug test results. These records were used to identify defendants eligible for intervention, describe the defendants, document services received and court actions taken, track drug test results, program compliance, and new arrests. Semi-structured interviews were conducted annually with the judges on each of the three dockets to collect information on: to whom they offered the treatment or programs; how they used drug tests; how they sanctioned defendants who failed drug tests; what information they got from the sanctions and treatment programs on participant progress; and, what aspects of the program they believed to be effective and what aspects needed to be improved. Text comment fields in the computerized records were reviewed for information on treatment referrals and defendant progress.

Qualitative data on court and program operations were collected by research staff who attended court planning meetings, observed the treatment program, case handling in the court room, and progression and graduation ceremonies for the treatment program. Finally, documents were examined to collect information on project activities and costs. These included: progress reports prepared by PSA for funders; treatment program logs and records; and, written procedures and forms used by the court and intervention programs.

To provide insight on the defendants' views of the new court procedures and programs, a series of focus group interviews were conducted. The groups included five to ten participants and two discussion leaders. Topics covered in the focus groups included defendant opinions about: the drug tests; the judge's use of drug test results; drug treatment; and, recommendations on what courts can do to help defendants. Three focus groups, one for each docket, took place on the evenings of November 7, 8 and 9, 1995. Participants were recruited from a list of offenders sentenced on one of the dockets between April 1, 1995 and August 31, 1995 who were eligible for the specialized services on the basis of having at least two drug test failures following their pretrial release. A later focus group with treatment program participants was held on October 15, 1996.

Potential participants for the first three focus groups were contacted by letter and telephone and invited to the interview; treatment program participants were contacted at the treatment program. They were assured that: 1) participation was voluntary, 2) their decision to participate would not affect any services they received or how their case was handled, and 3) no

one at the courts or elsewhere would know whether they participated. They were told that the discussions would be audio taped and used to prepare this report. The authors promised to describe the participants only in general terms (e.g., by age, gender, and drug experiences) and omit specific information which might reveal their identify. To help protect their confidentiality, only first names were used during the discussions and participants were asked to agree not to repeat the discussion outside of the room. Participants were encouraged to ask questions before joining the group, which several did. Incentive payments were given to those who attended.

Efforts were made to recruit focus groups in which a variety of ages, drug use patterns, and court experiences were represented. The four groups included:

- The *treatment docket* focus group, which included seven men, two of whom had been in the SCDIP treatment program. Of the seven, four were high school graduates and three had dropped out of school by the end of eighth grade. Most were in their late twenties or early thirties; two were older. Most were living in a family with children, although two were single, one of whom lived with another family member. According to their pretrial drug test results, five had tested positive for cocaine at least twice, and of these, one was also positive for heroin and one for marijuana. Of the other two, one was positive for PCP and marijuana and one was a very heavy PCP user.
- The *sanctions docket* focus group, which included six men: three high school graduates, one college graduate, and two who dropped out of school after ninth grade. Four lived in families with children, and two were single with children living elsewhere. Their ages ranged from 21 to 78. According to their pretrial drug test results, three tested positive for cocaine, and of these, one tested positive for marijuana and PCP. Another was a heavy heroin user. The three others used marijuana, two in combination with PCP.
- The *standard docket* focus group included one woman and four men, with ages ranging from 19 to 38. One had finished college, the others had finished 11 or 12 years of education. None were living with children. The group included one whose tests showed heroin use and four whose tests showed cocaine use. Two of the cocaine users had also tested positive for marijuana.
- The *treatment program* focus group consisted of three women and seven men. Of these, five dropped out of high school before graduating, two had some post-high school education, and three had high school degrees. Nine of the ten were single and all except two lived with family members. Most were in their early thirties; two were in their early twenties and two in their early forties. All ten were currently enrolled in the Enhanced Drug Treatment Program. The amount of time each member had participated in the treatment program varied. Four had been active in the treatment program for less than one month, four had been in the program less than six months, and two had been active in the treatment program for more than nine months.

The Impact Evaluation

The impact evaluation uses both experimental and quasi-experimental comparisons. Experimental comparisons at the docket level are used to evaluate the overall impact of the sanctions and treatment programs on the drug-felony defendants who entered the Superior Court with indications of drug use. After docket assignment, drug using defendants were offered the opportunity to join the sanctions and treatment programs. Quasi-experimental comparisons of program participants to comparable defendants on the standard docket are used to evaluate the impact of the programs' services on those who received them. Control variables are used to adjust for the potential bias created by self-selection into treatment.

Sample Characteristics

The steps in the identification of drug involved offenders who were eligible for SCDIP intervention and inclusion in the sample are illustrated in Exhibit 3.1. Cases that were dismissed were not eligible for SCDIP services or for the evaluation. In addition, the evaluation excluded cases that had not reached sentencing by the end of June 1997, because there would be insufficient time to follow these cases for one year after sentencing. Fourteen percent of the eligible cases on the sanctions docket, 12% of those on the treatment docket and 9% of those on the standard docket were excluded for this reason. The primary reason why these cases remained open was that the defendants had absconded for extended periods of time.

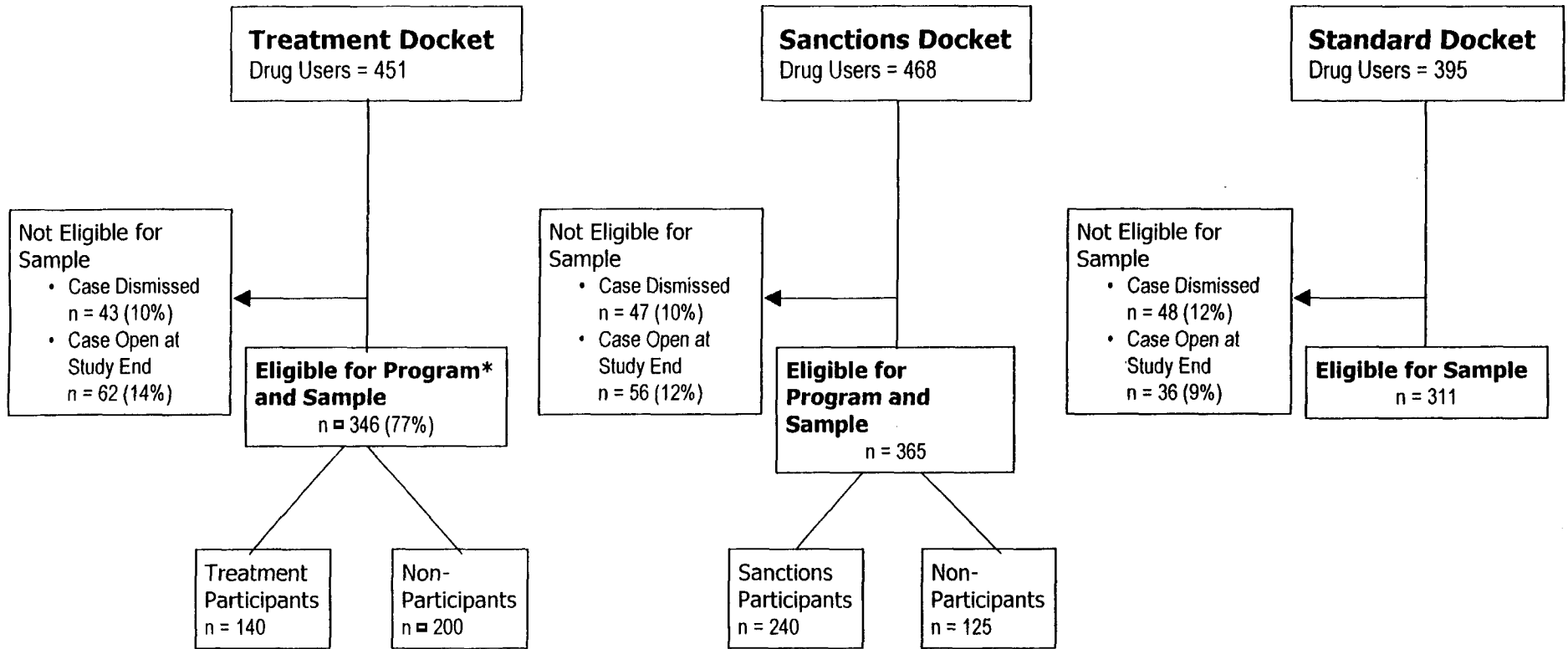
In the evaluation, the experimental comparisons were based on the 1,022 defendants who had new cases randomly assigned to one of the three dockets, became eligible for intervention services between September 1, 1994 and January 31, 1996,³ and were sentenced by June 30, 1997. This sample includes: 365 on the sanctions docket, 346 on the treatment docket, and, 311 on the standard docket. The characteristics of defendants in this sample are shown in Table 3.1.

In the experimental sample, there are no significant differences between dockets in: the percentage of defendants testing positive at arrest; the percentage becoming eligible for intervention based on drug tests; and, defendant characteristics, including age, gender, drug use at arrest, or other characteristics.

The quasi-experimental comparisons were based on 140 defendants who agreed to participate in the treatment program, 240 defendants who agreed to participate in the sanctions

³ This time frame covers the period after start up when the two intervention dockets were fully implemented. The sample is limited to defendants who remained on one of the three drug dockets for at least 30 days. Those who transferred to a trial docket in less than 30 days were not included because they were unlikely to be exposed to the interventions.

Exhibit 3.1. Eligibility for SCDIP Evaluation Sample



*Court and arrest records available for all sample members. Survey data available for sample subset (see Exhibit

TABLE 3.1

Demographic Characteristics of the Full Experimental Sample (N = 1,022)

	Sanctions Docket (n = 365)	Treatment Docket (n = 346)	Standard Docket (n = 311)
Male	89%	88%	85%
African-American	96%	96%	96%
Median Age in Years	31.7	30.1	31.2
Number of Prior Arrests in past 5 Years	0.42	0.54	0.43
In First 60 Days of Case Processing:			
Use of Stronger Drugs	70%	65%	73%
Drug Use Severity	.68	.72	.75

* p<.05. ** P<.01. *** p<.001.

program, and 311 defendants on the standard docket. In this sample, no significant differences between the eligible defendants on the standard docket and participants in the two experimental programs were found in: 1) the percentage of defendants testing positive at arrest; 2) the percentage becoming eligible for intervention based on drug tests; and, 3) defendant characteristics, including age, race and gender (Table 3.2).

TABLE 3.2

Demographic Characteristics of the Quasi-experimental Sample (N = 691)

	Sanctions Program (n = 240)	Treatment Program (n = 140)	Standard Docket (n = 311)
Male	86%	85%	85%
African-American	96%	99%	96%
Median Age in Years	33.0	29.6	31.2
Number of Prior Arrests in Past 5 Years	0.47	0.63	0.43
In First 60 Days of Case			
Use of Stronger Drugs	79%	63%	73%
Drug Use Severity	.69	.74	.75

* p<.05. ** P<.01. *** p<.001.

Treatment docket participants had significantly more prior arrests in the District of Columbia in the last five years, implying that defendants at greater risk of incarceration may have been more willing to enter a program that offered a chance at probation than defendants who believed they might receive probation anyway.

Data Collection

The conceptual framework, shown in Exhibit 3.2, guided the data collection for the impact evaluation. It is used to identify the constructs to be measured and hypothesized relationships between defendant characteristics, services, and outcomes. The first column illustrates the antecedent variables expected to affect offender outcomes and possibly the extent to which defendants would benefit from the interventions. Measures of the defendants' status on these variables at "baseline" (time of arrest) were collected from: court records on number of prior arrests by type of top charge; demographic characteristics (age, gender, employment and education); and, drug use (measured by urinalysis just after arrest and self-reports). Retrospective self-report data on drug use prior to the drug felony arrest and prior criminal activities were collected during a follow-up interview.

The middle column in Exhibit 3.2 illustrates the case handling, interventions, and intervening events expected to influence the outcomes. These include: the docket assignment; the number of hearings with the judge; the days incarcerated; amount and type of drug treatment; amount and type of sanctions imposed; other contents of court orders; and, offender behavior and compliance with orders during this period -- measured by results of urinalysis tests, new arrests by top charge, other violations of orders, and treatment attendance. Retrospective data were collected at the follow-up interview on drug use, criminal activity, and treatment received during this period.

Outcomes measured across the 12 months after sentencing are shown in the column on the right in Exhibit 3.2. Records-based data include arrest information (number by top charge and date). Self-report data include information on: criminal activity; drug use and drug-related problems; continued participation in drug treatment or aftercare (including NA/AA); social functioning; employment; and, education or training.

Data were collected to operationalize the framework in a variety of ways. Computerized program records were collected from the MIS maintained by PSA on: defendant demographic characteristics; program status; sanctions hearing outcomes; and, drug test results. These records were used to identify program participants, sanctions imposed, and drug use. Records collected from the Superior Court MIS system include the primary drug court case hearings and final dispositions and sentences. Records were also collected on cases filed during and/or after the

EXHIBIT 3.2 - Conceptual Framework

Background Factors

The Person

Age
Sex
Employment status
Race

Drug Use History

Prior Drug Use
Prior Drug Treatment
Drug Test Results prior
to interventions

Criminal History

Prior Arrests and
Convictions
Prior Criminal Acts

The Interventions

Program Participation

Type
Duration of Treatment
Compliance/Attendance
Status at Completion
Treatment Referrals

Court Monitoring

Number and timing of
hearings
Warrants
Use of Sanctions
Sentencing

Docket Assignment

Outcomes at Sentencing

Drug Use

Drug Tests in Month
Before Sentencing

Outcomes One Year After Sentencing

Criminal Activity

New Arrests - Any/Number
Criminal Acts
Days to First Arrest

Drug Use

Any Drugs
Types of Drugs Used

Drug Treatment

Type of treatment after
sentencing

Social/Economic Functioning

Employment status
Income
Education/Training
Drug-Related Problems

primary drug court case entered the criminal justice system. These records were used to determine the primary drug court case disposition and sentencing as well as track subsequent arrests in Washington, D.C. following the start of the intervention. Because many Washington, D.C. arrestees live in neighboring states, data were collected from the FBI Uniform Crime Reporting system on defendant criminal history and recidivism to ensure that criminal activity outside of Washington could be included in the analysis.

Records collected from the MIS maintained by the PSA's court-based treatment program were used to measure attendance and the level of participation in the treatment sessions. Records collected from the D.C. Department of Corrections provided dates of incarceration for each defendant from arraignment through the year following sentencing and were used to control for differences in amount of time available for re-offending and using drugs.

Interviews with defendants were scheduled for one year after sentencing. The questionnaire was adapted from the 1995 National Survey of Probationers sponsored by the Bureau of Justice Statistics. Defendants were asked about the offense that led to their involvement in drug court; criminal activity; alcohol/drug use and treatment in their lifetime and since their drug court sentence; and, social functioning. A copy of the questionnaire is provided as an attachment to this report. The field work for the follow-up survey was conducted by the Gallup Organization. Interviews were conducted either in the respondents' homes or in jail if the respondents were incarcerated. Survey participants received \$20 upon completion of the one-hour interview. The human subjects protections for survey participants included an informed consent procedure, guarantees of confidentiality, pledges by all research staff to maintain confidentiality and an approved data security plan. Gallup project staff and interviewers were blind to the respondents' docket assignment.

The sample eligible for interview included 808 (79%) of the sample of 1,022. Those not eligible for interview included: 112 defendants not sentenced before December 1, 1996; 58 defendants were on bench warrant status throughout the survey period (not assigned for interview due to concerns about interviewer safety); 25 were confirmed to have moved out of the greater Washington metropolitan area; 16 were deceased; and, 3 were not mentally competent to complete the interview (see Exhibit 3.3). Although the full sample includes respondents who were sentenced between December 1, 1996 and June 30, 1997, survey schedule required that we eliminate the 112 defendants sentenced in that time period.

Interviews were completed with 482 (60%) of the 808 defendants who were eligible for interview; 33 (4%) refused to be interviewed, and 283 (35%) could not be located, despite repeated efforts which included contacting their probation officers, offering extra incentives for calling in, and contacts with family members. The field locating procedures and results are described in the Evaluation of the Superior Court Drug Intervention Methodology Report (The Gallup Organization, 1998).

Table 3.3 describes the characteristics of the defendants who were interviewed.

Exhibit 3.3. Survey Respondents by Docket

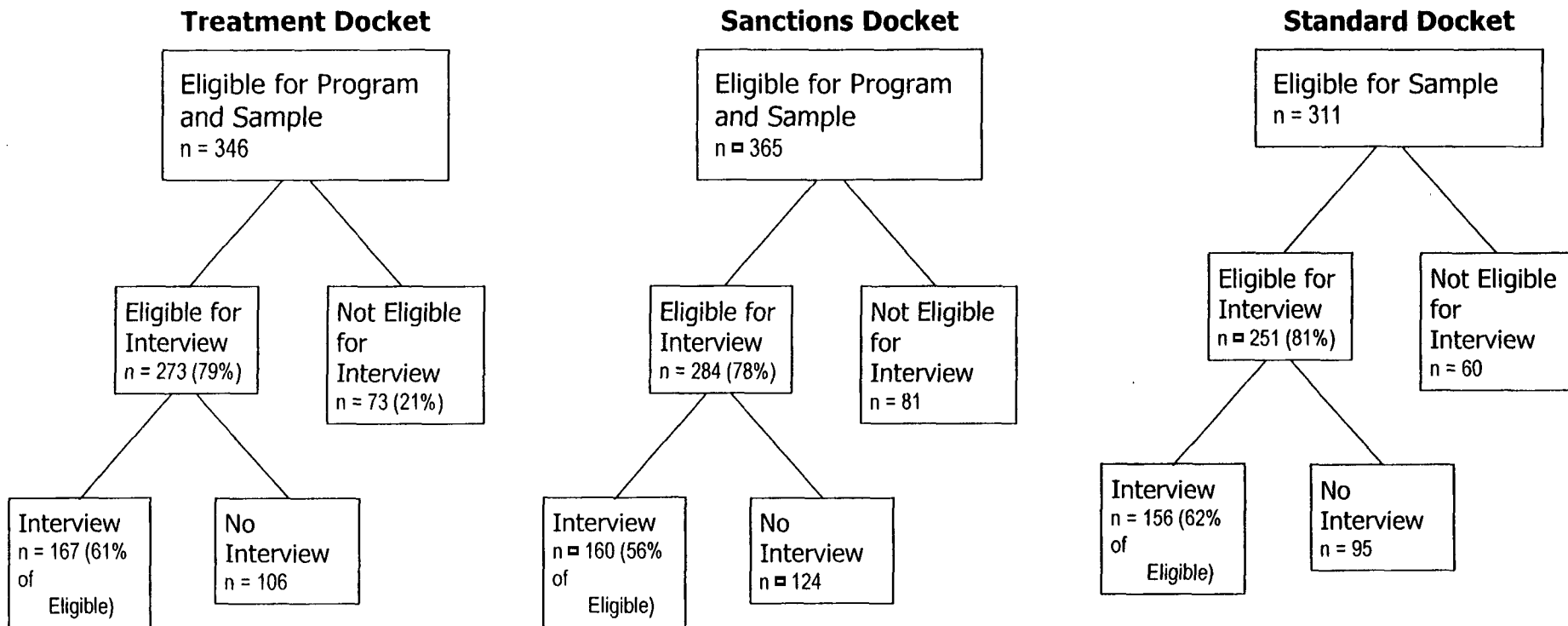


TABLE 3.3
Demographic Characteristics of Interview Sample (N = 482)

	Sanctions Docket (n = 160)	Treatment docket (n = 167)	Standard Docket (n = 155)
Male	88%	88%	84%
African-American	99%	97%	96%
Median Age in Years	32.3	30.9	30.9
Number of Prior Arrests in the District in past 5 Years	0.58	0.58	0.39
In First 60 Days of Case Processing:			
Use of Stronger Drugs	71%	66%	69%
Drug Use Severity	.70	.73	.74
Program Participants	69%	41%	N/A

Extensive analysis of non-response included two tests of the external validity (generalizability) of the sample: 1) a comparison of those who were interviewed to the full sample of 1,022 defendants to determine if the sample is representative of the pool of eligible defendants, and 2) a comparison of the respondents and non-respondents within the group assigned to interview. Compared to the full sample, survey respondents were significantly more likely to be black and had significantly more prior arrests. Among those assigned for interview, respondents were more likely to be black than non-respondents. Based on these findings, weights are used in the analysis to adjust the sample characteristics of those interviewed to those of the full sample of 1,022 defendants. Weights were constructed using a logistic regression to create estimates of the likelihood of a defendant responding to the survey, controlling for age, gender, employment at the time of arrest, prior convictions, use of stronger drugs, and drug use severity. The predicted likelihood of participating in the survey (α) ranged from .38 to .67, with a mean of .54, and α was not significantly different from the actual likelihood of responding (.53). The weights were then adjusted to a factor of $1/\alpha$ to reflect the distribution of the characteristics of the entire pool of potential respondents. These adjusted weights were used in all analyses of survey data.

To examine threats to the internal validity of the comparisons based on the survey sample, the attrition analysis tested for differential response by docket. Respondents on the treatment docket had significantly more arrests and convictions than standard docket

respondents; and, sanctions respondents were significantly more likely to have prior violent arrests than standard docket respondents. These differences were observed at the docket and program participation level as reported above, suggesting no additional differences in demographic characteristics were introduced by the survey attrition.

Data Analysis

The analyses used two approaches to assess the impact of SCDIP. The first approach involved a traditional “intent to treat” analysis of the effects of SCDIP on the entire target population of defendants on each docket who met the study criteria. These analyses were based on true experimental comparisons of the three dockets. The results indicate the overall impact of a policy of offering these programs to an eligible population. However, this approach does not answer the equally, or perhaps more important, question of the impact of the experimental programs on participants. The second approach involved comparison of the participants in each treatment with the standard docket. These analyses were based on quasi-experimental comparisons of the two dockets. Taken together the two approaches can be used to infer: 1) what was the overall impact of the program given the observed rates of participation and graduation, and 2) what was the impact of the program on those who agreed to participate.

Both approaches were used to test the research hypothesis that participants in the intervention programs have lower rates of criminal activity and drug use, improved social functioning, and greater involvement in work and education in the year after the intervention than defendants assigned to the standard docket. The estimation models, in their simplest form, can be expressed as:

$$(1) Y_i = f(b_0 + b_1 X_i + b_2 G_i) + u_i$$

where Y_i is the outcome for individual i ; X_i is a set of variables measuring nontreatment (control) variables expected to affect Y_i ; G_i represents group (treatment docket, treatment program, sanctions docket, sanctions program or standard docket); and, u_i is a random error term. The b 's are parameters to be estimated, with b_2 providing an estimate of the impact of the intervention on outcome Y_i . To identify subgroups of offenders for whom an experimental program is especially effective (or ineffective), selected terms are added to the model to test for interactions between some antecedent variables, X_i , and group, G_i .

Control variables, X_i , are used to remove the effects of variation in group composition that occur despite randomization at the docket level. (Key differences in group composition are described earlier in this chapter). In the absence of random assignment to the sanctions or treatment program, offenders with more severe drug problems may be: 1) more likely to fail drug tests and thus experience greater exposure to treatment and graduated sanctions, and 2) more likely to have poor post-program outcomes. To be able to distinguish program effects from the effects of characteristics of defendants at program entry, the analysis controls for differences in defendant age, gender, criminal history (any prior conviction), severity of drug use (percentage of drug tests dirty in the first 60 days after arrest) and employment status

(employed/unemployed). All results shown throughout the report are based on multivariate models that control for these factors.

The analysis uses multiple estimation procedures, depending on how the dependent variable is measured and assumptions about the distribution of the variable and dynamics of the process to be modeled. In general, logistic regression models are used to model binary outcomes during the year after program completion. Where the distribution of the dependent variable are censored, as is the case in some categorical survey items (such as the number of drug crimes committed where one value is censored to include 'more than fifty-one'), a tobit regression model is used to create estimates for the censored value, and these estimates are included in the regression models used to model outcomes. Where the underlying distribution of the dependent variable is assumed to be exponential, and the dependent variable includes zero values (such as number of arrests after sentencing), poisson regression models are used. Duration models are used to estimate the proportional hazards of days to first arrest. This model was selected to: accommodate censored data (cases that have not failed within the period of observation, but may); accommodate differences in opportunity to fail (which will allow us to control for periods of incarceration); and, represent changes in the likelihood of failure across time.

The Analysis of Costs and Benefits

The analysis of costs and benefits associated with the Superior Court Drug Intervention Program: 1) creates a framework for developing estimates of costs and benefits associated with Drug Court interventions: and, 2) estimates net benefits that accrue to the criminal justice system as a result of these interventions. This analysis is closely linked to the impact evaluation, and uses both the same conceptual framework in determining key outcomes, as well as the same primary data sources. The magnitude of net reductions in criminal justice contact are derived from official records data and self-reported data from the participant survey. The monetary value associated with these reductions is derived from secondary sources.

The project was designed to estimate only the benefits associated with averted crime. As a result, several potential benefits of these programs are not included in the estimation of benefits, including: improved health of program participants (through decreased use of publicly-funded medical care), increases in tax collection resulting from greater employment by participants, and increases in child-support payments that lessen the public burden. The evaluation collected information on some of these outcomes, but did not gather the detailed data needed to value these benefits. However, in conjunction with this evaluation, a separate report (Roman, Woodward, Harrell, and Riggs, 1999) recommends methods of data collection and methods for estimating the value of potential benefits. As the report indicates, the value of these excluded benefits may be quite large, particularly in the area of reduced health care and child welfare costs.

In addition, because the cost-benefit literature used to derive benefits associated with averted crime is incomplete, not all criminal justice benefits are included here. The most notable exclusion is the value of averted pain and suffering due to reductions in crime. This decision

reflects the difficulty of assigning appropriate monetary value to such losses.

The analysis used a modified cost-benefit methodology to evaluate SCDIP. There are generally three approaches to measuring economic gains from social programs: cost-benefit, cost-effectiveness, or cost offset. A cost-benefit approach analyzes the total economic costs and benefits resulting from the operation of a single program, culminating in both an estimate of the change in net social welfare and a cost-benefit ratio that is used to identify relative 'efficiency' of two or more programs. Cost-effectiveness analysis is a comparison of programs in terms of cost per outcome, rather than costs and benefits ('dollar' benefits are generally excluded entirely from this type of analysis). Relative cost per outcome is then used to compare the relative effectiveness of programs. Cost offset analysis, an approach akin to the averted cost measures used in cost-benefit analysis, yields relative net benefits from cost offsets for particular benefactors by program.

This analysis takes a different approach, incorporating elements of all three methods, yielding an estimate of the *relative* costs and benefits of SCDIP. Relative costs and benefits are defined as the *difference* in net benefits associated with the two experimental dockets operated by SCDIP compared to the standard docket. Rather than the traditional cost-benefit approach of calculating total marginal net benefits of each of the three SCDIP dockets, this analysis measures net benefits of the experimental programs relative to the costs and benefits associated with a wholly separate program, the standard docket.

This approach was selected for four reasons. First, this method most closely models the experimental design of the impact evaluation, where effects are measured as the difference in outcome between participants and those on the standard docket. Second, because this evaluation attempts to measure changes that result from these 'new' programs, this method offers the best means of isolating new and additional costs and benefits. Third, given that so much of the costs, especially fixed costs, of these three programs were shared, analyzing all three programs separately would be redundant. Fourth, this approach provides estimates from the perspective of the criminal justice system and the public, who were the intended beneficiaries of SCDIP.

Many cost-benefit analyses include the costs and benefits received by the entire society, as does this evaluation, with two exceptions. First, the analysis excludes the benefits and costs that accrue to participants. This decision reflects our focus on the policy question of whether the investment in the programs serves the public that the justice system is charged with protecting. From this perspective, the potential costs and benefits to offenders are of less interest. Second, this analysis does not measure changes in aggregate net social welfare that may accrue as a function of the program. If, for example, SCDIP is so effective that decreases in criminal justice spending lead to decreases in taxation, those changes would not be captured in this analysis. Instead, the recipient of program benefits are assumed to be public payors, which implicitly includes the general public, net of program participants. Potential beneficiaries include the D.C. Pretrial Services Agency, D.C. Superior Court, the Department of Human Services, the criminal justice system, potential crime victims, the defendants, taxpayers, and other members of society.

Costs described in this analysis were generated using an economic cost approach. Economic cost refers to the opportunity cost of a resource, where opportunity cost is the cost of not using a resource in its highest valued use. Resources are therefore valued at the market price, regardless of the actual price paid for that resource, even if there is no market with which to value that resource (such as the value of life) or if the resource was received at a below market price (such as an in-kind gift or a subsidized price). Unlike cost accounting, which measures revenues and expenditures, economic analysis allows for measuring the value of *averted* costs (benefits). Economic cost analysis therefore allows for more generalizable results, and is both more valuable to other jurisdictions deciding whether to implement a similar drug intervention program and more likely to estimate values that are not biased by circumstance.

The costs of operating the program were borne primarily by the D.C. Pretrial Services Agency, D.C. Superior Court and the U.S. Attorney's office, and other public agencies that provided services for offenders. Where possible, primary research was used to collect information associated with each cost category using an economic cost approach. Costs are collected for the 1995 calendar year, and are measured as the difference in the use of resources between the standard docket (old costs) and the treatment and sanctions docket (new costs). As such, no estimate of standard docket costs was calculated. These costs are then inflated by a factor of $1/n$, where n is the proportion of total program days that occurred in 1995 (i.e. the number of SCDIP experimental participant program days in 1995 divided by the total number of program days).

To date, there is no 'gold standard' in benefits estimation, but the most common method of estimation has been victim compensation, which is the approach used in this analysis. Victim-compensation or willingness to accept is the aggregated amount that would have to be paid to a victim to compensate them for their tangible and intangible costs. Victim compensation is estimated using a cost of illness approach, which uses survey data to aggregate the tangible cost of crime (including health and lost productivity, in the form of discounted future earnings). As Rajkumar and French (1996, p.296) note, this method tends to underestimate true costs because no intangible costs (pain and suffering, fear) are included in the estimate. However, given the high degree of uncertainty in measuring intangible costs, they are excluded from the analysis.

Analysis of net benefits was limited to information about impacts measured during the year after sentencing and does not capture long-term benefits resulting from the intervention. No effort is made to extrapolate crime reductions observed in the year after sentencing to subsequent years. However, later year benefits to reduced crime in the form of averted costs of criminal justice case processing and corrections is counted at an appropriately discounted rate because these are associated with the crimes averted during the follow up year. For example, if an averted robbery yields a mean averted prison sentence of two years, only eight months of which fall into this program's time frame, the amount of the remaining portion of the sentence that would have been spent in prison as a consequence of the averted crime is counted as a benefit.

As is generally the case, benefits calculations involve a more complex process. First, the findings from the impact evaluation were used to determine whether significant differences existed between standard docket members and experimental program participants with respect to incidence and prevalence of crime. Once this relationship was established, a multi-step process was used to create monetized estimates of the benefits associated with these reductions in crime as follows:

Step 1. The potential cost savings associated with each type of crime and type of event were estimated. These included the costs of victimization from an incident, the cost of an arrest, and the cost of case processing and corrections, given arrest. These costs were derived from secondary research on costs of crime.

Step 2. Estimates of the reduction in criminal victimization were based on self-report data on criminal activity collected in the survey of defendants one year after sentencing. The likelihood and number of arrests were derived from official arrest records. The likelihood of prosecution, conviction and incarceration were based on secondary data from national data sets.

Step 3. The benefits of the programs were calculated as a product of the number of averted crimes times the cost of the crime. When the number of crimes committed by the experimental groups exceeded those committed by the standard docket defendant, their value was subtracted from the potential benefits.

Overall net benefits were calculated as the difference between net costs and net benefits.

CHAPTER 4

OVERVIEW OF DRUG FELONY CASE HANDLING DURING THE SCDIP EXPERIMENT

The experimental interventions built on specialized drug case management systems the Court established in 1992 to expedite the handling of drug cases. The Court restructured the 12 felony calendars that handled mostly drug felony cases into three court clusters. Each cluster consisted of a master calendar and three trial calendars. The new system was designed to shorten case processing time by restructuring case calendaring, establishing fixed plea offers, and developing firmer trial dates for cases not resolved by plea.

Each master calendar handled a third of all drug felony cases and acted as a clearinghouse for the initial and intermediate events associated with each case. For SCDIP, each docket offered a different program. Defendants arrested on felony drug charges were randomly assigned to one of the three master calendars following arrest (prior to first appearance). They were not allowed to transfer to another master calendar or enter a program offered on another calendar docket. If they accepted the plea offer, they remained on the assigned docket through sentencing; if they declined, they transferred to one of the trial dockets. Judges rotate annually from one assignment to another in the Superior Court. As a result, each docket had three different judges during the SCDIP experiment.

The experiment introduced significant changes to court processing of drug felony cases. Although the experiment "piggy-backed" on the expedited case processing plan, using the three clusters of calendar and trial dockets and the practice of random assignment to a cluster, the goals of the expedited docketing and experimental intervention programs were different and in some ways contradictory. The primary goal of the expedited dockets was more timely disposition of drug cases. The expedited docket plan includes immediate assignment to a docket, prompt scheduling of arraignment and early indictments, and a single, early plea offer. These procedures were design to reach a case disposition as soon as possible. The primary goal of the intervention programs was to assist drug-involved defendants attain abstinence prior to sentencing through frequent drug testing, enhanced judicial monitoring, and other services. The two experimental programs offered case management and other services described in the following chapters. The process of identifying eligible clients and offering them the opportunity to demonstrate drug desistence prior to sentencing required additional time and slowed case disposition.

Plea Offers

On each of the three dockets defendants were offered a plea early in the process following arraignment or preliminary hearing. The plea offer was made before the master calendar judge, typically at the first status hearing. Pleas were not offered at arraignment or the preliminary hearing and were not negotiated after the first offer. If the defendant accepted the offer, he or she remained on the docket and had the same judge throughout the pretrial phase of the case and

sentencing (regardless of whether they were eligible for, or accepted, any special services offered on their docket). If the defendant failed to accept the offer, he or she was randomly assigned to a trial docket.

The repeal of mandatory minimum sentences for drug felony convictions in April 1995 reduced the willingness of defendants to accept plea offers and remain on the calendar dockets. Prior to the repeal, defendants convicted of distribution or possession with intent to distribute a controlled substance (PWID) faced a minimum four-year prison term. The sentence was determined by the offense and number of prior convictions. For example, a first-time defendant convicted of possessing cocaine with intent to distribute faced a mandatory term of four to 12 years in prison, while a defendant with three prior convictions charged with possessing heroin with the intent to distribute faced a mandatory term of 10 to 30 years in prison. Following the repeal of the mandatory minimums, defendants found guilty at trial could still face up to 30 years in prison, but were no longer guaranteed a minimum prison term. This encouraged some defendants to try their luck with a trial which might result in probation even if they were found guilty. To encourage defendants to accept the early plea offer after the repeal, the government retained their previous plea offer structure, but agreed to ask for no more than one to three years of prison time at sentencing if the defendant accepted the offer.

The change in the mandatory minimums did not appear to affect defendants on the experimental dockets differently from defendants on other dockets. The percentage of defendants accepting the offer declined on all dockets, but there were no significant differences between the experimental dockets and the standard docket in the percentage transferring to a trial docket.

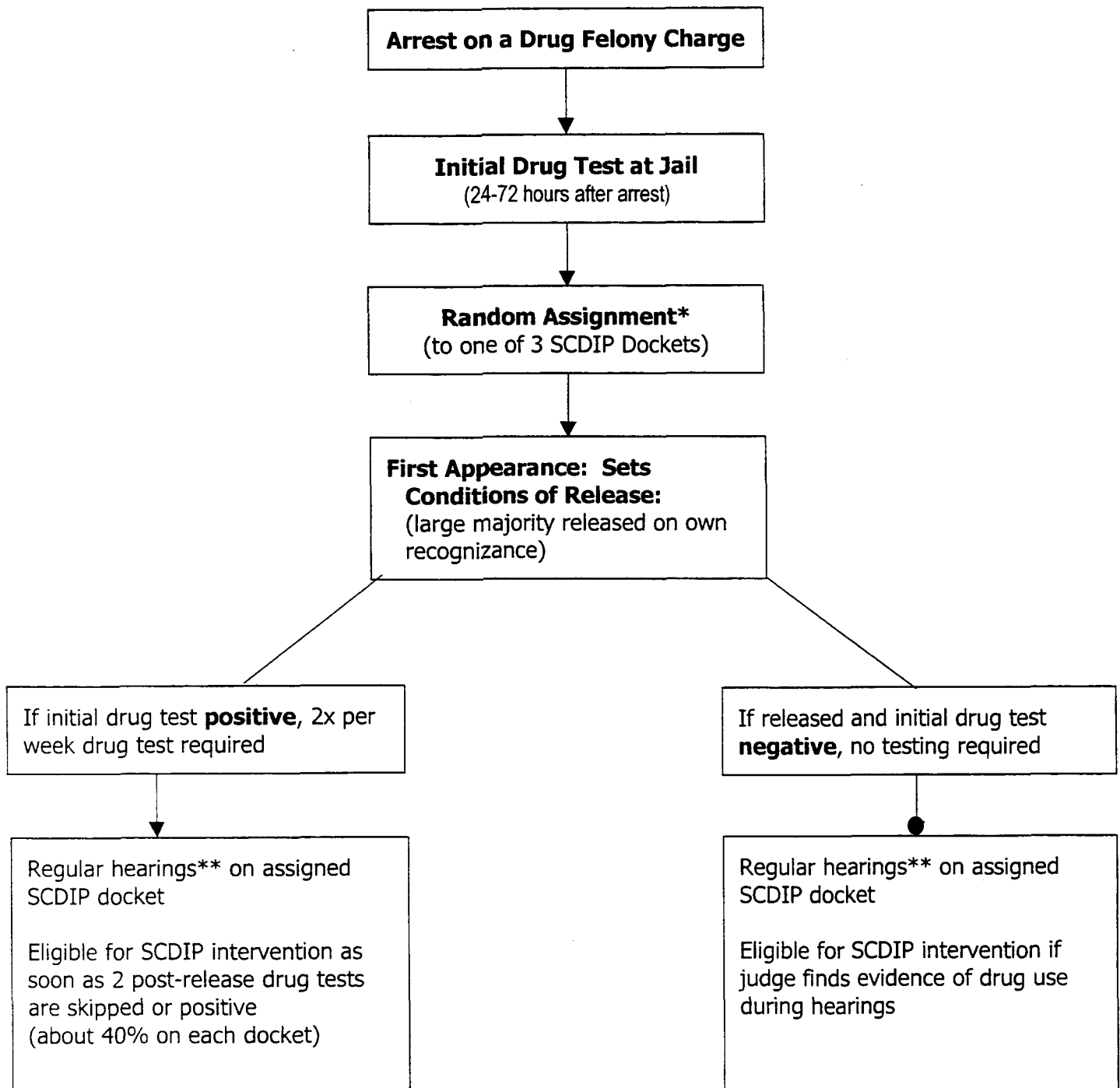
Identifying Drug-Using Defendants

The identification of drug using defendants relied primarily on drug testing. The process is illustrated in Figure 4.1. In Washington, defendants arrested and detained were routinely tested for drugs by the Pretrial Services Agency (PSA). The post-arrest drug test was usually conducted within 24 hours of arrest. The results of this test, combined with the results of the PSA interview, were used by PSA staff to prepare recommended conditions of release. PSA recommended twice weekly drug testing as a condition of release for all defendants who tested positive at arrest or reported current drug use in the PSA interview. A magistrate set release conditions at a felony presentment hearing, held within 48 hours of arrest, usually following the PSA recommendations.

Drug testing took place at PSA's highly automated laboratory located in the court house. The laboratory used EMIT urinalysis to test for a full screen of drugs -- cocaine, marijuana, PCP, and heroin.⁴ The state of the art technology included picture identification of defendants, supervised submission of samples with a guaranteed chain of custody, and quality control

⁴ The amphetamine screen was dropped on July 12, 1995 due to extremely low levels of use.

Exhibit 4.1. Case Identification for SCDIP Interventions



*Defendants were not allowed to transfer to another SCDIP docket.

**Plea offers were made at regular docket hearings and could occur before, after, or at the same time a defendant became eligible for SCDIP and the program after was not contingent upon acceptance of the plea. However, if the plea was rejected, defendants transferred out of the SCDIP dockets to a trial docket.

procedures managed by an on-site laboratory supervisor. Test results were automatically transferred into a sophisticated MIS system which had information on the defendant and the case. Computers located at the bench in each court room made the results available to the judge within one-half hour of a test. Judges on all three dockets frequently referred to the MIS screens during hearings. Disputed results were confirmed by gas chromatography.

As part of SCDIP, PSA staff regularly reviewed the drug test results of defendants prior to each hearing and flagged the files of those who tested positive for drugs at arrest and failed two drug tests as eligible for intervention. Drug test failures, referred to as bad outcomes in our analysis, included positive tests, missed tests, and submission of tampered urine samples. The arraignment hearing, scheduled three to four weeks after presentment, was the first hearing on the master calendar and the first hearing during which an eligible defendant could be invited to join the program. Thereafter, status hearings occurred about once a month and defendants could be identified as eligible before any one of these hearings.

The two intervention dockets made additional efforts to identify and offer services to drug-involved defendants who had not yet failed two post-release drug tests. Information presented during a hearing indicating that the defendant wanted drug treatment, had a history of drug possession charges, or used drugs regularly was used as a basis for offering the program to defendants.

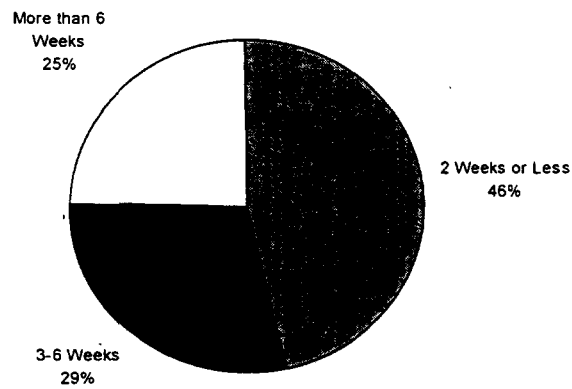
Defendants were dropped from program eligibility if their case was dismissed. Defendants on the sanctions docket were dropped from the program (or were not invited to join) if they transferred to a trial docket. This was done because the sanctions judge would no longer be regularly reviewing their drug test results and thus could not intervene with graduated sanctions prior to sentencing. A few defendants in the treatment program were allowed to continue in treatment while appearing on the trial docket, but were not included in the evaluation sample. Defendants who became eligible for treatment after transferring from the trial docket were not eligible to join.

Using drug tests as the primary strategy for identifying defendants in need of intervention proved to be a useful strategy, given the heavy caseloads of the courts. While waiting for defendants to fail drug tests is not as fast in identify drug users as an immediate clinical assessment would be, it was considerably less resource intensive. Most of those who were ever identified as eligible for SCDIP were identified within a month of arrest. The average number of days to eligibility was 37, but half became eligible within 19 days of arrest. However, some drug-involved defendants were not identified for a relatively long time. About 40% of the defendants on each docket were identified as drug users eligible for intervention based on their drug test results. As Figure 4.2 illustrates, there was no significant difference across dockets in the time to eligibility based on drug tests, with over 70% of the eligibles identified within six weeks.

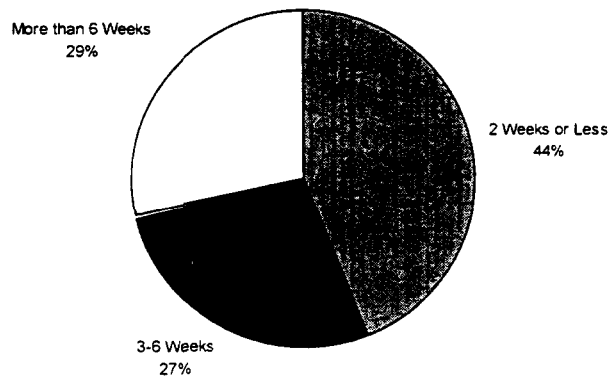
In addition to test results, the two experimental dockets offered services to defendants

Figure 4.2. Weeks to Identification of Drug Using Defendants by Docket

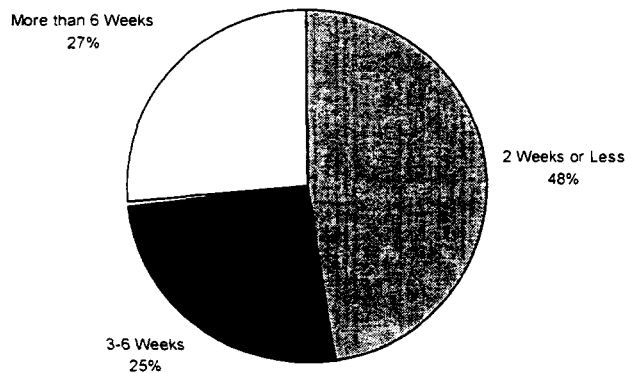
Sanctions Docket Time to Eligibility



Treatment Docket Time to Eligibility



Standard Docket Time to Eligibility



identified as drug users during status hearings based on testimony presented on their behalf by their attorneys. Five percent of treatment docket eligibles and six percent of the sanction docket eligibles were identified in this way. On the standard docket, the drug test results alone were used to identify drug users for the comparison sample.

The Standard Docket

The standard docket offered more intensive supervision of drug felony defendants than most courts and, as a result, should not be considered a true control group or representative of a "no intervention" condition. On the standard docket, drug-using defendants were tested twice a week for drugs and the judge usually referred to these results during status hearings. Although the standard docket judges did not sanction positive or skipped drug tests or offer defendants immediate access to treatment, they did have drug test results and used them to encourage desistance and participation in community-based treatment. This level of intervention goes well beyond that normally provided in criminal courts and may have helped some defendants reduce their drug use and/or enter treatment. To the extent that this occurred, the SCDIP evaluation which uses this docket as the comparison group may underestimate the impact of the graduated sanctions and intensive day treatment programs.

Standard docket judges had test results available at the bench on the computer and could refer to them during regularly scheduled hearings. They often, but not always, looked at the drug test results, depending on the nature of the issues raised during the hearing. If the judge noted that the defendant tested positive for drugs, additional tests could be ordered and the defendant could be urged to seek services at the city's public drug treatment agency. While defendants could be referred to community-based treatment programs, the judge did not refer defendants to the graduated sanctions or court-based treatment program. As in the other dockets, the judge could delay sentencing if the defendant appeared to be making progress in abstaining from drugs.

Drug Testing on the Standard Docket

Defendants on the docket who tested positive for drugs at arrest or admitted drug use during the PSA interview at the jail were required to undergo drug testing twice weekly between 7 a.m. and 6:30 p.m. Each defendant was tested for a full screen of drugs -- cocaine, marijuana, PCP, and heroin.⁵ Defendants on the standard docket had up to 154 drug tests after becoming eligible for intervention, averaging 27 tests apiece. Most of the scheduled tests (70%) had bad outcomes: 43% of the tests of eligible standard docket defendants were positive, 25% were skipped (counted as positive), and 2% were tampered samples (counted as positive). If a defendant failed to appear for a test two times in a row, PSA stopped automatically scheduling subsequent tests. Although not reflected in statistics on tests actually administered, both the judges and the evaluation counted dropping out of testing as the equivalent of two skipped drug tests per week. Prior to the month before sentencing, 41% of the eligible defendants had

⁵ The amphetamine screen was dropped on July 12, 1995 due to extremely low levels of use.

dropped out of testing and, as expected, were far more likely to be sent to prison than those who continued in testing.

Judicial Monitoring

The standard docket judge saw defendants frequently and interacted directly with them. Defendants were scheduled to come before the judge monthly for status hearings. The judge had access to drug test results at the bench to monitor defendant drug use. This information, combined with traditional case processing information, allowed judges to oversee both the legal and the treatment aspects of the defendants' cases. On the standard docket, the number of hearings per defendant ranged from 2 to 24, with an average of 6.8. The cases were open on the docket an average of 273 days, with a median time to disposition of 223 days. As the following chapters indicate, these cases had significantly fewer hearings and fewer days on the docket than required for cases in the two experimental programs.

The standard docket judges were persistent and creative in dealing with drug-involved defendants. In a semi-structured interview, a judge who considered her tenure on a drug court docket as "social work" described some tactics she used to help clean up defendants on her docket. The first time a defendant tested positive for drugs, she told him/her to stop using drugs, either with the assistance of a treatment program or on his/her own. If a defendant continued to be persistently noncompliant -- testing positive or skipping drug tests -- she changed the conditions of release, putting them into a halfway house or placing them on a bond. Thirty-five percent of the drug-involved defendants on the standard docket were sentenced to prison. This was quite similar to the percentage of defendants on the two experimental dockets sentenced to prison (35% on the treatment docket; 38% on the sanctions docket). Thus, the two experimental programs did not significantly change the use of prison resources, but did, as the following sections indicate, redirect the use of prison resources towards defendants who continued to use drugs.

Focus Group Results

Standard docket eligibles were asked their opinions about the drug testing system in a focus group discussion. Overall, this group was less sophisticated and opinionated about the drug testing system, compared with treatment or sanctions program participants. However, the focus group participants did indicate that the main difference between the way the court handled this case, compared to earlier cases, was in the judge's attention to their drug test results. They all said the judge was very interested in the results of their drug tests and talked with them if they turned up positive.

"My lawyer told me how much she loves those drug test results. She's got the computer right up on her desk there. She looked at that like, someone thought some judge might look at rap sheets, she looks at the drug test results....It's very important to her that they're right there at her fingertips. Right near so she can bring it up right there when

you're before her on her computer right there."

"She'll send you downstairs to take the urine and tell you be back in an hour to see her in about an hour and she had it, she had it"

"Mine didn't take an hour. She had mine ten minutes later."

The group agreed it would make a good impression on the judge if they voluntarily entered some type of program prior to their court date.

"I went through the detox and had nothin' in my system... it wasn't through the courts, like a court referral or court order to go to the Salvation Army. That was just somethin' I was trying to do for myself because I didn't think it would have hurt, I was enrolled in the Salvation Army before I went back to court ... it don't hurt to like attend meetings while you out waiting to go to court, you know, as long as you can prove that you was there."

However, several group members said it was very hard to get into treatment before sentencing, particularly for longer inpatient programs where they want you around for the full program. For example, one person said

"It's kinda hard because we get kinda like a long wait ...there's a lot of programs that like Salvation Army, which is a good program to get into, but they do not like to take you if you have got any thing in the court, if you got any court papers."

At (the Montgomery County detox program) "they don't want to be shuttlin' you to the judge, courthouse.... They just want to focus on your recovery."

Even without a pending court case, they said the wait was a month, or a couple of months to get into a program.

The defendants on the standard docket clearly lacked the understanding of the role of drug testing and consequences of a drug test failure. In the focus group interview, some of those on the standard docket expressed concerns about the fairness of forcing people to be tested for drugs while on pretrial release. One argued it was unconstitutional to force "innocent" people into drug treatment by threatening them with jail time if they failed to comply. Two others disagreed and said being released before sentencing came with rules and regulations and they should be grateful to get out of jail for free (without posting bail) and live by those rules.

The standard docket defendants also expressed skepticism about the risk of getting penalized for one bad test when asked about the seriousness of various sanctions. They said that in their experience nothing was likely to happen in response to one bad test in the courts. There was also confusion and disagreement over whether the court tested only for the drug detected in the post-arrest test or for all drugs. Most thought the judge tested for everything. However, one

member claimed defendants were only tested for some drugs -- their drugs of choice -- and said some defendants were able to use substitute drugs to avoid detection.

Focus group results suggested that intensive monitoring through drug testing and concern on the part of the judge on the standard docket did not dramatically affect defendants' belief that it was imperative to give up drugs. They saw drug desistance as an advantage, not a condition required by the court. They appreciated the judge's concern, but did not rate the handling of their case as better and did not indicate the same motivation to stop using drugs.

However, it was also clear that the standard docket provided a much higher level of attention to drug use than many felony courts and that defendants were keenly aware that the judge attached importance to their drug desistance. Thus, comparisons of the treatment and sanctions programs to this docket may under estimate the impact of these interventions because the control group was also experiencing judicial efforts to change their behavior.

CHAPTER 5 THE GRADUATED SANCTIONS PROGRAM

The Program Model

The sanctions docket offered drug-involved defendants the opportunity to take part in a program that required twice weekly drug testing, referrals to community-based treatment, judicial monitoring of drug test results, and graduated sanctions for drug test failures. Penalties increased in severity with each drug test failure. After early experimentation with sanctions, the court adopted the following sanctioning schedule:

- three days in the jury box for the first infraction;
- three days in jail for the second infraction;
- seven days in detox for the third infraction;
- and, seven days in jail for subsequent infractions.

The Court emphasized the swiftness and certainty of the sanction imposed.

Swiftness. Drug tests were required on Mondays and Thursdays between 7 a.m. and 6:30 p.m. Each defendant was tested for a full screen of illegal drugs -- cocaine, marijuana, PCP, heroin -- and alcohol. Participants were instructed to call a Pretrial Service Officer (PSO) between 8:30 and 9:30 p.m. on the evening of their drug test to learn test results. If a participant tested positive, he or she was instructed to come before the judge the following day at 9:30 a.m. for a compliance hearing. If a participant failed to appear for the hearing, a bench warrant for arrest was issued.

Certainty. Because the court wanted the consequences of a bad test outcome clearly understood by the defendants and all concerned, defendants signed agreements at program entry agreeing to the program rules. These rules stipulated that the type of penalty was the same for a missed test, tampered sample, or positive test.

Recruitment

The PSA staff flagged the files of eligible defendants before each hearing. At the hearing, the judge described the treatment or sanctions program, encouraged the defendant to join, and gave the defendant and attorney a chance to speak with program staff privately. Interested defendants and their attorneys were excused from the courtroom to meet privately with PSA staff. Staff described program rules and expectations and invited defendants to join. Defendants who agreed to participate signed consent forms outlining program rules and returned to court to

tell the judge that they planned to enter the program. Those who did not agree to join returned to the courtroom and the judge was notified that they had chosen not to participate. Recruitment could occur before or after a plea was offered or accepted and was not contingent on acceptance of the plea.

The judge told defendants if they stopped using drugs they would likely be sentenced to probation; but, that probation was not an option for those who continued to use. The judge also encouraged defendants to take advantage of the help these programs would give them in abstaining from drug use. The encouragement was often in the form of a challenge -- "Show me that you can stay drug-free, and I will consider probation. I am not inclined to return a drug user to the community." Those joining the sanctions program received written copies of the penalties for failing drug tests. The relationship between compliance, program requirements, and penalties was made clear at the time of the program offer.

About two-thirds (n=240) of the eligible defendants chose to enroll in the sanctions program.⁶ Half of those who joined did so within 15 days of becoming eligible, but some defendants waited much longer. In focus group interviews, sanctions program participants stated that the main reason they joined was to avoid jail. Although most felt forced into the program, all agreed that stopping drugs had to be a personal decision: "You can't just do it for your kids, you can't do it for your mother, or somebody that loves you, you have to love yourself and do it for yourself." Again and again they emphasized the choice was their own -- a theme which implies that one explanation for program success may be that it gives defendants control over what happens to them at a point in their lives, and within a system, in which they generally feel powerless. They appreciated the pressure placed on them and thought the chance to avoid prison time was a good incentive.

Most of those who did not join said they did not need the program. Others were simply not offered the program. The sanctions docket judges in the second and third years of the demonstration period (when 88% of sanctions participants in the impact sample entered the program) did not offer the program to young, marijuana-only users. In semi-structured interviews, one judge indicated that he thought program resources were better spent on defendants with more serious drug problems. He preferred to give young marijuana-only users a stern warning about continued use and remanded those who continued to use drugs to short-term incarceration.

Table 5.1 shows the characteristics of eligible defendants by program enrollment status. Most program participants, like eligibles who did not join the program, were African American (96%) and fewer than half were employed at the time of arrest. However, program participants differed significantly in several ways from those eligibles who did not join. Participants were more likely to be: female (14% compared with 6%) and older (33 years old compared with 29

⁶ Twenty-six participants had two episodes of sanctions participation. Their time in the sanctions program was combined for these analyses.

years old) than non-participants. Although they did not have significantly more arrests overall in the prior five years, they had more prior arrests for violent offenses. The participants were also more likely to test positive for cocaine or heroin in the first two months of testing (79% compared with 53%) than nonparticipants indicating heavier drug use and reflecting the judges' policy of not offering the program to young marijuana users.

Table 5.1
Characteristics of Eligible Defendants on the Sanctions Docket

	Sanctions Participants (n = 240)	Non-participating Eligible Defendants (n = 125)
Gender		
Male	86%*	94%
Female	14%	6%
Ethnicity		
Black	96%	96%
Other	4%	4%
Age	33.0**	29.0
Employed	42%	46%
Number of prior arrests in past 5 years	0.47	0.32
Number of prior violent arrests in past five years	0.04*	0.01
In first 60 days after filing:		
Use of stronger drugs	79%**	53%
Drug use severity	0.69	0.66

** $p < .01$. * $p < .05$.

Case Management

Defendants were assigned to one of the four sanctions program case managers when they joined the program. At that time, the case managers, reiterated program rules and informally assessed whether the participant needed referrals to outside services. Typical service referrals included community-based drug treatment programs, D.C. Department of Employment, and the Social Security Administration.

Case managers monitored the twice weekly drug tests, notified participants of results, called attorneys to notify them of compliance hearings, and presented reports on client progress at hearings. Each case manager had an average caseload of 25-35 participants and alternated responsibility for covering court hearings.

Case managers had weekly telephone contact with defendants who progressed in the program. Participants who continued to test dirty or skip tests had additional face to face meetings with case managers. These defendants were referred by the case manager to an appropriate treatment provider. All treatment referral information was entered into the PSA's MIS system and was available to the judge at hearings.

Referrals to community-based treatment were provided to a third of the sanctions program participants. Those referred were more likely to be older (36 years old compared with 31 years old) and, as expected, users of stronger drugs (86% of those referred tested positive for cocaine or heroin in the first two months of case processing compared with 74% not referred to treatment). Case managers did not have regular contact with the treatment programs and records were not available to indicate what portion of the participants entered the programs to which they were referred. During an interview, one of the sanctions judges doubted that many of the participants actually entered community treatment programs. He believed that defendants were not likely to attend the treatment programs in the absence of the structure and consequences of court monitoring. Our only data on treatment attendance among sanctions participants is from the survey. One year after sentencing, sanctions program participants were significantly more likely than standard docket defendants to report receiving detoxification and inpatient hospital treatment⁷, but did not report significantly higher rates of participation in outpatient treatment, day treatment, NA, counseling or other forms of treatment.

Some participants requested entry into a detox program with varying degrees of pressure from the court to address their drug problem. Thirty-three participants entered detox voluntarily, with 17% entering before their second sanction was imposed. Defendants who received detox (voluntarily or as a sanction) were more likely than other program participants to have tested positive for cocaine or heroin in the first 60 days of testing (92% compared with 74%). Defendants typically spent seven days in the detox unit and were referred to an outpatient treatment program following the intervention. Data on treatment following detoxification are not available, but interviews with PSA staff indicated that follow up treatment was relatively rare.

Drug Testing

Drug testing was a key element of the sanctions program. Frequent drug testing provided the judge, case manager, and defendant an objective measure of participant success and was used to monitor progress in the program. Results were used to assess the defendant's commitment to the program at each hearing and determine whether their progress was sufficient for satisfactory program completion. The judge used this information in selecting the sentence.

Sanctions participants completed up to 125 drug tests after becoming eligible for the program, averaging 34 tests per participant. Of these tests, about half (51%) had bad outcomes.

⁷ The survey did not differentiate between detoxification that was ordered as a sanction and voluntary entry into this service.

The bad test outcomes included positive tests (36%), failure to appear (14%), and a few other bad outcomes such as a tampered sample (less than 0.5%). Prior to the month before sentencing, 38% of the participants had dropped out of testing. Because PSA automatically stops scheduling drug tests after two consecutive failures to appear, these skipped tests are not counted in the test result statistics presented above. However, the judges treated these defendants who dropped out of testing as program failures at sentencing. For the impact evaluation, the defendants were counted as having two missed tests per week for all weeks following their last scheduled drug test.

Defendants on the sanctions docket were asked their opinions about the drug testing system in a focus group discussion. All of the group members believed the drug testing system was accurate. However, some expressed concerns about the chain-of-custody of urine samples. Most members were concerned they could be incorrectly charged with a positive test. For example, one said he worried test results could be changed by someone incorrectly inputting the results into the computer. Another worried his probation officer might get back at him by collaborating with the testing staff to make his tests look bad. Some thought if their clean urine got swapped with a dirty sample, no one would believe them when they said a mistake had been made. Overall, these concerns reflected a lack of trust in the human factors associated with the test, not with the tests themselves. The key role of test results in the sanctions program leading to a jail sanction may account for the extra anxiety about the testing process expressed by those on this docket.

Focus group members were also asked if they knew of ways to prevent a positive test after using drugs. Many mentioned drinking lots of fluids before a test or adding cleaning solutions to the urine to produce a negative test result. However, all felt they could not get around it. As one phrased it:

"They will find out what you're using, regardless of what you're doing, and you going to try to fool yourself...but you can't trick that machine too good, I know all those tricks. I been doin' it [drugs] almost 30 years. I know how to take Ajax and put it under my fingernails and make the urine clean, and you know all those games, but they'll find out."

Others agreed:

"So they do have the ways, you know, to find out. I think the test was pretty accurate. The time that I did come back dirty, I tried to give it 3 days, they say up to 72 hours, I drank water, cranberry juice, vitamins..."

Judicial Monitoring

Another key feature of the sanctions program was enhanced judicial monitoring. The judge was directly involved in monitoring participants' drug use and oversaw both the legal and the treatment aspects of the case. The judge used the authority of the court to improve treatment outcomes through both positive encouragement when a participant did well and sanctions when

the participant did not perform to the program's expectations.

Participants were required to appear before the judge at monthly case status hearings. During hearings the judge spoke with the defendant about his or her drug use and examined the participants drug test results shown on the computer screen at the bench. A case manager covering the hearings provided information about participation at a city-run treatment program or attendance at NA/AA meetings, if applicable. If the participant continued to use drugs or repeatedly failed to comply with the testing requirements, the judge could sentence the defendant at the hearing. However, if the participant was beginning to test clean or was struggling but appeared to be trying to clean up, the judge often continued the case another month, giving the participant an opportunity to demonstrate consistent sobriety.

The judges also presided at the twice weekly sanctions hearings. At sanctions hearings, case managers announced the name, offense, and the sanction the defendant was eligible to receive. The judge discussed the test results with the defendant and the attorney to determine whether the defendant was in non-compliance with the release conditions. If the defendant was noncompliant, the judge ordered the appropriate sanction, following the sanctions guidelines. If the defendant provided an acceptable excuse for the bad test outcome, the judge could choose not to impose a sanction. If the defendant failed to appear at the hearing, the judge issued a bench warrant. Defendants who voluntarily appeared for a compliance hearing within a week of issuance typically had the warrant quashed. Overall, sanctions participants averaged 12.5 hearings each. This number includes an average of 4.7 scheduled compliance hearings each (counting those in which the defendant failed to appear). The number of scheduled sanctioning hearings per participant ranged up to 21 (for one participant) with most having three to six sanctions hearings scheduled. For the sanctions participants, the mean number of days to disposition was 300 days, with a median time of 251 days. This was nearly one month longer than the time to disposition on the standard docket.

Use of Sanctions

The court almost always responded to a bad drug test -- 97% of the drug test failures were followed by a scheduled compliance hearing. If the defendant failed to appear at a compliance hearing, a warrant was issued. If the defendant appeared voluntarily for a hearing within a week, the warrant was quashed. About two-thirds (65%) of the warrants were quashed, one-quarter (24%) of the warrants were served, and 10% remained outstanding since these defendants never reported to court voluntarily or involuntarily.

Most of the time, sanctions were imposed at the compliance hearings. Excuses were accepted at 16% of the hearings. Judges only accepted excuses for missed tests when these could be verified as legitimate. Demands of the job were not considered legitimate, but documented illness and family problems were. Residual drug use, identified on earlier drug tests, was considered legitimate if the laboratory director agreed based on careful examination of the pattern of tests results and drug levels. Overall, the total number of sanctions imposed was 437.

Three days in the jury box was imposed 182 times, three days in jail 121 times, detox 82 times, a week in jail 52 times.

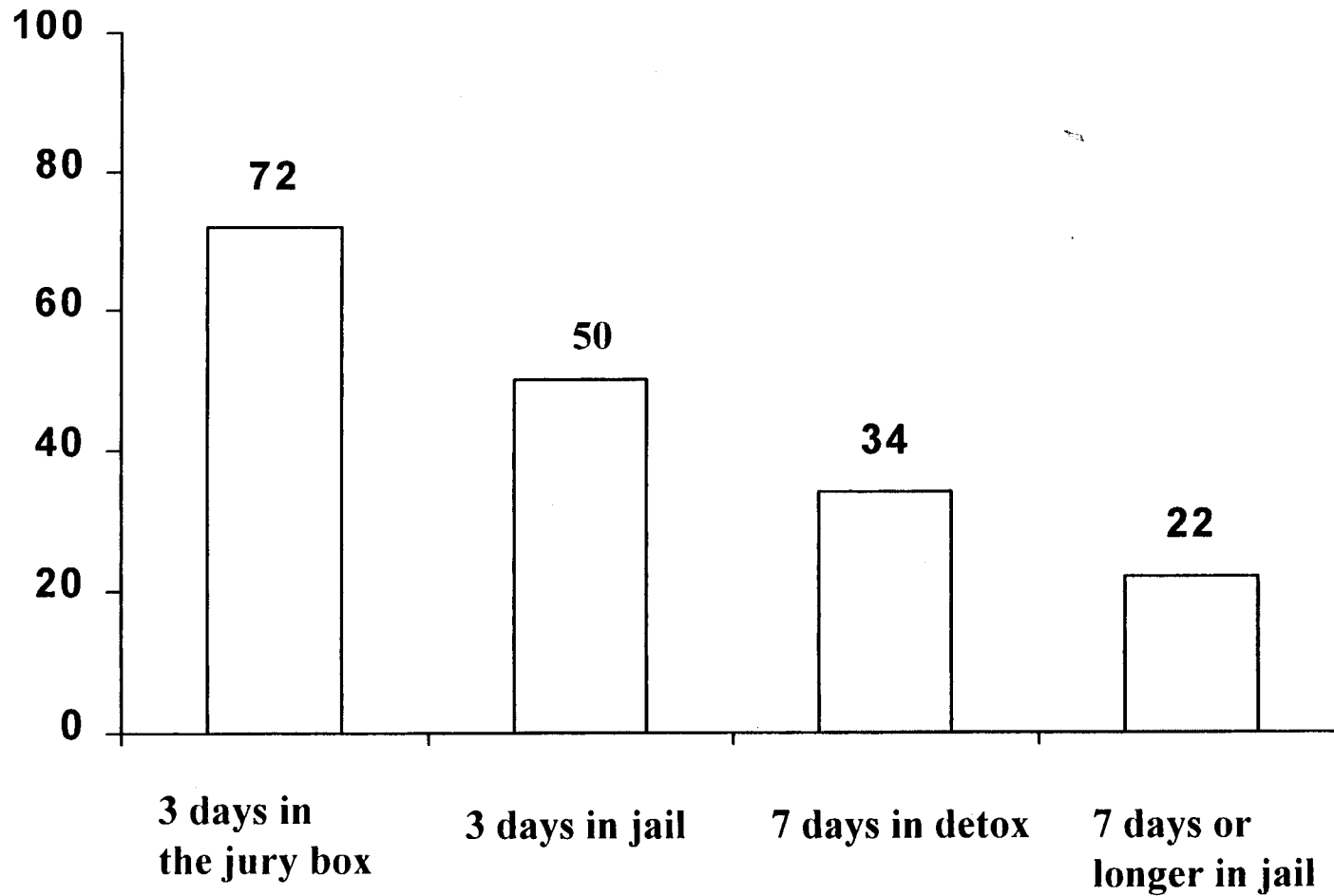
Most of the sanctions program participants had a least one bad drug test -- 93% failed a drug test after entering the program, and more than a quarter (27%) had ten or more bad outcomes. The only participants who never had a compliance hearing scheduled were the 7% who were clean and 3% who were missed by the court. This represents high fidelity to the sanctioning rules by the judges. Although 90% of the program participants were called to account for their continued drug use, 10% never appeared at their compliance hearing, remaining out on warrant and some participants avoided a sanction by voluntarily entered detox prior to a compliance hearing.

A majority of program participants received a sanction and many received more than one sanction: 72% of the participants spent three days in the jury box; 50% spent three days in jail; 34% were sent to detox; and, 22% spent a week or longer in jail (see Figure 5.1).

Heavy emphasis was placed on consistency in enforcing the rules. The judges required proof to support excuses, such as a medical prescription for a drug that could cause a false positive test result. Because the testing lab was open 12 hours a day, the excuse of work commitments was not generally accepted. One judge estimated that defendants who missed tests had a legitimate excuse about a quarter of the time. However, he stated many people tried to work the system by skipping testing on the scheduled test day in the hope of testing clean the following day. For example, if a participant needed an extra day to "clean up", he or she would come to the testing lab just after 6:30 p.m., past the time a test could be administered. The Pretrial Services Officer (PSO) would enter a comment into DTMS saying the defendant came to the lab but he or she was too late to have the urine tested. The participant would come back the next morning and submit a sample in the hopes that the urine would be drug-free. The judge said he spent a lot of time trying to stay on top of the excuses defendants supplied and tended to be very conservative in accepting them. If he was not sure an excuse was valid, he would issue the sanction.

Another judge said he occasionally imposed sanctions when he had some doubts about whether it was necessary. He did so because he felt he needed to support the integrity of the program by reinforcing the case manager. He explained that this situation could be problematic because the participant was always looking for some "wiggle" room -- trying to play the case manager or the judge against each other -- and if the participant sensed any disagreement between the two, the participant would exploit it.

Figure 5.1- Percent of Participants ($n = 240$) Receiving Each Level Sanction



Focus group members confirmed the judge's reluctance to accept excuses. They indicated that the judge would order an immediate test if they had any suspicions about the defendant's drug use or excuses for missing a test and ask for the results right away. Several had tried to explain away their positive tests, but did not get them excused.

"I told Judge Jackson, I said, man, I was at a party, they was all smoking around me and I didn't smoke none, I was just there...He said naw, you could be around it, and you can smell it, but it would not show up dirty in your urine. You have to inhale it, you have to take it in yourself. He said you can be around, people can blow smoke in your face and it will not show up dirty -- he was right about that."

The first level sanction -- three days in the jury box -- appears to have been an important milestone for participants. In the original program design, the first level sanction was one day in the court cellblock. However, the judge presiding over the sanctions docket in 1994 felt the sanction was too harsh and proposed three days in the jury box as an inexpensive and reasonably punitive sanction. Once instituted, it became clear the sanction accomplished two additional goals early in a defendant's program tenure: 1) it illustrated, by example, the rules of the program and the consequences on continued use; and, 2) gave the judge and defendant an opportunity to develop a more personal relationship.

Quotes from focus group participants illustrate why the sanction was educational to them.

"[When you sit in the jury box] you hearing the judge tell somebody, laughing at him and jokin' with him and ... just go ahead and give him 7 to 21 in jail... and you realize that could be you."

" [It is] a good thing to do because that make you think."

"You watch people who got jury box come back in and get 3 days in jail and know that will happen to you next time."

"It's a wake up call -- you realize how serious it is and how real the risk of losing your freedom."

"[It is] a good experience too cause they ain't talkin' to you. You understand what I'm sayin'? You looking at somebody else that's not really you, that's a good learnin' experience they try to teach you a lesson you know stop usin' drugs, get yourself together, all of its scary, something you can never forget unless you live it, you know?"

There was less agreement about the use of detoxification as a sanction. One sanctions docket judge recommended and placed defendants into detoxification, mostly before the defendant was eligible for the third level sanctions. The judge felt that before the earlier sanctions could have an effect on the participant, the participant must first be "detoxed".

However, another sanctions docket judge was critical of detoxification as a sanction and was disinclined to place defendants in at their request. He thought people completed detoxification with great expectations for recovery, and with little exception, relapsed immediately because they were not remanded into a treatment program. In his view, detoxification without mandatory treatment set defendants up for failure.

One issue that arose in enforcing drug testing compliance was that defendants began to drink large quantities of water to dilute the urine and avoid detection of drug use. To detect water loading, the lab began testing the creatinine levels in urine samples in December of 1995. Participants with low creatinine levels were required to come before the judge for a sanctions hearing. At the first and second hearing triggered by a low creatinine level drug test, the judge warned the participant that a sanction would be imposed if he or she continued to submit samples with low creatinine levels. At subsequent hearings, the participant was eligible for a sanction.

Program Retention and Completion

Sanctions program participants averaged 132 days -- approximately 4.3 months -- during their first time in the program. A few (26 of 240) participants entered the program twice. The second treatment episode averaged 314 days as these defendants struggled to get clean. Sanctions program participants were sentenced when they maintained consistent drug test results -- either continued clean or dirty drug tests.

Overall, 30% of the 240 sanctions program participants successfully completed the program and 70% failed the program. Program success is defined by testing clean in the month before sentencing or clean in the last six tests prior to discontinuing testing pending sentencing. Sanctions failure is defined by program termination by the judge or dropping out of testing before attaining six consecutive clean tests.

A key incentive for joining the sanctions program was the increased chance of probation at sentencing. Two-thirds of sanctions program participants (65%) were sentenced to probation following their drug court case. The balance of participants were sentenced to prison. Court records indicate that judges followed through with the offer of leniency in sentencing for drug use desistance among participants: 95% of program participants who tested drug-free (n=66) in the month before sentencing received probation⁸, compared with 56% of those who did not test clean, dropped out of testing, or were detained in jail (n=174) during the entire month. Thus, the judges appeared to reward defendant compliance and efforts to abstain.

Defendant Opinions about the Program

In the focus groups, satisfaction with the program was high. "I took it as a blessing, I

⁸ Sentencing decisions also reflected other considerations such as prior criminal history and thus compliance did not always result in probation, but in a few cases resulted in reduced periods of incarceration.

almost thanked the judge." One said the program had a cumulative effect, with success coming from "not the three days (in jail or sanction). (It was) the accumulation of going through ... the slips, continued dirty tests, slide backward." For that respondent, detox was very helpful because it made him want to "live a more humane, Christian life, with normal family, no fear of arrest, shootings."

Another said the program "...gave him a chance, combined with desire to get out of the life and have a family life instead of being locked up." Yet another recounted his accomplishments:

"In the last year, I've got married, I got a mini van in my name, as I say, these are my accomplishments since I got off drugs, and we bought a house, a friend of mine was a realtor, I didn't need no down payment, they took care of closing costs, but I have to maintain that mortgage, you know what I'm sayin'? So between my wife and I, we doin' rough, but its a sweet struggle."

Most appreciated the certainty of sanctions -- the impartial application of rules which they knew about for outcomes they viewed as under their control. Several said they liked knowing exactly what the sanctions would be -- if they messed up they knew they would go to the jury box or jail and that put some power back into their hands. However, one person wanted the judge to be more flexible in applying sanctions. He was delayed due to a traffic jam and arrived late. He explained he still received three days in jail: "They don't have to see everything in black and white. There are shades of gray here. But they don't see that." Another respondent who received a sanction equaling three days in jail said the judge counted the court day as his first sanction day and required him to spend the next two days in jail. The judge also called his boss to explain he would be delayed. "When I came out I started work. And ever since then I just said man, hey, that's it man, I ain't messing around no more. I'm giving this up."

The group members also had positive things to say about the sanctions program case managers.

"The pretrial counselors set the foundation ... They go into your background...talk to you in a way you can relate and understand ...break it down to the person"

"They (Pretrial counselors) are the ones you stay in most contact with. You know, and they the ones that help you keep committed to you know stop using drugs. Keep you informed what's goin' on."

Despite overall satisfaction with the progress they made in the program, almost all program participants in the focus group had suggestions about how the program could be improved. Many recommended the program be "tougher". Tougher seemed to refer to expanding the treatment options and requirements. The additional treatment requirements would be a productive penalty because:

"It'd take more of the drug addicts time which is punishment enough ... I'm not saying throw him in jail for 30 days [without drug education classes or a chance to test clean] because all that's gonna do is frustrate a lot of people for real."

"I think a lot of people that's on drugs now got too much free time, see they don't have nothing to do with their time, they need to put to their minds to some positive use."

Specific suggestions for improving the program included: 1) offering detoxification for 40 days, 2) getting the court to set up a special program like a 30 day detox for only "these court appointed people that are 'menaces' to society as opposed to having 'em mix with everyday guys who wife sends 'em there for three days." Another participant suggested, "If you can't afford it (detox), have someone come down here and take a urine ... for 30 straight days (every day) or ... 30 days of jail."

Lessons on the Sanctions Program

One important lesson from the sanctions program was the defendants' up-front commitment to the rules. In the focus group, program participants said that agreeing in advance to the sanctions and the rules for applying penalties gave them a feeling of control and a sense that they were being treated fairly. These defendants knew that they could avoid penalties by not using drugs, and that it was their responsibility to show the judge that they were clean through drug test results. This "contingency contract" between the judge and defendant clearly differentiates these sanctions from penalties that are imposed using rules that are poorly understood or inconsistently enforced.

CHAPTER 6

THE IMPACT OF THE SCDIP GRADUATED SANCTIONS PROGRAM

The graduated sanctions program was designed to reduce repeat criminal activity among drug-involved defendants by reducing drug use. Other program outcomes hypothesized to result from decreased drug use include improvements in the social and economic functioning of defendants. The program consisted of twice weekly drug testing, judicial monitoring, and consistently applied penalties that increased in severity with additional drug test failures. It is important to consider the findings in light of the operational strengths and weaknesses of the program described in Chapter 5.

Throughout this report, the analysis first presents a comparison of eligible defendants on the sanctions docket to those on the standard docket to assess the effects of offering services to this population. Because the sanction docket eligibles include those who never agreed to enter the program, this analysis, based on the experiment of offering different interventions to defendants randomly assigned to three dockets, measures the overall impact of the program on the targeted population. The analysis then examines the impact of the program on those who agreed to enter the program, regardless of the duration of their participation. This analysis, based on a quasi-experimental comparison, provides estimates of the impact of the program on those who agree to join. We believe that incentives to join can be changed by various court policies and it is thus very important to understand what effect the services have on those who received them.

Program impact is measured by:

- Reductions in drug use by the end of the program and in the year after sentencing from: 1) drug test results during the month before sentencing, and 2) self-report survey data on drug use in the year after sentencing.
- Reductions in criminal activity during the year after sentencing from: 1) arrest data (officially detected criminal activity) during the year following sentencing, and 2) self-report survey data on detected and undetected criminal activity.
- Improvements in employment, education, and social functioning during the year following sentencing from self-report survey data.

Other topics covered in this chapter include the use of drug treatment and differential impacts of the program. The analysis of drug treatment services looks at whether sanctions program participants obtained more treatment during pretrial release than defendants on the standard docket and the relationship of treatment to program impact. It then examines use of treatment in the year following sentencing. The differential impact analysis tests the hypothesis that program impact differs by participant characteristics such as age, sex, type or severity of drug use, and prior criminal history.

The Impact of Program Participation on Drug Use

Reductions in Drug Use during Pretrial Release.

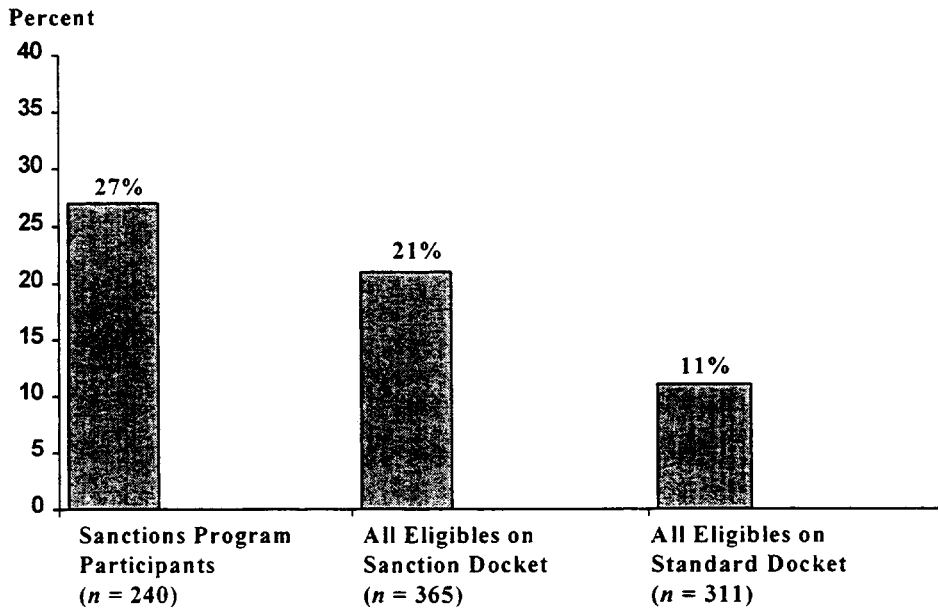
The program goal was to get defendants to stop using drugs and begin recovery before they were sentenced. Defendants were told by the judge that their drug test results would be an important consideration at sentencing. They were assured that the judge was reluctant to return drug-using offenders to the community by placing them on probation and, would consider drug abstinence in choosing between prison and probation. Because other factors, including prior criminal history, are considered at sentencing, the judges did not make the sentence solely contingent on drug test results. Judges supported defendants who appeared to be trying to refrain from drugs, often continuing cases that showed reductions in drug use short of abstinence to allow defendants every opportunity to achieve a "green screen"-- a consistent pattern of negative drug test results which appear on the MIS screen at the bench in green rather than red (for a bad test outcome).

Reductions in drug use during the program are measured in two ways. The first analysis looks at the success of the program in achieving drug abstinence during the final month before sentencing. Test results from the PSA MIS system are used to classify defendants into two groups: 1) known to be drug free -- those who continued in testing and had no bad test outcomes in the month before sentencing, and 2) not known to be drug free -- those who either dropped out of testing or had a bad outcome in the month before sentencing. The second analysis examines the percentage of scheduled tests that were clean in the month before sentencing to determine whether the program resulted in reductions in drug use short of abstinence.

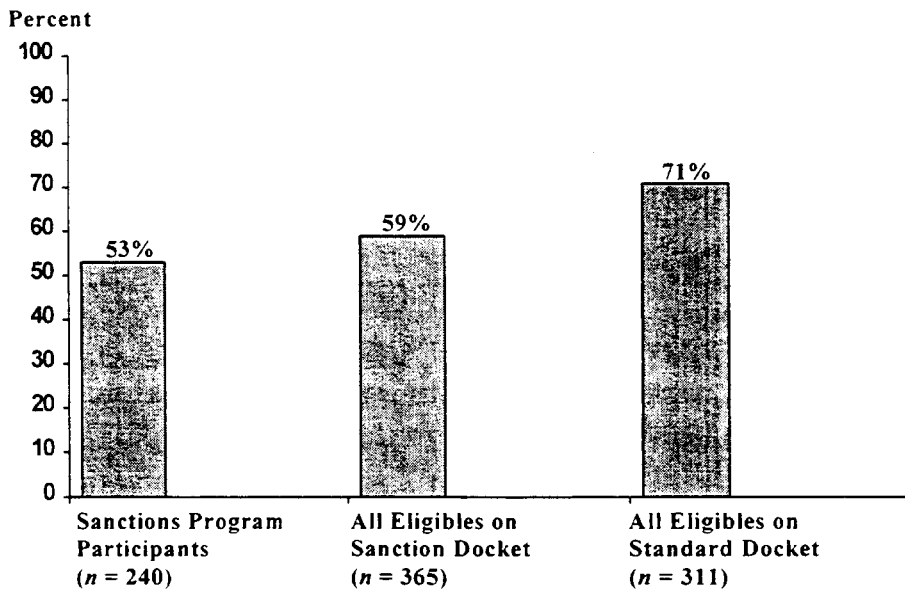
The impact on program participants was sufficiently strong to produce reductions in overall drug use among the target population as a whole. As Figure 6.1 shows, eligible defendants on the sanctions docket were more likely to test drug-free in the month before sentencing than defendants on the standard docket: 21% compared with 11% (odds ratio=2.13, $p<0.001$), after controlling for age, employment, gender, prior criminal history, drug use severity and stronger drug use. This indicates that the court, by investing in this program, reduced drug use among eligible drug felony defendants.

Drug tests during the month before sentencing also indicate that 27% of the participants were clean compared to 11% of the standard docket sample members (Figure 6.1). The logistic regression models used to test the significance of this difference control for age and employment at time of arrest, gender, and the proportion of bad test outcomes on tests in the 60 days following arrest. Because sanctions participants were more likely to test positive for stronger drugs (cocaine or heroin) during the 60 days after arrest than nonparticipants (76% compared

**Figure 6.1 - All Drug Tests Clean in the Month Before Sentencing:
Court Records**



**Figure 6.2: Percentage of Tests with Bad Outcomes in the Month
Before Sentencing: Court Records**



with 52%)⁹, the models also control for use of stronger drugs at the start of the program. The program participants were significantly more likely to test clean than defendants in the standard docket sample (odds ratio of 2.94, $p < 0.001$).

The percentage of bad tests among all eligibles on the sanctions docket was also significantly lower than the percentage of bad tests among standard docket sample members in the month before sentencing (59% compared to 71%, $p < .01$). Sanctions participants also had bad outcomes on a significantly smaller percentage of the drug tests administered during the final month before sentencing (Figure 6.2). The participants had bad test outcomes on 53% of the tests administered during the month, while standard docket sample members had bad outcomes on 71% of their tests ($p < .0001$). Logistic regression models confirm the significance of these differences.

Reduction in Drug Use during the Year after Sentencing

Drug use after the end of the intervention period is measured by respondent reports of the number and kinds of drugs used during the twelve months after sentencing. The questionnaire asked about seven drug categories: 1) marijuana or hashish, 2) crack cocaine, 3) other cocaine, 4) heroin or other opiates or methadone outside a treatment program, 5) PCP, 6) LSD or other hallucinogens, and 7) any other illegal drug. These categories were grouped for analysis into three categories: any drugs, marijuana, and stronger drugs (other than marijuana). Because the analysis is fundamentally concerned with drug use desistance, it only examines the drug use of participants who reported use of drugs in these categories prior to their arrest and entry into court on the drug felony charge. (None of the survey participants reported first-time use of any drug, marijuana use, or stronger drug use during the year after sentencing.) The number of defendants included in the analysis thus varies by drug category.

The use of each type of drug during the year after sentencing is shown in Figures 6.3 and 6.4. The drug use of program participants and the sanction docket eligibles by drug category is compared in Table A6.1 shown in Appendix A. Results of the logistic regression models comparing sanctions program eligibles with the standard docket defendants are shown in the top half of Table 6.1 and results comparing the sanction program participants with the standard docket defendants are shown in the lower half of Table 6.1. These results indicate no significant differences between the sanctions docket eligibles and the standard docket eligibles and no significant differences between the sanction program participants and the standard docket eligibles after controlling for other variables in the model.

⁹ The higher rates of stronger drug use among participants is consistent with the process evaluation finding that the judges who presided over the sanctions docket were resistant to offer the program to young marijuana-only users on the grounds that they were primarily dealers, not addicts.

Table 6.1

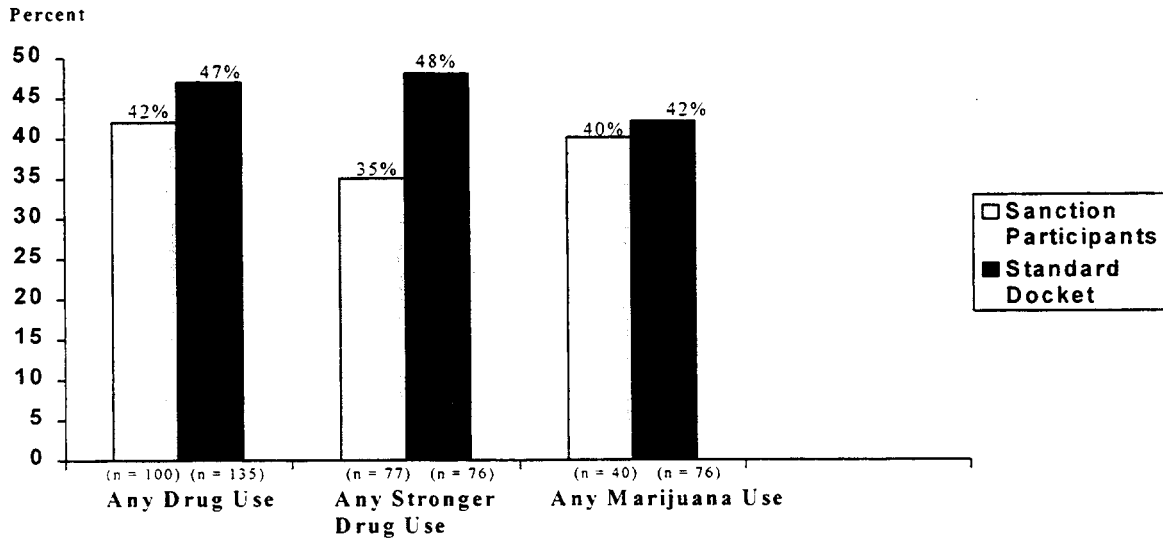
Logistic Regression Odds Ratios: Self-reported Drug Use during the Year after Sentencing

	Any Drug Use	Any Stronger Drug Use	Any Marijuana Use	Weekly Drug Use	Weekly Stronger Drug Use	Weekly Marijuana Use
A. Sanctions Program Eligibles	n=304	n=166@	n=145@	n=256	n=153@	n=126@
Age	.99	1.00	1.00	.99	.96	1.01
Male	.60	.68	.83	.63	.62	1.80
Employed	1.10	.80	1.46.	.68	.95	.43
Propdrty	4.32***	2.67	5.01**	2.35	1.47	2.78
Prior Conviction	.38**	.57	.44.	.29**	.53	.21*
Sanctions Docket	1.14	.57	1.26	1.00	.68	.94
B. Sanction Program Participants	n=256	n=149 @	n=115	n=218	n=138@	n=102@
Age	.99	1.00	1.03	.99	.97	1.02
Male	.76	.58	1.11	.56	.52	1.68
Employed	.77	.92	1.15	.73	1.20	.37
Propdrty	1.92	3.38*	5.74*	2.41	1.84	2.12
Prior Conviction	.47**	.57	.21**	.29**	.56	.14
Sanction Participants	1.00	.69	.95	1.00	.76	.78

* p<.05. ** P<.01. *** p<.001.

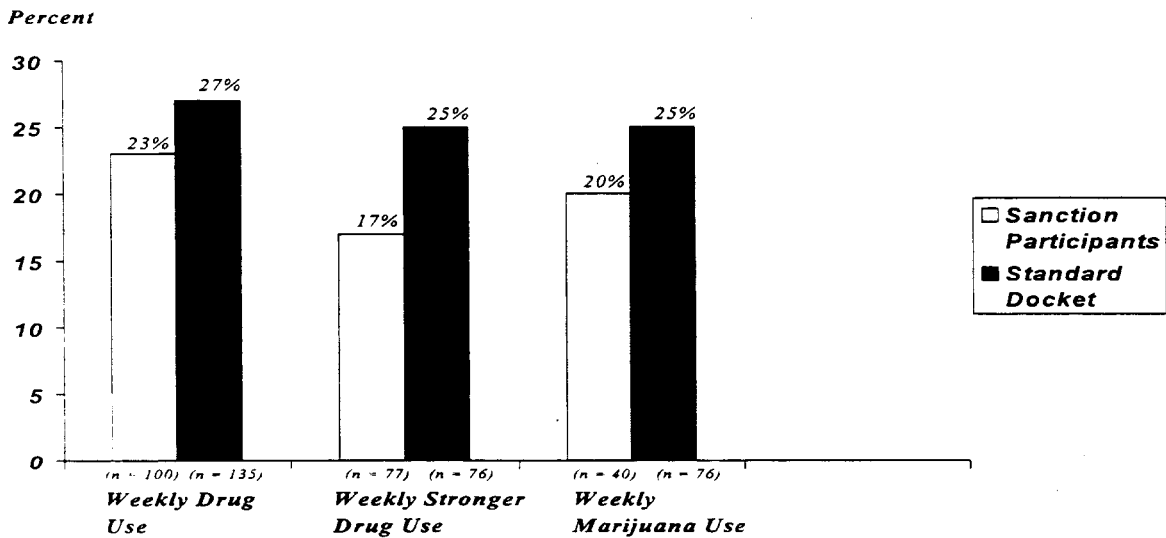
@ Model is not significant.

Figure 6.3 - Any Drug Use in Year After Sentencing Among Former Users*: Survey Data



*The number of former users varies by drug category as shown.

Figure 6.4 - Weekly Drug Use in the Year After Sentencing Among Former Users*: Survey Data



*The number of former users varies by drug category as shown.

The Impact of the Sanctions Program on Crime

Reductions in Officially Detected Criminal Activity in the Year after Sentencing

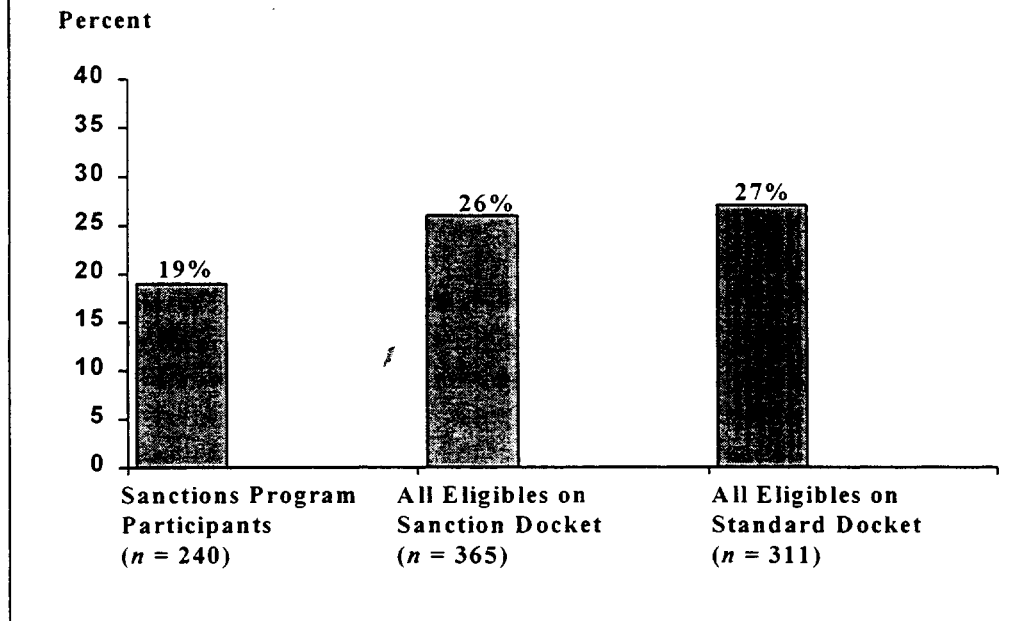
A key measure of reductions in crime is provided by arrest records. Records from the FBI and data on arrests in Washington, D.C. were coded by date and top charge at arrest. Measures of criminal activity based on this information include:

- Any arrest in the year after sentencing and any arrest within four crime categories: drug offense, violent offense, property offense, and other. The offense types were not mutually exclusive: a defendant could have more than one type of arrest so the category percentages add to more than the percentage showing any arrest.
- Time to first arrest based on the number of street days between sentencing and first arrest. Data collected from the D.C. Department of Corrections were used to identify entries to, and exits from, D.C. correctional facilities. Days between sentencing and the first arrest when defendants were known to be incarcerated were not counted when calculating the time to first arrest because of the lack of opportunity to reoffend on these days. Relying on days of incarceration under the supervision of the D.C. Department of Correction may overestimate street days because days of incarceration in other jurisdictions or days spent in hospitals or other institutions were not eliminated. However, days in the D.C. jail most likely represent the larger portion of days off the street.
- Number of arrests in the year after sentencing and number of arrests within four crime categories: drug offense, violent offense, property offense, and other.

The sanctions eligibles were no less likely than the standard docket sample to be arrested in the year following sentencing. However, the sanction program participants were significantly less likely than the standard docket sample members to be arrested in the following year: 19% compared to 27% ($p < .01$) (see Figure 6.5).

The logistic regression in Table 6.2 which controls for age and employment at time of arrest, gender, use of stronger drugs in the 60 days following arrest and the proportion of bad test outcomes on tests in the 60 days following arrest shows a statistically significant difference between sanctions participants and the standard docket in the likelihood of any arrest after sentencing (odds ratio=0.68, $p < .05$). Although the sanctions program participants averaged 15 fewer street days in the year after sentencing, this difference in opportunity to be arrested does not appear to be of sufficient magnitude to account for the differences in arrest rate.

**Figure 6.5 - Any Arrest in the Year After Sentencing:
Official Records**



The estimated per day probability of arrest among the pooled group was .0006. Adjusting for the 15 days of extra risk among the standard docket would lower their arrest rate to 26%, but would not change the significance of the difference between the groups. The lower likelihood of arrest was consistent with the finding that sanction program participants had more days on the street prior to their first arrest after sentencing than did the standard docket sample. The offenses that make up the any arrest category indicates that much of the difference is in the likelihood of drug arrests (see Table A6.2). However, the logistic regression revealed no significant differences between the eligible defendants on the sanction docket and those on the standard docket.

The hypothesis that sanctions program participants had significantly more days before their first arrest than standard docket participants was tested using a proportional hazards model (Cox, 1972). This model was selected because the maximum number of street days was limited by design to the 365 days in the year after sentencing (censored data). To correct for days on which defendants were incarcerated and thus not able to commit additional crimes, the analysis is based on 'street days' -- those days when sample members were not detained in a D.C. Department of Corrections jail or prison -- and is limited to defendants who were not incarcerated for the entire year.

The sanctions program also delayed returns to crime, measured by the days to first arrest, for participants, but not for the larger group of sanction program eligible defendants. The graph in Figure 6.6 illustrates the percentage of each group not yet arrested on the left hand axis. The

Table 6.2

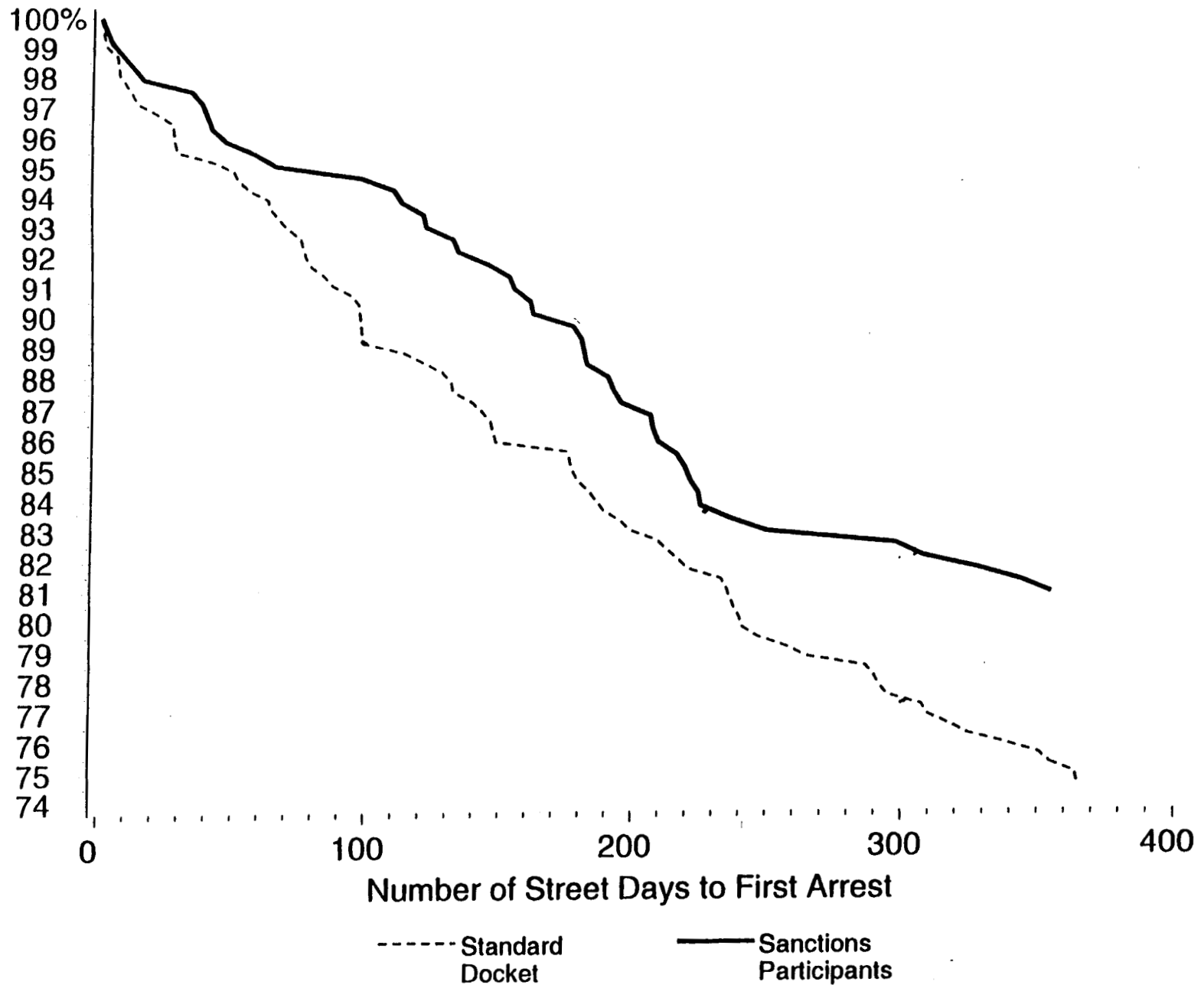
Logistic Regression Odds Ratios: Any Arrest during the Year after Sentencing

	Any Arrest	Any Arrest on Drug Charges	Any Arrest for a Violent Offense	Any Arrest for a Property Offense	Any Other Arrest
A. Sanctions Program Eligibles	n= 662	n= 662	n= 662	n= 662	n= 662
Age	.96***	1.61***	.92**	.98	.96**
Male	1.81	1.61	2.78	.68	1.28
Employed	1.06	.98	.80	1.05	.62
Propdrty	1.30	1.95	.57	.81	.93
Prior Conviction	.65	.66	.70	.41	.77
Sanctions Program Eligibles	.74	.93	.66	.94	.90
B. Sanction Program Participants	n= 542	n= 542	n= 542	n= 542	n= 542
Age	.96***	.96**	.90***	.99	.95*
Male	1.81	1.86	2.40	.53	1.11
Employed	1.02	.79	1.09	1.43	.68
Propdrty	1.61	3.49**	.68	.73	.86
Prior Conviction	.81	.81	.77	.48	.86
Sanction Program Participants	.68*	.82	.95	.86	.85

* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

Figure 6.6. Survivor Function Estimate of Street Days to First Arrest



street days are shown on the bottom axis. At day zero, none of the sample members had been rearrested. By day 100, 95% of the sanctions program participants had not been arrested (5% had been arrested) compared to 89% of the standard docket defendants (11% had been arrested). By day 300, the percentages not arrested had declined to 83% for the sanctions participants and 78%

Table 6.3
Poisson Regression Odds Ratios: Number of Arrests during the Year after Sentencing

	Number of Arrest	Number of Arrest on Drug Charges	Number of Arrest for a Violent Offense	Number of Arrest for a Property Offense	Number of Other Arrest
A. Sanctions Program Eligibles	n=662	n=662	n=662	n=662@	n=662
Age	-.04***	-.04***	-.05**	-.01	-.04***
Male	.12	.42	1.46	-.49	-.10
Employed	-.40	-.23	-.71*	-.01	-.77**
Propdrty	.16	.70*	-.86	.01	-.01
Prior Conviction	-.34	-.37	.04	-.80	-.10
Sanctions Program Eligibles	.04	-.027	.09	.10	.10
B. Sanction Program Participants	n=542	n=542	n=542	n=542@	n=542
Age	-.04***	-.04***	-.07**	-.01	-.04**
Male	.01	.52	1.34	-.77*	-.37
Employed	-.27*	-.35	-.39	.37	-.51
Propdrty	.36	1.30***	-.64	-.19	-.11
Prior Conviction	-.19	-.19	.26	-.62	-.01
Sanction Program Participants	-.05	-.10	.31	.03	-.20

* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

for the standard docket sample. Throughout the year, the standard docket participants averaged fewer street days to first arrest after sentencing. The difference was significant under the directional alternative hypothesis ($p < .05$). A significant difference was not found when comparing all eligible sanctions docket sample members to the standard docket. The gain appears to be associated specifically with participants.

The lower prevalence of arrest and the longer time to first arrest were not accompanied by significantly fewer arrests among sanctions program participants as Table 6.3 indicates (frequency by types of arrests by group). The largest difference (not significant) was in other arrests, half of which were for drunk driving. This indicates fewer arrests among sanctions participants who were arrested at least once in the year after sentencing than among standard docket sample members who were arrested at least once. Overall, it appears that while sanctions participants were less likely to be arrested, a small number of outliers who were re-arrested more than once reduced the difference between sanctions participants and the standard docket sample.

Reductions in Self-Reported Criminal Activity in the Year after Sentencing

Arrests only measure criminal activity that is detected. However, the majority of offenses go undetected and are known only to offenders. For this reason, the survey asked defendants about the crimes they committed in the year after sentencing. The questions, modeled on the Bureau of Justice Statistics Survey of Adult Probationers, asked about 14 types of offenses.¹⁰ The 14 types of offenses were grouped into five categories: drug crimes (possession and trafficking), violent crimes (assault, sexual assault, robbery, murder/manslaughter and other violent offenses), property crimes (burglary, larceny and auto theft, fraud and bad checks, other property offenses), other crimes (weapons offenses, driving while intoxicated, other public order offenses), and probation/parole violations. Those who reported offenses in the year after sentencing were asked how many times they committed each type of offense.

There are no significant differences between the sanctions program eligibles or sanction program participants and the standard docket sample members in the prevalence of these offense categories in the year after sentencing. Logistic regression models which control for self-reported criminal offending prior to the drug felony arrest show no significant differences (Table 6.4). About 45% of all defendants reported some criminal activity: just over 32% reported a drug offense, 8% reported a violent offense, just over 10% a property crime, and 31% another type of offense (see Table A6.4). The survey data do not provide dates of reoffending and thus do not allow analysis of the days to first offense.

The number of crimes in the year after sentencing were estimated from questions about 14 offenses (see the Glossary). If respondents said they had ever committed that type of offense,

¹⁰Although self-report data on stigmatized behaviors are subject to underreporting (see Harrell, 1985), the analysis assumes similar willingness to report in both groups in this experimental comparison.

they were asked the number of times prior to their arrest (lifetime prior to court entry) and the number of times in the year after sentencing. If the number was 10 or fewer, that number was recorded. If greater than 10, the answers were coded in categories (11-20, 21-30, 31-40, 41-50, and 51 or more) to avoid gross distortions due to recall errors. The midpoint of the categories between 11 and 50 or the number 51 were used as estimates of number of offenses when combining categories. For analysis, the responses were combined into four offense types: drug offenses, violent offenses, property offenses, and other offenses. Overall, 54% of the respondents reported no criminal offenses in the year after sentencing, 20% reported one to ten crimes, 8% reported eleven to 50 crimes, and 18% reported 51 or more. The pooled mean number of offenses in the year after sentencing was 20.

In order to evaluate the reliability of the self-report data and assess the bias introduced by grouping the answer categories in this way, the mean number of crimes for violent and property offenses was combined with the FBI and DC records of number of arrests for violent and property offense to create a ratio of detected crimes (number of self-reported crimes divided by number of officially reported arrests). This ratio was then compared to a similar ratio constructed from national data sets. (The number of crime estimates were drawn from the National Crime Victimization Survey and the number of arrests from Uniform Crime Report data). The ratios, shown in Exhibit 6.1 below, are similar, indicating that the self-report data were consistent with the arrest records of these respondents. While the self-reported ratios are lower by .01% and .03% respectively, they do not indicate gross underreporting and may reflect the truncation of the top category at 51 offenses. Nor did closer analysis support differential reporting by group. As a result, survey data of self-reported numbers of criminal incidence was used to determine the number of averted criminal incidence.

Exhibit 6.1 - Validation of Survey Data			
	Total Number of Criminal Incidents	Total Number of Arrests	Ratio of Detected Crimes (% Arrested)
Violent Crimes (National)	10,860,630	543,435	5.0%
Violent Crimes (SCDIP Survey Sanctions Participants)	144	7	4.9%
Property Crimes (National)	31,012,200	1,431,11	4.6%
Property Crimes (SCDIP Survey Sanctions Participants)	211	9	4.3%

Data sources: Criminal Victimization in the United States (1994), pg. 21 (violent crime), pg. 30 (property crime); Uniform Crime Report (UCR, 1996), pg.10 (violent crime), pg. 35 (property crime); UCR (1996), pg.222.

The most frequent offenses (see Table A6.5) were drug sales or possession (approximately 10 offenses per person) and other offenses (about 6 to 8 per person). This is substantially lower than the average number of crimes committed by drug addicts which range

from 332 to 375 per year per user for heroin addicts to 320 per year for those addicted to nonnarcotic drugs including cocaine (Bureau of Justice Assistance, 1990). Even eliminating drug crimes (44% of the heroin addict offenses and 28% of the offenses by non-narcotic addicts), the drug-using defendants (some of whom were drug users, not addicts) committed relatively few crimes in the year after sentencing.

Table 6.4
Logistic Regression Odds Ratios: Any Self-Reported Arrest during the Year after Sentencing

	Any Crime	Any Drug Offense	Any Violent Offense	Any Property Offense	Any Other Offense
A. Sanctions Program Eligibles	n= 302@	n= 302	n= 296@	n= 295@	n= 299@
Age	.98	.99	.96	.98	.98
Male	.89	.64	3.04	.37	1.13
Employed	.80	.97	.79	.77	.66
Propdrty	1.73	1.32	2.59	1.67	1.55
Prior Conviction	.51	.37**	.38	.86	.57
Sanctions Program Eligibles	1.04	1.11	1.29	.95	1.09
B. Sanction Program Participants	n= 257@	n= 257@	n= 251@	n= 250@	n= 254
Age	.99	.99	.96	1.00	.99
Male	.76	.54	2.85	.31	1.07
Employed	.77	.97	.85	.83	.60
Propdrty	1.92	1.36	2.31	1.76	1.70
Prior Conviction	.47	.37**	.24	.55	.46
Sanction Program Participants	1.00	1.04	1.53	.81	1.22

* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

Poisson regression (negative binominal) found significant reductions in the total number of self-reported criminal offenses for sanctions program participants and eligibles defendants on the sanctions docket (Table 6.5). This is consistent with the finding of lower overall likelihood

Table 6.5
Poisson Regression Odds Ratios: Number of Self-Reported Crimes in the Year after Sentencing

	Number of Crimes	Number of Drug Sales	Number of Violent Offenses	Number of Property Offenses	Number of Other Offenses
A. Sanctions Program Eligibles	n=306	n=306	n=306	n=306	n=306
Age	-.04***	-.02***	-.02**	-.06***	-.04***
Male	-.57	-.57***	.42	-.95	-.15*
Employed	-.34***	-.43	-.29**	-.74***	-.07
Propdrty	-.30***	-.21***	-.44*	-.51	-.25***
Prior Arrest by Type	.01***	-.02***	.05***	.03***	.02***
Sanctions Program Eligibles	-.10***	-.01	.14	.44	-.18***
B. Sanction Program Participants	n=260	n=260	n=260	n=260	n=260
Age	-.04***	-.02***	-.02**	-.07***	-.04***
Male	-.59	-.58	.10	-1.23	-.17
Employed	-.32***	-.37***	-.01	-.13	-.23***
Propdrty	-.31	-.30	-1.54	-.76***	-.12
Prior Arrest by Type	.01***	-.02	.05***	.03***	.02***
Sanction Program Participants	-.09***	.08	-.17	.35	-.30***

* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

Note: Models include self-reported number of offenses prior to arrest. but not prior conviction.

of arrest reported above. In addition, the number of crimes in the other offense category was significantly lower among sanctions participants and among the target population of eligible defendants than among eligible defendants on the standard docket.

The Impact of Program Participation on Other Outcomes

Improvements in social and economic well-being are hypothesized to result from reductions in drug use among program participants. The survey asked about employment, participation in education or vocational training, and income in the year after sentencing to assess improvements related to economic well-being. There were no indications of improved economic well-being in the areas of employment, income, or participation in training or education (see Table 6.6).

Table 6.6
Outcomes Related to Economic Well-being in the Year After Sentencing

	Sanctions Program Eligibles (n)	Sanctions Program Participants (n)	Standard Docket Eligibles (n)
Employed*	49%	47%	58%
Employed full-time	27% (132)	31% (93)	32% (121)
Employed part-time	8% (132)	4% (93)	11% (121)
Occasional employment	5% (132)	3% (93)	4% (121)
Mean income	\$4,347 (142)	\$4,955 (100)	\$6,335 (142)
Enrolled in educational program in year	30% (159)	29% (109)	31% (153)
Enrolled in vocational training in year	25% (157)	22% (101)	27% (153)

*Type of employment not reported by 14 sanctions participants and 31 of the standard docket sample.

Regression models confirm that there were no significant economic improvements in sanctions participants or sanctions docket eligible defendants compared to the standard docket sample

during the year after sentencing. It should be noted that many other factors affect these outcomes and that reductions in drug use alone might not be sufficient to create improvements in these areas given the other problems faced by these sample members, including their criminal history and poor educational and work histories. There is also no significant difference in being homeless at any time during the year.

Those interviewed one year after sentencing were asked about problems related to drug use during the year. The problems included: having an accident while under the influence of a drug, having an argument with a spouse, girlfriend/boyfriend, family or friends while under the influence of a drug, losing a job because of drug use, having trouble at school or at a job due to drug use, getting arrested or held by the police due to drug use, or getting into a physical fight while under the influence of a drug. There were no significant reductions in problems related to drug use (see Table 6.7). Regression models (not shown) also indicated no significant reductions in problems related to drug use in the year after sentencing for either the sanctions participants or eligible defendants on the sanctions docket compared to the eligible defendants on the standard docket.

Table 6.7
Percentage Reporting Problems Related to Drug Use in the Year After Sentencing

	Sanctions Program Eligibles (<i>n</i>)	Sanctions Program Participants (<i>n</i>)	Standard Docket Eligibles (<i>n</i>)
Vehicle accident while under the influence of drugs	15% (103)	13% (71)	18% (88)
Arguments while under the influence of drugs	18% (88)	21% (62)	25% (89)
Lost a job because of drug use	5% (38)	6% (33)	8% (24)
Had trouble at school or job because of drug use	4% (47)	5% (38)	5% (41)
Arrested or held by police because of drug use	5% (64)	5% (43)	5% (56)
Gotten into a physical fight while under the influence of drugs	13% (57)	14% (44)	11% (55)
Any of these problems	20% (132)	22% (91)	24% (134)

Use of Drug Treatment Services

Use of Drug Treatment during Pretrial Release

Services other than the graduated sanctions program were available to help drug-involved defendants and were used by participants and nonparticipants alike, regardless of docket. Voluntary participation in drug treatment was encouraged by the judges on the standard docket and by case managers on the staff of the sanctions program. Records maintained by the program indicate that one third of the sanctions participants received referrals to community based treatment programs by case managers which often included assistance in gaining admission. However, follow-up information on whether the participants enrolled in treatment, type of treatment received and duration was not available.

The survey asked about participation in drug treatment during pretrial release and the year after sentencing. Substantial percentages of the defendants reported drug treatment while on pretrial release (see Table A6.6). The regular judicial monitoring of drug test results and encouragement to seek treatment may have led many defendants to enroll voluntarily in community based programs. Overall, about three quarters of the defendants in both groups received some treatment. The most frequently reported type of treatment was attendance at NA/AA, reported by over 60% of those interviewed. Just over a quarter participated in a formal outpatient treatment program. Smaller percentages received methadone maintenance, inpatient hospital treatment, or less intensive day treatment programs. The 'other treatment' category is described as treatment at a residential/halfway house facility, an alcohol or drug rehabilitation program, a crisis center, or emergency room.

Sanctions participants were significantly more likely than standard docket defendants to receive detoxification and hospital-based treatment. Although the survey data do not differentiate between treatment obtained as a sanction or with the assistance of sanctions program case managers, sanctions program records indicated that one-third of the participants were referred to treatment by their case managers and 49% of all participants received detoxification through the program: 34% as a sanction ordered by the judge and 15% at the defendant's request. In addition, some additional participants, like those on the standard docket, apparently entered detoxification without the formal involvement of court staff. Overall, those on the sanctions docket were also more likely to receive detoxification than those on the standard docket. There was no significant difference, however, in the likelihood for those on the sanctions docket to receive hospital-based treatment (Table 6.8).

Although many defendants in both groups used some form of drug treatment during pretrial release, extensive analysis found no consistent significant differences in crime or drug use during the year after sentencing related to: 1) participation in any treatment, or 2) participation in an inpatient, outpatient, day reporting, or methadone program. However,

regression analyses (not shown) indicate that participation in NA/AA is significantly related to lower rates of reporting any criminal activity (odds ratio=.57, $p<.05$), any drug use (odds ratio=.43, $p<.01$), and any marijuana use (odds ratio=.51, $p<.05$). In addition, the interactions between NA/AA and group indicate that the combination of NA/AA with the sanctions program reduced stronger drug use in the year after sentencing (odds ratio=.21, $p<.05$).

Table 6.8

Logistic Regression Odds Ratios: Participation in Substance Abuse Treatment during Pretrial Release

	Any SA Treatment	Detox	Inpatient	Outpatient	Day Treatment	Methadone Maintenance	NA/AA	Other
A. Sanctions Program Eligibles	n=218@	n=218	n=218	n=218	n=218@	n=218	n=218	n=218@
Age	1.05*	1.05**	1.09**	1.03*	1.05*	1.10**	1.07***	1.02
Male	0.71	0.45*	0.39	1.59	2.78	0.52	0.77	0.63
Employed	0.67	0.96	0.95	1.08	0.69	0.55	0.85	0.79
Propdrt	0.90	2.03	1.78	0.88	0.38	1.35	0.53	0.78
Prior Conviction	1.31	1.21	1.24	1.61	1.12	1.18	1.36	1.42
Sanctions Program Eligibles	1.03	1.87*	2.10	0.86	0.86	1.67	0.62	1.24
B. Sanction Program Participants	n=185@	n=185	n=185	n=185@	n=185@	n=185@	n=185	n=185@
Age	1.05*	1.05*	1.11**	1.03	1.05*	1.09**	1.07***	1.03
Male	0.64	0.43	.026*	1.67	2.22	0.63	0.74	0.71
Employed	0.86	1.28	1.51	1.15	0.80	.49	0.88	0.83
Propdrt	0.90	2.19	2.44	0.77	0.42	0.63	0.31*	0.74
Prior Conviction	1.41	1.16	1.02	1.64	1.19	1.70	1.39	1.77
Sanction Program Participants	1.34	3.57***	2.70	0.78	1.19	1.47	0.64	1.27

* $p<.05$. ** $P<.01$. *** $p<.001$. @ Model is not significant.

Use of Drug Treatment in the Year after Sentencing

During the year after sentencing, there were no significant differences in use of drug treatment between the sanctions samples (participants or all eligible) and the standard docket sample (Table 6.9). Nearly 80% of both groups received drug treatment during the year. Most

Table 6.9
Logistic Regression Odds Ratios: Participation in Substance Abuse Treatment during the Year after Sentencing

	Any SA Treatment	Detox	Inpatient	Outpatient	Day/Partial Care	Methadone Maintenance	NA/AA	Other
A. Sanctions Program Eligibles	n=218@	n=218	n=218	n=218@	n=218@	n=218	n=217	n=218@
Age	1.03	1.04	1.06*	1.03	1.05*	1.13**	1.05**	1.00
Male	0.67	0.78	0.38	0.62	0.53	0.23	0.68	0.57
Employed	0.56	0.30**	0.50	0.94	0.94	0.32	0.78	0.85
Propdrt	0.82	1.16	3.93	2.07	3.31	0.11*	1.02	0.87
Prior Conviction	1.75	0.53	0.51	1.31	0.48	1.46	1.52	0.84
Sanctions Program Eligibles	0.79	0.50	1.66	0.50	0.65	1.04	0.62	1.35
B. Sanction Program Participants	n=185@	n=185	n=185	n=185@	n=185@	n=185	n=184@	n=185@
Age	1.03	1.04*	1.08*	1.03	1.05	1.15**	1.05**	1.00
Male	0.58	0.86	0.25*	0.69	0.42	0.17*	0.75	0.61
Employed	0.89	0.36*	0.75	0.95	1.36	0.38	0.92	0.98
Propdrt	1.02	1.23	7.29	3.55	5.3	0.13	0.94	0.78
Prior Conviction	1.33	0.51	0.35	1.37	0.51	2.00	1.30	0.76
Sanction Program Participants	1.26	0.55	1.99	0.50	0.73	1.12	0.89	1.60

* p<.05. ** P<.01. *** p<.001. @ Model is not significant.

of these attended NA/AA. However, a substantial minority received one or more intensive kinds of treatment. This suggests that efforts by these offenders to reduce their drug use continued after the end of regular drug testing and judicial monitoring.

Differential Effects of the Sanctions Program

The impact of the sanctions program on drug use of participants in the year after did not vary significantly by characteristics of the participants. A large number of models tested for significant interactions of group (sanctions program participant vs. standard docket eligible) with age, gender, employment, prior convictions, gender, or proportion of drug tests with bad outcomes in the first 60 days after arrest. The results are summarized in Exhibit 6.2. The variables on the left are those that were hypothesized to interact with group in models predicting the dependent variables shown at the top of the columns. Similarly, there were no consistently significant patterns of interactions when group is defined as a eligible defendants on the sanctions docket versus eligible defendants on the standard docket.

Exhibit 6.2
Tests of Interactions Between Sanctions Program Participation and Other Independent Variables:
Probability for those with $p < .05$

Group Interaction	Any Drug Use (Self-Report)	Any Stronger Drug Use (Self-Report)	Any MJ Use (Self-Report)	Drug Use Weekly (Self-Report)	Stronger Drug Use Weekly (Self-Report)	MJ Use Weekly (Self-Report)	Any Crime Committed (Self-Report)	Any Violent Crime (Self-Report)
Age								
Gender								
Employment								
Proportion of dirty tests		p=.02						
Any Conviction								
	Any Drug Crime (Self-Report)	Any Property Crime (Self-Report)	Any Other Crime (Self-Report)	Any Arrests After Sentencing	Any Drug Arrests After Sentencing	Any Violent Arrests After Sentencing	Any Property Arrests After Sentencing	Any Other Arrests After Sentencing
Age								
Gender								
Employment					p=0.04			
Proportion of dirty tests								
Any Conviction				p=0.02				

CHAPTER 7 THE TREATMENT PROGRAM

The Treatment Program Model

The treatment docket offered an intensive, court-based day treatment program to drug-involved defendants. Participants were expected to move through sequential treatment stages, which consisted of an Orientation Phase and a five-level Intensive Treatment Phase (shown in Exhibit 7.1). Progression through the program was contingent upon the participant's progress toward the treatment objectives outlined in the treatment plan, academic functioning, participation, and, social adjustment. Level movement was designed to reward defendants for positive behaviors and to acknowledge the completion of 21 days of treatment. The treatment team reviewed defendant progress and recommended to the judge whether defendants should move to the next level. Progression to the next level was celebrated in a court ceremony during which the judge congratulated defendants for their success and presented small gifts to recognize their achievement of treatment goals. Treatment graduates were honored with certificates presented by the judge at ceremonies in the court room attended by friends, family members, fellow program participants, and staff from the court and treatment program.

The program included frequent drug testing (daily or three times per week). The program used the leverage of the court to retain drug-abusing defendants in the treatment program and to provide an accountability structure, thus increasing the chances for improved treatment outcomes. Penalties were imposed by the treatment staff for nonattendance, tardiness, and behavior problems in treatment, but not for positive drug tests. The penalties used for various infractions evolved during the treatment program and were not specified in the agreement signed by the defendant at the start of the program. Persistent, serious problems resulted in judicial admonishment and program termination.

In addition to the core treatment program, defendants received supplementary services. Services included individual counseling, acupuncture, and referrals to vocational skills training. Counseling and acupuncture services were offered throughout a participant's program tenure, but participants were encouraged to attend both daily in the orientation phase of treatment.

The Treatment Content

The treatment program was designed to provide the skills, self-esteem, and community resources necessary for drug-dependant individuals to leave the drug using criminal life. Defendants received psycho-educational interventions designed to introduce defendants to central treatment issues. They covered such areas as Substance Abuse, Relapse Prevention, Anxiety/Anger Management, Effective Social Communication, and Ethnic Contributions to Civilization.

EXHIBIT 7.1 TREATMENT STAGES

Orientation Phase. This phase is for defendants who are just entering the program or who exhibit a need for further assessment, detoxification, or orientation to the basic concepts of treatment. The focus is on goal setting, motivation, awareness of consequential outcomes, and the process of recovery. A significant amount of the defendant's time is directed toward assessing personal abilities and deficiencies, defining appropriate intervention strategies, and remaining drug free. Specific treatment modules include recovery group, and goal setting and time management. Acupuncture is offered at the program daily and defendants are encouraged to participate. If a defendant is unable to become drug free during the first 14 days of treatment, as evidenced by urinalysis, the treatment team can recommend more intensive detoxification services.

Intensive Phase. This phase includes five levels of intervention during which the defendant begins individualized treatment.

Level I. Stabilization and Self-Esteem Building. The goal is to remove distorted and limiting perceptions of self. Modalities which reduce stress and anxiety and raise the level of inner satisfaction are employed to increase self-awareness and break addictive patterns. Significant others and mentors are encouraged to participate with defendants in experiential therapies.

Level II. Cognitive Restructuring. This intervention uses techniques to develop social thinking skills and increase the defendant's sense of possibilities. Defendants are challenged to exercise the control they have over their thoughts and how they label their experiences.

Level III. New Concepts Development. In Level III, the emphasis is on exploring the knowledge and skills that have been learned through the symbolic imagery of language. Many times defendant behaviors are influenced by negative conditioning, but freedom from a self-limiting world view is possible. This phase explores the defendant's interpretation and expression of words and ideas, and how they interact with his or her conceptual framework.

Level IV. Constructive Action. In addition to the strategies for change implemented thus far, the defendant explores applications of new behaviors in the community through exploring community resources.

Level V. Community Leadership. Level V is the last level of treatment before the defendant's transition to aftercare. During this level defendants have the opportunity to lead group sessions at SCDIP.

The key treatment modules are shown in Exhibit 7.2. On a given day, four modules were scheduled. Modules were led by treatment specialists and defendants were encouraged to participate. The treatment modules attempted to enhance self concept, facilitate skills acquisition, and provide tangible alternatives to crime for program participants. Treatment specialists were expected to keep attendance at each session and record participation in PSA's MIS system.

During the experiment, the treatment program shifted from five to three days per week: Mondays, Wednesdays, and Fridays. During that time, the same psycho-education modules were offered but the morning Recovery Group was dropped. Acupuncture also was dropped because the program was unable to pay the acupuncture provider on a regular schedule due to the financial insolvency of the District. However, participation continued in Substance Abuse Education, Relapse Prevention, Identifying and Changing Patterns of Criminal Behavior, Ethnic Contributions to Civilization, Parenting, and Men's and Women's groups three days per week.

The program was designed to offer additional services to assist recovery. Individual counseling sessions were provided to reduce defendant misconceptions about drug treatment and build a relationship between the participant and treatment specialist. Acupuncture therapy was offered on a voluntary basis to help the participant restore inner balance, reduce anxiety, diminish drug cravings, and reduce acute post-withdrawal symptoms such as sleeplessness and depression. Defendants were encouraged to attend acupuncture every day for the first fifteen consecutive days of treatment and as needed thereafter. Vocational skill training was offered in the latter phases of the treatment program to participants expressing interest in vocational rehabilitation. Typical vocational referrals included D.C. Central Kitchen and the D.C. Department of Employment Services.

Recruitment

Treatment docket judges offered the program to all who met the original eligibility criteria. However, only 40% (n=140) of the 346 eligible defendants agreed to join. Many participants initially declined the treatment program, but joined later after continued bad drug test outcomes and hearings before the judge who emphasized the consequences of continued use. Treatment participants entered the program an average of 50 days after becoming eligible for the program (see Figure 4.2 for days to program entry). Combined with time to case identification, participants entered treatment an average of 92 days (three months) after they were arrested. The delay to program entry, compared with the sanctions program (64 days), is significant and can be attributed to the stringent nature of the program

The focus group interview with active treatment program participants indicated that the main reason defendants enrolled in the program was to avoid jail. One participant said the judge asked him if he wanted to take the treatment program or face 30 years of incarceration -- he quickly chose treatment. Other participants faced these alternatives as well. One defendant said

“I am going to be blunt, I took the program because it was an easy way for me to stay out of jail.

EXHIBIT 7.2

KEY TREATMENT MODULES AND GROUPS

Ethnic-Specific Contributions to Civilization. Defendants are exposed to the contributions of African people to world culture and civilization. This module seeks to motivate defendants by breaking through the psychological barriers that impede goal attainment.

Identifying and Changing Patterns of Criminal Thinking. Defendants are taught to identify and change antisocial cognitive patterns. The premise is that offenders have developed patterns of thinking, feeling, and perceiving that support their criminal behavior; changes in these patterns can reduce their criminal behavior.

Recognizing and Regulating Anxiety. Defendants are exposed to a structured process for identifying anxiety and learn practical methods of coping. The module encourages awareness and regulation of personal patterns of anxiety.

Peer Support Group. In this group, defendants are challenged by peers to stop allowing negative thoughts and the appearance of circumstances determine their feelings, and are empowered by the group to define reality for themselves.

Power and Self-Expression Module /Socially Effective Communication. This module focuses on increasing the awareness of the participant's abilities and power to change his or her environment. The module encourages appropriate forms of self-expression to strengthen personality and functional use of power to curtail unacceptable behavior.

You and Your Community Module. Defendants are provided with "resource" information critical to accessing community resources. Defendants research a community agency and report on the services the agency provides to the community.

Life Skills Module. The Life Skills module provides defendants with information on basic living skills. Topics include money management and job readiness, as well as problem solving, communication, and coping skills.

Spiritual Mentorship. Principles for healthy character development are addressed during these group sessions, including respect, honesty, silence/relaxation, discipline, empathy, responsibility, productivity and honor. Information and skills for developing rituals and ceremonies to support self awareness and character development are included.

Men's and Women's Groups. Gender specific groups are conducted to develop peer and social support and discuss recovery issues specific to their gender.

Counseling Groups. Counseling groups provide defendants with an opportunity to apply the knowledge and the skills they have learned in various modules, develop interactive skills, and learn new approaches to problem solving.

I do not want to go to jail.” Although the defendant’s primary motivation for joining was to avoid jail, participants indicated that they continued to attend because they found that treatment was beneficial.

One defendant stated he initially saw the program as a “joke.” At first, he thought all he would have to do was show up to treatment each morning, and he could avoid jail and continue to use drugs. But after being in treatment a while, he got tired of watching others move forward in treatment while he stayed in the same place. He said “. . . I got tired of everybody getting certificates and I wanted mine.” He realized all he needed to do was test clean for a certain number of days to progress. He cut back on his use, progressed to the next level, and got his certificate. Although a desire to be recognized as a success by the judge and his peers motivated him more than a desire to be free of drugs, he did cut back on drug use and progressed in treatment.

The stringent requirements of the treatment program (daily attendance and frequent drug tests) for a minimum of six months were frequently cited as a reason for not joining the program. In the focus group with defendants eligible for the treatment program, the programs’ hours of operation were frequently mentioned as a major problem. Several group members, most of whom had not joined the program, complained that the hours did not leave time to care for children or to secure a job. Some wanted more flexible hours for treatment. Many felt five days a week for six months was too much for too long. One participant felt that joining the all-day treatment program would be a step backward because it would remove him from the job market. He said, “The 9:00 a.m. to 3:00 p.m. treatment program leaves no time to get a job -- forces you back to the streets to sell drugs for money.”

Table 7.1 shows the characteristics of eligible defendants by whether they enrolled in the program. Program participants, like the eligible defendants who did not join the program, were mostly male and approximately 30 years old (the age ranged from 18 to 55). Just under two-thirds (65%) tested positive for cocaine or heroin in the first 60 days of testing. However, participants were significantly more likely to be African-American, have more prior violent arrests in the District of Columbia, and were less likely than those who did not join to be employed at the time of arrest -- giving credence to the work excuse often provided by those who declined the program.

Table 7.1
Characteristics of Eligible Defendants on the Treatment Docket

	Treatment Participants (<i>n</i> = 140)	Non-participating eligible defendants (<i>n</i> = 206)
Male	85%	90%
African-American	99%*	94%
Average Age in Years	29.6	30.4
Employed at Arrest	31%*	44%
Number of prior arrests in past 5 years	0.63	0.48
Number of prior violent arrests in past 5 years	0.11*	0.02
In first 60 days of case processing:		
Use of stronger drugs	63%	66%
Drug use severity	0.74	0.71

* *p*<.05.***p*<.01.****p*<.001

Drug Testing

Frequent drug testing provided the judge, case manager, and defendant an objective measure of treatment progress. Results were used to assess the defendant's commitment to the program at each hearing and determine whether their progress was sufficient for satisfactory program completion. The judge used this information in selecting the sentence.

Drug tests were also used as an aide to treatment. Results were discussed in group sessions at the treatment program, providing a basis for an honest discussion of the defendants' struggle to abstain. This information also allowed the judge and case manager to tailor the intervention to defendant needs. For example, if a defendant continually tested positive, the treatment team could recommend 14 day stay at the detoxification unit.

Initially, program participants were required to test daily for a full drug screen which

included marijuana, PCP, cocaine, amphetamines, heroin, and alcohol¹¹. On October 23, 1995, drug testing was reduced to three times per week (Monday, Wednesday, and Friday) because of budget constraints in the District of Columbia. On the appropriate test day, defendants were required to test between 7:00 a.m. and 9:00 a.m. -- before the start of treatment. If a defendant missed treatment, he or she could test between 7:00 a.m. and 6:30 p.m. Each defendant was tested for a full screen of drugs. Drug test results were discussed in the group meeting at the start of the treatment day. Defendants with negative tests were recognized, and those with positive tests were offered group support.

Treatment participants were tested up to 416 times after becoming eligible for intervention. The average number of tests was 107 per person. Of these tests, slightly over half (51%) were negative. Tests with bad outcomes included positive for drugs (32%), failure to appear (16%), and other bad outcomes such as tampered samples (less than 1%). Most of the program participants had a bad outcome at least once. Ninety-three percent failed a drug test after entering the program and more than 90 participants (64%) had ten or more bad outcomes. In addition, half (50%) of the treatment participants dropped out of testing the month before sentencing, a higher dropout rate than on the standard docket (41%) or among sanctions program participants (38%).

Beginning in December 1995, the creatinine levels of program participants urine samples were tested. In March 1996, the PSA lab director and treatment program staff met with the judge and described participants' probable manipulation of urine samples and the new urine test. As a result, defendants with low creatinine level were prohibited from level progression and were required to come before the judge for a compliance hearing. As the relatively low percentage (1%) of tests defined as bad outcomes for other reasons indicates, it did not take long to discourage water loading.

Some defendants protested the new policy, claiming that drinking water was legal. Some indicated they had medical reasons for drinking large quantities of water. Counselors encouraged these defendants to give a urine sample in the morning and then drink plenty of fluids after a sample was submitted. Most defendants could give samples with valid creatinine levels. The number of defendants with low creatinine tests dropped dramatically. Not surprisingly, some defendants who gave samples that tested negative with low creatinine levels, began to test positive when the sample was valid. Others stopped giving low creatinine level samples and continued to test negative.

In the focus group discussion with treatment-eligible offenders, participants were asked if they knew of ways to prevent a positive test after using drugs. Many mentioned drinking lots of fluids before a test or adding cleaning solutions to the urine to produce a negative test result.

¹¹ The amphetamine screen was dropped on July 12, 1995 due to extremely low levels of use in the District of Columbia.

Most felt they could not get around it. However, one participant stated there was one way around the test:

“All the teas you want to take, all those herbal teas you want to talk about taking, ain’t nothing can clean your system, but water. Flushing your system totally out. All that other stuff you hear about out on the street, and what you hear when you land in the joint, that stuff don’t work. You can go in and if you can dilute your urine, because they test for certain numbers against certain in your system. You can give them a drop of urine, one drop of urine and the rest water, you can come up clean. But that’s the only way you are going to beat the system.”

In the second focus group discussion with defendants active in the treatment program, participants were asked their opinions about the drug testing system. At that time, the creatinine test was in place and participants did not have great faith in the drug testing system. Many participants told of times when they or friends had not been using but drug test results showed up positive. All defendants remarked on creatinine levels and drug tests. Participants felt the check was unfair, and that to avoid being accused of water loading, one must avoid drinking anything before being tested. A defendant claimed:

“If you test clean and you have a low creatinine that’s just like a positive -- I don’t like that. They got to change that. When you get up in the morning and don’t drink anything, you are basically hurting your kidneys to test clean.”

Judicial Monitoring

A key feature of the treatment program was enhanced judicial monitoring. The judge was directly involved in monitoring treatment progress and oversaw both the legal and the treatment aspects of the defendants’ case. The judge used the authority of the court to improve treatment outcomes through both positive encouragement when a participant did well and sanctions when the defendant did not perform to the program’s expectations.

The judge saw defendants frequently and interacted with them directly. During hearings, the dialogue between the judge and defendant typically involved the defendant’s drug use. If a participant tested positive, the judge confronted him or her directly about it. The exchange was sometimes confrontational and participants were allowed to speak directly to the judge. Because discussions between the judge and participant were believed to be instrumental in affecting change, the U.S. Attorney’s Office agreed not to use information disclosed in the hearings against the participant, except in cases of threats or reported incidents of assault, murder, or child abuse.

Program participants were scheduled to appear before the judge at monthly Treatment Program Reviews. During the hearings, the court representative read the participant’s treatment report to the judge. The report highlighted participant progress (i.e., three weeks of perfect

attendance, attended required NA/AA meetings, etc.) or failure (i.e., disruptive behavior, continued drug use). The reports also recommended promotion to the next treatment level or therapeutic sanctions for those not progressing in treatment, if appropriate.

Participants who exhibited patterns of noncompliance between monthly hearings were ordered before the judge for compliance hearings. Typical reasons for compliance hearings were treatment absences, poor treatment participation (three or four absences within a specific period), disruptive behaviors in group, and inability to obtain a pattern of sobriety. Hearings were not scheduled following a single bad test outcome as in the sanctions program. Participants that were ordered before the judge because they were unable to obtain a pattern of sobriety typically had consecutive bad test outcomes and were resistant to the intervention. The treatment team's recommendation to the judge included therapeutic sanctions tailored to the participant's need. Sanctions included detox, additional NA/AA meetings, placement in a halfway house if continued use was exacerbated by others in the home, or program discharge.

These hearings were scheduled for Thursdays afternoons. On the preceding Tuesday, treatment specialists faxed the judge the names of defendants ordered to appear and entered the reason for the hearing into automated court data base. The defendant's attorney was contacted by staff and informed of the hearing and the treatment team's recommended sanction. Staff notified participants who were active in the treatment program to attend the hearing. Participants who failed to appear at treatment were contacted over the phone.

About once a month, the judge presided over the Treatment Progression Ceremony. These ceremonies were also scheduled on Thursdays. The judge often stepped down from the bench to congratulate and present a small gift or certificate to the participant in recognition of the achievement of treatment goals. Ceremonies were attended by friends, family members, fellow program participants, and staff from the court and treatment program.

Treatment participants had up to 37 hearings, and averaged 15.6. More than half the hearings (an average of 9.5 hearings) were progression and compliance hearings. This number did not include graduation ceremonies which were festive special occasions. Treatment participants averaged 416 days to disposition, with a median time of 394 days, or about five months longer than the time to disposition on the standard docket.

In the focus group interview with active participants, all spoke highly of the judge. Each felt the judge took a personal interest in his or her case. As a result, participants felt the judge did not look at each like a typical defendant but as an individual. The group also remarked that the judge was fair. One participant described the judge's approach as ". . . the judge gives you enough rope to hang yourself with." All felt that if a participant was doing well in treatment and tested clean, the judge would support the participant. However, if a participant disrupted the program activities or failed to exert genuine efforts towards recovery, the judge would step the participant back and put them in jail. Many said that if the judge stepped a person back, he or she deserved it.

Program Operations

The treatment program was housed in the basement of a D.C. Superior Court building. The program hours changed frequently during the demonstration period. From March 1994 through February 1995, the treatment program was scheduled Monday through Friday, 9:00 a.m. to 3 p.m. After February 1995, treatment programming was reduced three times. At the end of the evaluation period, treatment programming was offered from 9:00 a.m. to 12:00 p.m., three days a week.

When a defendant accepted the program, the treatment court representative completed intake forms with the participant in the courtroom. These include an Initial Screening Interview Form, Needs Assessment Questionnaire, Admissions Summary Form, Authorization to Release Information to the Court, and the Request for Release of Information Form with the defendant. Copies of program rules and regulations and a map with directions to the program were given to the defendant. A defendant who joined the program early in the day was told to report directly to the treatment facility that afternoon. Otherwise, the defendant reported to the program on the next business day. An in-depth participant assessment was conducted within the first month of treatment.

During 1996, the treatment program employed an acupuncturist, a psychologist, an education specialist, and six treatment specialists, two of whom worked exclusively at the court. The court representatives were responsible for enrolling defendants in the program and representing participants at court hearings. Each treatment specialist had a Bachelors degree and was either a Certified Addiction Counselor or eligible to be certified. A treatment specialist had an average caseload of 10 defendants. Specialists met individually with defendants daily and directed treatment modules and groups, and individual psychotherapeutic sessions. Weekly, the treatment specialists met as a group to discuss participant progress. Recommendations from these meetings were presented to the judge at a monthly Treatment Progress Review and at compliance hearings, when necessary.

Beginning April 1996, sanctions for noncompliance with treatment program requirements were incorporated in the program. If a defendant missed a full day of programming or was absent, tardy, or left early from a treatment session, a sanction was imposed. The sanctions for noncompliance are shown in Exhibit 7.3. Sanctions were "reset" to the first level as the defendant progressed to a higher program level.

The day treatment program, housed in abasement of a D.C. Superior Court building, faced serious and chronic structural problems during most of the demonstration. Beginning in May 1995, pipes in several treatment rooms began to leak. The chronic flooding left affected rooms unusable for weeks at a time and significantly disrupted the program. The following example illustrates the effect of the problems on treatment programming. After severe flooding caused by leaking pipes, the program relocated into a makeshift space and provided services in

conferences rooms throughout a large, three story building for two days. Contiguous program space was eventually secured and an abbreviated programming schedule was instituted for two weeks while repairs (which turned out to be temporary) were done to the basement. However, this disruption to services resulted in lower than usual attendance.

The treatment space also suffered from an ineffective ventilation system. The program experienced problems maintaining reasonable air quality and a comfortable temperature. The temperature in the basement was consistently above 80 degrees. Besides disrupting services, the air flow problems and the flooding lead to the growth of bacteria and mold in the carpets. Concurrent with the problems, treatment staff and participants began complaining of headaches and respiratory ailments and increases in staff sick leave were observed.

Financial problems in the District also affected treatment delivery. Although the program was funded with federal money, the poor financial state of the District of Columbia during the demonstration period limited PSA's ability to pay or employ contractors who provided direct services to defendants. Contractors whose tenures were affected by budget constraints included the acupuncturist, psychiatrist, and literacy tutor. It also affected the program's ability to get the necessary supplies and contract out repair work that needed to be done. For example, the vendor who supplied testing materials for the HIV counselor refused to ship any supplies until the District of Columbia payed some portion of its outstanding balance. Also, problems with the building plumbing system caused raw sewage to overflow out of bathrooms and into the program's hallway. Programming was suspended around the affected area until the plumbing was fixed and the carpets cleaned. However, it took two weeks to have a plumber tend to the problem because the D.C. Department of Public Works was short staffed due to budget cuts and the plumbing contractor refused to work until he was compensated for past work for the court.

Treatment Attendance

Treatment specialists were expected to record participant attendance and level of participation for each module. This information was then entered into the program's MIS by administrative staff. Because the record keeping were inconsistent, consistent data on attendance at each module was not available. It was possible, however, to determine if a participant attended at least one session or signed in at the start of the day. If a participant attended at least one module, he or she was counted as present for the full treatment day.

Overall, the attendance rate of treatment program participants was 0.36. That is, the average participant attended the program approximately a third of the days in which he or she was enrolled (this excludes weekends). According to attendance records, 18 (13%) treatment participants had no recorded attendance at the treatment program. Among those who attended at least one day, the average rate of attendance was 0.41.

EXHIBIT 7.3

RULES FOR SANCTIONS FOR THE TREATMENT PROGRAM

A sanction hearing will result for missing a day of programming, or any combination of three of the following: absent, late or leaving early from program session.

The court will order the following sanctions:

First Sanction Remain in the Courtroom for one day
and attend one NA/AA meeting

Second Sanction Jail overnight

Third Sanction Weekend in jail

Additional Sanctions At the Court's discretion

Sanction level returns to the first level when client progresses to a higher program level.

Treatment program participants were in the program an average of 188 days -- approximately 6.2 months. Combined with time to program entry, treatment program participants were active on the docket for 13.7 months.

Program Completion

Defendant status at program discharge was classified into three categories: 1) graduation after successful completion of all phases of the program, 2) withdrawal upon a request by the defendant, and 3) involuntary discharge.

Successful Program Completion. To complete the program successfully, defendants had to: 1) complete Level V of the Intensive Phase, 2) have at least 63 consecutive drug-free days, 3) have satisfactory records of program attendance and participation, 4) have an AA/NA sponsor, and 5) complete all relapse prevention work and other assignments.

Voluntary Treatment Departure. A defendant could request to go before the judge to petition for program discharge at anytime. Reasons varied, but most often the defendant no longer wanted to be in the program.

Involuntary Discharge from Treatment. Defendants who failed to comply with program rules were involuntarily discharged from the program. Circumstances that resulted in involuntary discharge were: 1) involvement in a physical or verbal altercation, or violent or inappropriate behaviors disruptive to the treatment process and/or failure to comply with behavior and/or treatment contracts, 2) unsatisfactory program participation and attentiveness, 3) unexcused absences or repeated failure to attend program activities including inconsistent patterns of attendance that did not allow the defendant to benefit from treatment, 4) noncompliance with drug testing conditions of release, 5) a psychiatric or physical illness that impaired the defendant's ability to benefit from treatment, 6) possession of illegal drugs or paraphernalia at the program, 7) inability to establish and maintain a consistent pattern of sobriety after exhausting many therapeutic options, or 8) bench warrant status or incarceration for 30 days or more.

The treatment specialist completed a Discharge Summary when a defendant successfully completed the program. This included a comprehensive assessment of the defendant's progress toward meeting treatment objectives outlined in the treatment plan, a brief history of the person's substance abuse, and overall compliance in the program. The Summary was presented to the judge by the court representative with the treatment team's discharge recommendation. If appropriate, the recommendation included an aftercare treatment option for the defendant.

When a defendant was terminated from the program before graduation, the treatment specialist completed a Termination Outpatient Treatment form. A summary of the form was entered into the DTMS and could be used by the judge. Defendants who ended before graduation were allowed to reenter the treatment program; however, they were required to wait a minimum of 90 days before reentry. The program had a 90-day rule -- a cooling off period -- to limit the "revolving door" nature that many defendants experience in the criminal justice system.

The program was rigorous and many failed to complete it successfully. Nineteen percent graduated from the program (n=27). Twenty percent requested voluntary discharge, 9% left the program to accept jobs while doing well in the program, 6% left because they felt they no longer needed the program, and 5% were referred to more intensive drug treatment or medical care. Sixty-one percent were involuntarily discharged from the program. Table 7.2 compares the characteristics of those who graduated to program participants who did not graduate.

Sentences Imposed

A key incentive for joining the enhanced treatment program was the increased chance of receiving probation at sentencing. Just under two-thirds (64%) of treatment program participants were sentenced to probation following their drug court case. The balance of participants were sentenced to a period of incarceration.

Table 7.2

Characteristics of Treatment Participants Who Graduated and Those Who Did Not Graduate

	Graduated (n = 27)	Did not Graduate (n = 113)
Male	81%	86%
African-American	100%	98%
Average Age in Years	32.0	29.0
Employed at Arrest	32%	26%
Number of prior arrests in past 5 years	0.44	0.65
Number of prior violent arrests in past 5 years	0.03	0.12
In first 60 days of case processing:		
Use of stronger drugs	52%	65%
Drug use severity	71%	78%

* p<.05

Our examination of sentences showed that the judges followed through with the offer of leniency in sentencing for treatment success: 93% of the program participants who tested clean in the month before sentencing received probation, compared with 56% of those who did not test clean during the entire month. Ninety-three percent of treatment program participants who tested drug-free (n=29) in the month before sentencing received probation, compared with 58% of those who did not test clean, dropped out of testing, or were detained in jail (n=111) during the entire month. About half of program participants remained active in drug testing in the month before sentencing. Of those still testing, 80% were sentenced to probation compared to 51% who dropped out of testing or were detained in jail the full month.

Participant Opinions about the Program

In the focus group, several participants spoke of how the program helped them by providing structure to their lives, exposing them to other people working through similar problems, and keeping them off the street. These factors allowed them to change their behavior and desist from drug use. One described the program in the following way.

"It [the program] gives me something to look forward to. I don't have a whole lot of idle time. I like the people and I like the counselors. It's a change in my behavior. It's a big difference from getting up, getting something to eat and chasing crack all day. What is the sense of me getting a job now 'cause when I get my first check I am going to use. Money is a big thing with me. I need this time, this slow time, to kick it with you all. I'd rather have this chill time as oppose to sitting in jail yelling down the hall 'Hey what's up'. I'd rather talk to you like this than live like that."

Another participant spoke of how by attending the program he could "program" himself through the structure of a five-day a week treatment program and find strength in the community the program provided.

"You got your freedom but you still need to go to the program five days a week - you can program yourself. You get up at this time, shower at that time, eat your breakfast, and go to treatment. You program your life into a whole new way of thinking. You may not like what the counselors say but you get a chance to be around a group a people, something someone says might inspire you. Someone is gonna say something that's gonna help you. The program doesn't just help your drug addiction, it helps your self esteem. It motivates you. Everybody in the whole group gets along, we laugh and joke - that's motivation. People that move onto higher levels - that helps you. You shouldn't just look at the things that you don't agree with [in the program] but the little things that you can take away from it that helps you. The program, in the little ways, can help you."

Others felt the program was not beneficial. One client said participants were "getting nothing out of the program." He says the counselors expect people who have had a drug addiction for more than 20 years to "just give up" their addiction once in the program and wanted the program to place more emphasis on GED programs and job placement. He thought the counselors didn't care about the clients themselves, but only whether they tested clean.

Another client said:

"The program is not giving us the tools. They [the counselors] just talk and talk about how we need to be prevented from using again. I already know that - I have been in drug programs before. I know it's on the individual. But a person can try their best to stay clean but there are too many other obstacles."

He said a person could work hard in the treatment program every day but when he returned to his neighborhood filled with drugs and to friends who use, it was very hard not to use. He remarked the program placed too much emphasis on testing clean and that counselors didn't realize it would take time and maybe a new environment for a person to give up drugs altogether.

Another client felt the rules of the program were too severe and contributed to his continued drug use.

"The program is stressing me out. You can't tell me something you read here [in a book] when my addiction is as long as you are old. You never smoked a cigarette and you are going tell me about a heroin addiction? You can't tell me about me. It was an either or thing for me [getting in the program]. It was either come here or get the six years. The program is stressing me out. I started getting dirty after I got in the program."

The group had many suggestions on how the program could be improved. All participants agreed that the program should hire counselors who are recovering addicts themselves. Many resented being told by counselors who never used drugs or struggled with addiction what they should be doing or how they should be feeling. One client said, "You [the counselors] cannot tell me 'I can't do this, I can't do that -- it works if you work it.' I don't want to hear that. You can't tell me when all that you know is out of a book." Another client remarked that counselors who are recovering addicts "are more able to relate to us. They can even look at us and tell when we are bull ___ them -- when we're pulling the wool over their eyes.

Participants also suggested job skills training and educational sessions be included in the program. They felt these skill were fundamental to leading a drug free life. A participant who felt strongly about adding a job skill component asked:

"What happens when a person completes this program - goes to level five and graduates - they spent all that time in the program and you put him back on the street and what's he gonna do? He's gonna use. But if you put him back on the street - completing the program with a trade or something - he could say well I accomplished this, and I could get me a job. It'll give him something to fall back on."

Participants also suggested the program should include a monthly social, less drug use-focused, activity that took place outside the court complex. Suggestions included trips to museums or restaurants. Participants felt these trips would raise morale among participants and may improve their relationships with counselors.

The participants spoke highly of the acupuncture services offered. All agreed acupuncture relaxed them and was helpful in controlling addiction. One clients said "It works. It calms your nerves. It really helps you." Besides helping them with their addiction, participants spoke highly of the doctor and other counselors who administered acupuncture. Apparently, another group session was held at the same time as acupuncture and clients could choose which activity to attend. Focus group participants seemed to like the idea that they had a choice to participate in this session or not.

Uncertainty about the rules of the Enhanced Treatment Program was voiced by focus group participants. Participants spoke passionately about the termination of bus tokens and the

arbitrary imposition of sanctions. Around each issue, participants' underlying message was the treatment program was not holding up its end of the contract. Until September 1996, the treatment program offered program participants two tokens per day to be used for transportation to and from treatment. As funds began to recede, tokens were no longer provided. One client complained:

"They [the treatment staff] tell you you can't work but now they cut out the tokens. How are we supposed to get there? I asked the judge and she said just get there - even if you have to walk. They told me they would provide for me the six months I'm in the program. The money got cut - what are we gonna do? One day we came to class and boom - no more tokens. You don't throw that on a person just like that. That's my biggest problem."

He went on to argue that if they weren't allowed to work and were not given tokens, he had no choice but to go back to dealing to get the money needed to commute to the drug treatment program.

Clients were asked about the use of sanctions in the treatment program. Clients knew the rules and the consequence for failure to comply, but said they were not enforced. A client new to treatment listed the sanctions associated with each infraction. Upon hearing this, another client said "Don't go with that [the proscribed sanction]. I had my first dirty urine and they threw me in detox." Clients said "the counselors do nothing" when a client is late to treatment or leaves early.

Another client told of how after continued positive drug tests, he was sent to a 28-day inpatient program with no notice from the treatment program.

"I messed up and was sent to a 28-day inpatient program. They sprung this inpatient program on me. This was not part of the deal - they are not following the guidelines. They said the first time you have a dirty, you sit in the jury box, the second time you go to detox, and so on. They are not following the rules. They threw me in detox on my first dirty urine. I got another dirty urine and they threw me in a 28-day program. That was not on my court release order. They are throwing new stuff in here that none of us is aware of. If you think you are going to detox, you're going to jail. It's like a trick."

Lessons on Court-Based Treatment

The demonstration provides several lessons about court-based treatment for offenders on pretrial release. One lesson is that individualized assessment and multiple treatment options are needed--one size does not fit all. Only one treatment program was offered and it required a major commitment by the defendant (daily or three days a week attendance and frequent drug tests) for a minimum of six months. Fewer than half--41%--of the eligible defendants accepted the treatment offer. A check of program records indicated that many defendants declined because they did not feel they needed such an intensive program and said they would seek other kinds of

treatment programs. In focus groups, defendants argued that five days a week for six months was too much for too long. Others rejected the program because the hours interfered with jobs and child care responsibilities.

Another lesson is the importance of the incentive to join the program. The demonstration continued a policy, originally adopted for the expedited drug dockets, that offered defendants a plea of an "attempted" drug felony, rather than a felony charge carrying a mandatory minimum. Defendants who accepted the plea remained on the SCDIP dockets; those who opted for trial transferred to trial dockets. The plea was **not** contingent upon treatment entry or completion and could be rejected by defendants who wanted to go to trial. However, the plea gave the judge discretion at sentencing and thus a basis for telling defendants that probation was unlikely if they continued to use drugs. The incentive structure shifted in April of 1995 with the repeal of mandatory prison time for drug felonies in D.C. Following the repeal, the proportion of defendants choosing to go to trial increased with the hopes of getting probation even if found guilty. Fewer defendants remained on the docket to receive the program offer. The treatment program was offered as a way to help defendants stay drug free and thus earn probation. Focus group members emphasized that the main reason they joined was to stay out of jail. As one said "I am going to be blunt - I took the program because it was an easy way for me to stay out of jail. I do not want to go to jail."

Finally, treatment quality must be carefully monitored. In this experiment, the treatment program experienced substantial operational problems. The program was repeatedly forced to close due to flooding, heating problems, and poor air quality. District financial problems meant that service components such as health screening, literacy training, and other support services could not be purchased. Also, attendance and completion rates were poor. Program participants attended slightly more than one-third of their scheduled treatment days. Overall, 19% graduated and 9% who were doing well left to take a job. Over 60% were discharged for noncompliance and a few were referred to more intensive treatment. Thus, the impact analysis does not test the effect of a strong treatment program.

CHAPTER 8

THE IMPACT OF THE SCDIP INTENSIVE OUTPATIENT TREATMENT PROGRAM

The SCDIP treatment program was designed to reduce repeat criminal activity among drug-involved defendants by reducing drug use. Other program outcomes hypothesized to result from decreased drug use include improvements in the social and economic functioning of defendants. The program consisted of a six month treatment program that combined individual and group therapy with supplemental services, regular drug testing, and judicial monitoring and encouragement. It is important to consider the findings in light of the operational strengths and weaknesses of the program described in Chapter 7.

Throughout this report, the analysis first presents comparison of eligible defendants on the treatment docket to those on the standard docket to assess the effects of offering services to this population. Because the sanction docket eligibles include those who never agreed to enter the program, this analysis, based on the experiment of offering different interventions to defendants randomly assigned to three dockets, measures the overall impact of the program on the targeted population. The analysis then examines the impact of the program on those who agreed to enter the program, regardless of the duration of their participation. This analysis, based on a quasi-experimental comparison, provides estimates of the impact of the program on those who agree to join. We believe that incentives to join can be changed by various court policies and it is thus very important to understand what effect the services have on those who received them.

Program impact is measured by:

- Reductions in drug use by the end of the program and in the year after sentencing, from: 1) drug test results during the month before sentencing, and 2) self-report survey data on drug use in the year after sentencing.
- Reductions in criminal activity during the year after sentencing from: 1) arrest data (officially detected criminal activity) during the year following sentencing, and 2) self-report survey data on detected and undetected criminal activity.
- Improvements in employment, education, and social functioning during the year following sentencing from self-report survey data.

Other topics covered in this chapter include level of exposure to treatment and differential impacts of the program. The analysis of level of exposure to treatment services during pretrial release and the year after sentencing looks at differences in outcomes related to treatment duration. The differential impact analysis tests the hypothesis that program impact differs by participant characteristics such as age, sex, type or severity of drug use, and prior criminal history.

The Impact of Program Participation on Drug Use

Reductions in Drug Use during Pretrial Release

The program focused on moving defendants through each stage of the treatment program to graduation. Defendants were encouraged to pursue treatment and the court emphasized the positive changes in defendants' lives and families as sobriety was attained and maintained.

Reductions in drug use during the program are measured in two ways. The first analysis looks at the success of the program in achieving drug abstinence during the final month before sentencing. Test results from the PSA's MIS system are used to classify defendants into two groups: 1) known to be drug free -- those who continued in testing and had no bad test outcomes in the month before sentencing, and 2) not known to be drug free -- those who either dropped out of testing or had a bad outcome in the month before sentencing. The second analysis examines the percentage of scheduled tests that were clean in the month before sentencing to determine whether the program resulted in reductions in drug use short of abstinence. Treatment participants were tested three to five times a week which may have increased the risk of a bad test outcome compared to standard docket sample members who were tested twice weekly. To avoid this potential source of bias, two of the weekly drug tests, one at the beginning of the week and one later in the week, were used as data for the comparison. Thus, the tests used to assess drug use were based on the same frequency and spacing of administration in both the treatment and standard docket samples.

The drug tests during the month before sentencing indicate that 17% of the treatment program eligibles were clean compared to 11% of the standard docket sample members (Figure 8.1). The logistic regression models which test the significance of this difference control for self-selection into the program and factors that might independently affect drug use desistance. The control variables include age and employment at time of arrest, gender, the proportion of bad test outcomes on tests in the 60 days following arrest (before the intervention has had a chance to affect the behavior), and use of stronger drugs (cocaine or heroin) during the 60 days after arrest. The treatment eligibles were significantly more likely to test clean than defendants in the standard docket sample (odds ratio=2.40, $p<.01$). In addition, drug use among treatment program participants was significantly lower than drug use among standard docket eligibles in the month before sentencing: 22% compared with 11%. The logistic regression model indicates that this difference is significant (odds ratio= 2.2, $p<.01$).

Treatment program eligibles also had bad outcomes on a smaller proportion of drug tests administered during the final month before sentencing (Figure 8.2). Bad outcomes were recorded for 63% of the tests administered in the month before sentencing for treatment participants, compared to 71% for the standard docket sample ($p<.01$). The treatment program participants also had significantly fewer bad test outcomes in the month before sentencing, 64% versus 71% for the standard docket sample..

Figure 8.1 - All Drug Tests Clean in the Month Before Sentencing

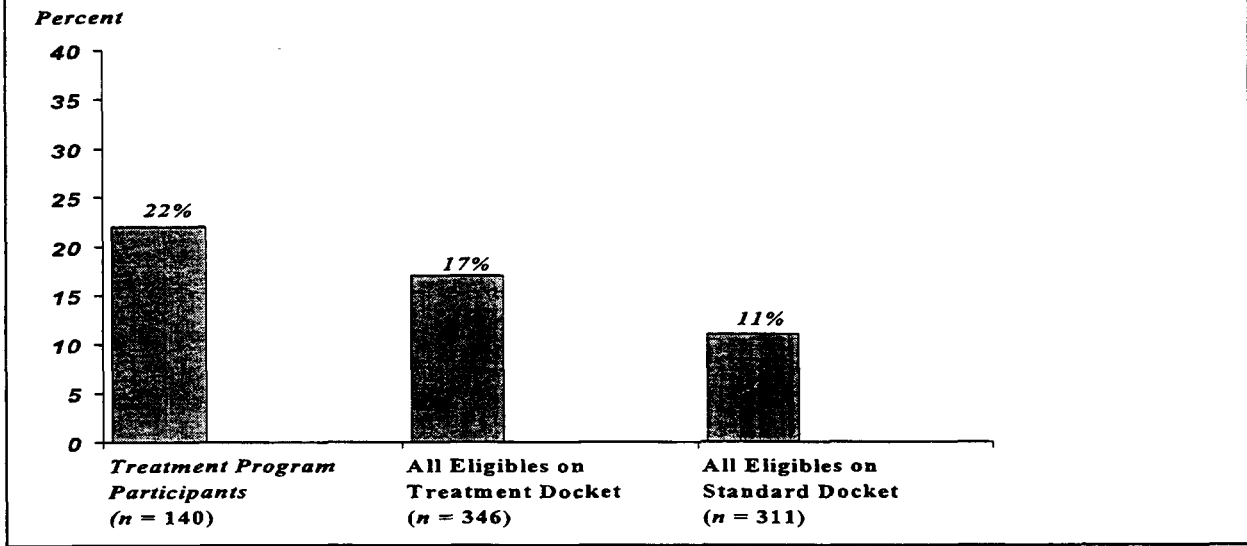
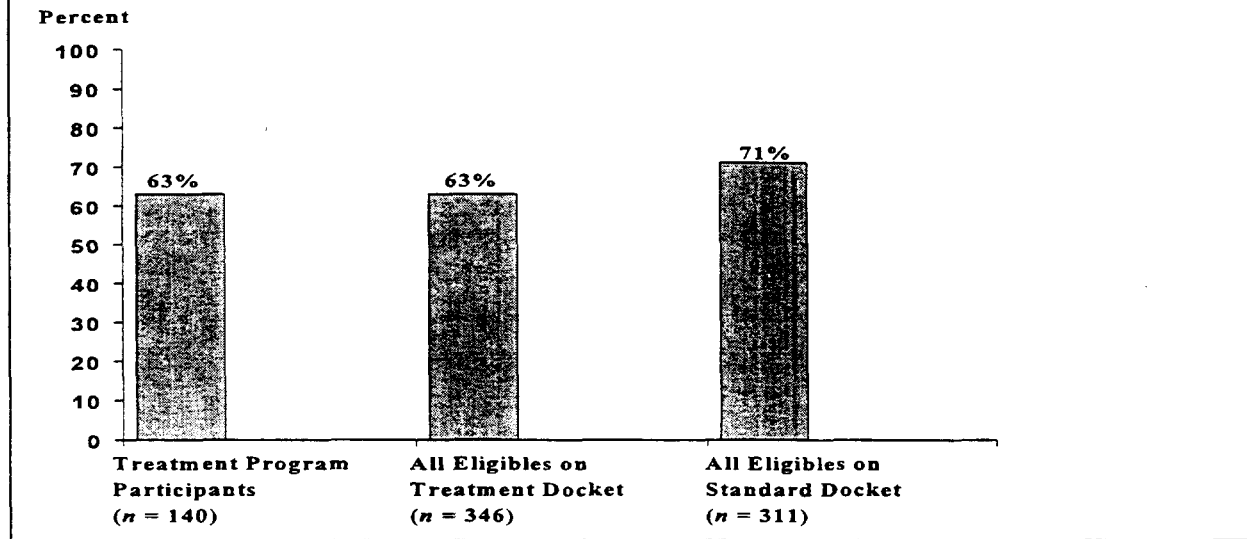


Figure 8.2 - Percentage of Tests with Bad Outcomes in Month Before Sentencing



Reduction in Drug Use During the Year after Sentencing

Drug use after the end of the intervention period is measured by respondent reports of the number and kinds of drugs used during the the twelve months after sentencing. The questionnaire asked about seven drug categories: 1) marijuana or hashish, 2) crack cocaine, 3) other cocaine, 4) heroin or other opiates or methadone outside a treatment program, 5) PCP, 6) LSD or other hallucinogens, and 7) any other illegal drug. These categories were grouped for analysis into three categories: any drugs, marijuana, and stronger drugs (other than marijuana).

A comparison of drug use among treatment program eligibles and participants and standard docket eligibles in the year after sentencing is illustrated in Figures 8.3 and 8.4. The logistic regression results shown in Table 8.1 show no significant reductions in stronger drug use in the year after sentencing among treatment program participants, compared to eligible defendants on the standard docket. As the Table shows, a number of the models were not significant. The small sample of treatment participants limit the power of the analysis to detect significant differences and it seems reasonable to speculate that larger samples might have detected significance, given the size and consistency of the group differences shown in Table A8.1.

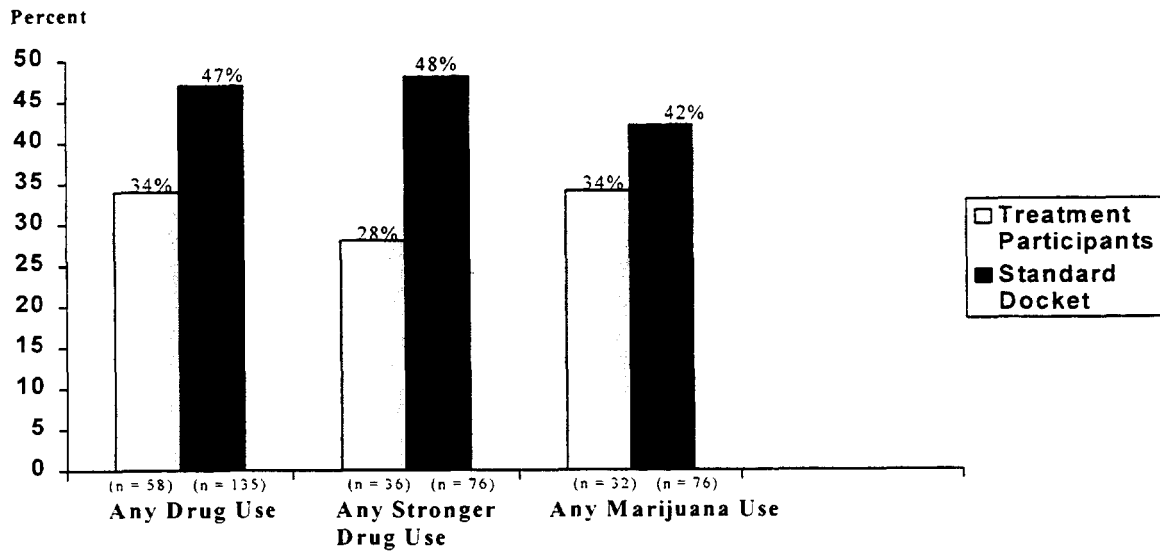
The Impact of the Treatment Program on Crime

Reductions in Officially Detected Criminal Activity in the Year after Sentencing

A key measure of reductions in crime is provided by arrest records. Records from the FBI and data on arrests in Washington, D.C. were coded by date and top charge at arrest. Measures of criminal activity based on this information include:

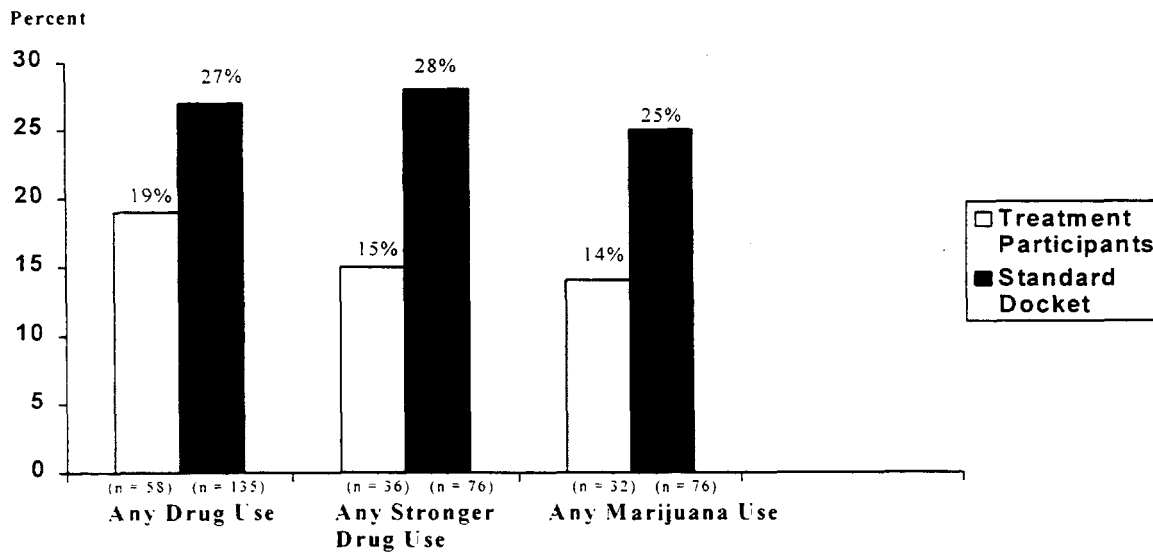
- Any arrest in the year after sentencing and any arrest within four crime categories: drug offense, violent offense, property offense, and other. The offense types were not mutually exclusive: a defendant could have more than one type of arrest so the category percentages add to more than the percentage showing any arrest.
- Time to first arrest based on the number of street days between sentencing and first arrest. Data collected from the D.C. Department of Corrections were used to identify entries to, and exits from, D.C. correctional facilities. Days between sentencing and the first arrest when defendants were known to be incarcerated were not counted when calculating the time to first arrest because of the lack of opportunity to reoffend on these days. Relying on days of incarceration under the supervision of the D.C. Department of Correction may overestimate street days because days of incarceration in other jurisdictions or days spent in hospitals or other institutions were not eliminated. However, days in the D.C. jail most likely represent the larger portion of days off the street.

Figure 8.3 - Any Drug Use in Year After Sentencing Among Former Users*: Survey Data



*The number of former users varies by drug category as shown.

Figure 8.4 - Weekly Drug Use in the Year After Sentencing Among Former Users*: Survey Data



*The number of former users varies by drug category as shown.

Table 8.1

Logistic Regression Odds Ratios: Self-reported Drug Use during the Year after Sentencing

	Any Drug Use	Any Stronger Drug Use	Any Marijuana Use	Weekly Drug Use	Weekly Stronger Drug Use	Weekly Marijuana Use
A. Treatment Program Eligibles	n=274	n=161@	n=156	n=247@	n=139@	n=132@
Age	1.00	1.01	.99	1.00	.98	1.01
Male	0.76	.94	.37	1.03	1.30	1.25
Employed	1.14	2.11	.75	1.12	2.94	.55
Propdrt	2.56*	2.65	1.94	1.92	2.53	.79
Prior Conviction	0.36***	.62	.27**	.57	1.30	.26
Treatment Program Eligibles	1.09	.80	1.10	1.27	.92	1.32
B. Treatment Program Participants	n=187	n= 107@	n= 104	n= 173@	n= 97@	n= 92@
Age	1.01	1.02	1.02	1.01	.99	1.02
Male	.54	.64	.47	.68	.82	1.02
Employed	1.05	2.04	.73	.85	2.23	.30
Propdrt	4.8	5.56	3.69	2.20	1.65	1.36
Prior Conviction	.31**	.80	.20**	.46	1.37	.24
Treatment Program Participants	.64	.43	.73	.68	.50	.51

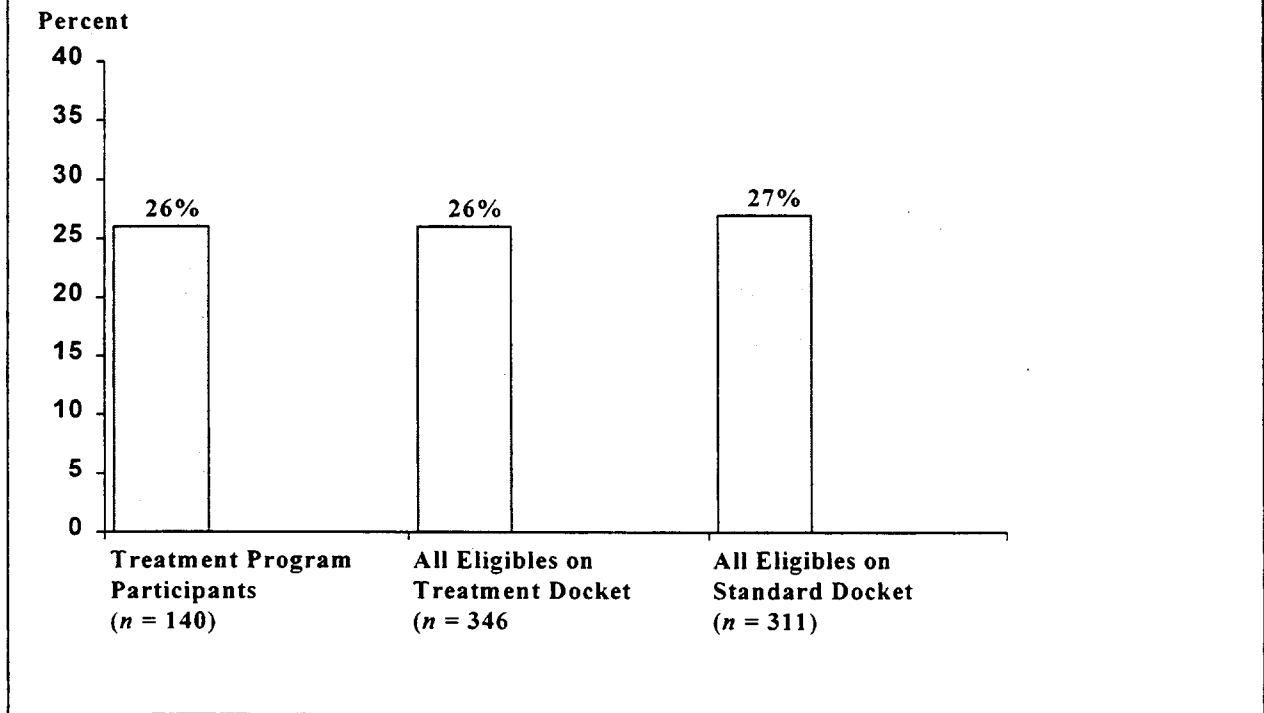
* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

- Number of arrests in the year after sentencing and number of arrests within four crime categories: drug offense, violent offense, property offense, and other.

The treatment docket eligibles were not significantly less likely than the standard docket sample to be arrested in the year following sentencing: 26% compared to 27% (Figure 8.5).

Figure 8.5: Any Arrest in the Year After Sentencing (Official Records)



The same finding applies to the comparison of treatment participants to standard docket eligibles. However, treatment participants were significantly less likely than standard docket members to be arrested for a drug offense in the year after sentencing (Table 8.2 and Table A8.2).

The hypotheses that treatment program participants and eligibles had significantly more days before their first arrest than standard docket eligibles was tested using a proportional hazards model (Cox, 1972). This model was selected because the maximum number of street days is limited by design to the 365 days in the year after sentencing (censored data). To correct for days on which defendants were incarcerated and thus not able to commit additional crimes, the analysis is based on 'street days,' those days when sample members were not detained in a D.C. Department of Corrections jail or prison and is limited to defendants who were not incarcerated for the entire year.

The treatment program did not significantly delay returns to crime, measured by the days to first arrest. The graph in Figure 8.6 illustrates the percentage of treatment program participants and standard docket eligibles not yet arrested on the left hand axis. The street days are shown on the bottom axis. At day zero, none of the sample members had been rearrested. By day 100, 92% of the treatment participants had not been arrested (8% had been arrested) compared to 89% of the standard docket defendants (11% had been arrested). By day 300, the percentages not arrested had declined to 81% for the treatment participants and 78% for the standard docket sample. A similar analysis failed to show any significant differences between eligible defendants on the treatment docket and those on the standard docket.

Table 8.2

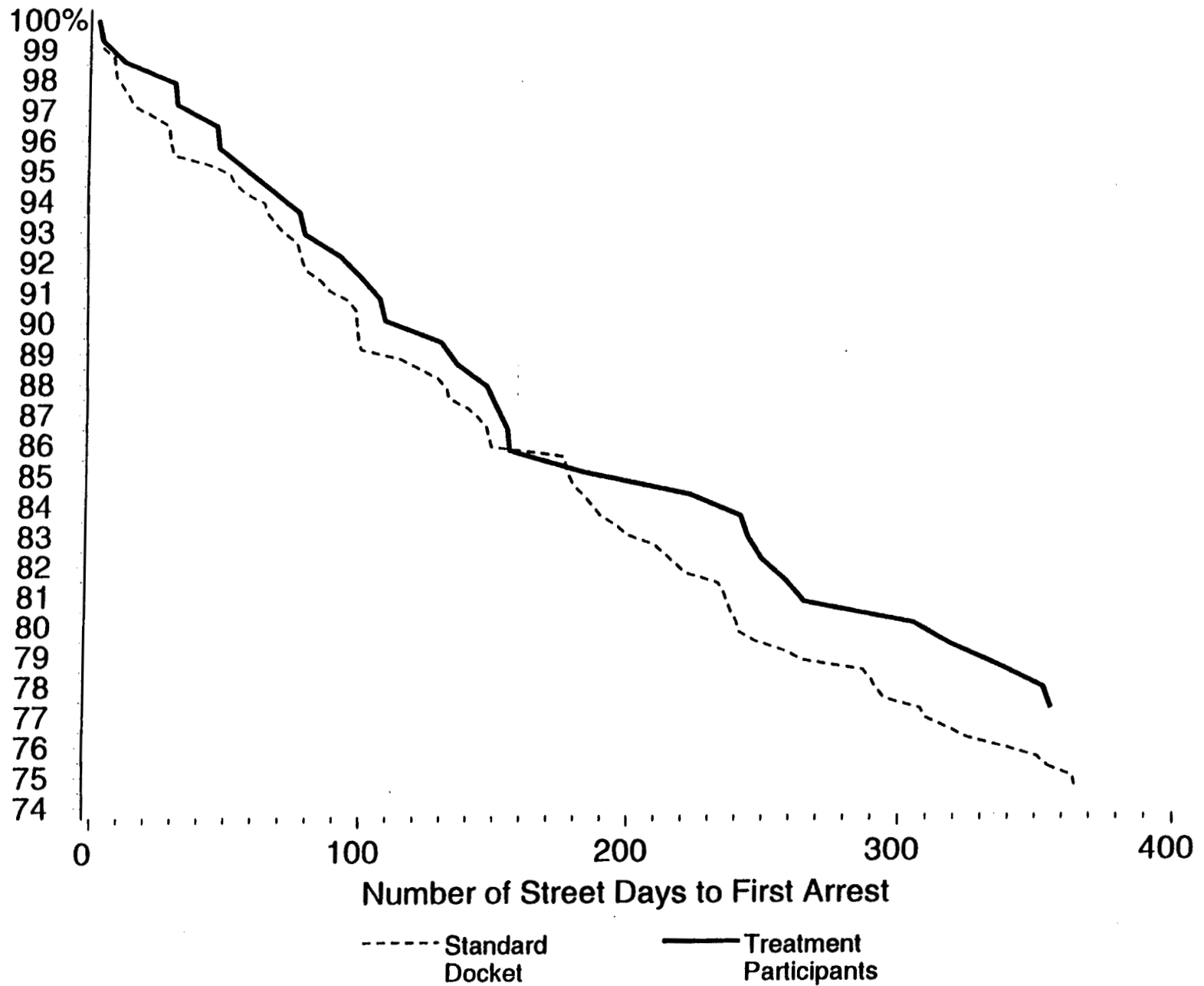
Logistic Regression Odds Ratios: Any Arrest during the Year after Sentencing

	Any Arrest	Any Arrest on Drug Charges	Any Arrest for a Violent Offense	Any Arrest for a Property Offense	Any Other Arrest
A. Treatment Program Eligibles	n= 636	n= 636	n= 636	n= 636@	n= 636@
Age	.95***	.96***	.85***	.98	.97
Male	1.43	2.54	.83	.62	.59
Employed	.93	.68	.77	1.40	.98
Propdrty	2.64**	3.85**	.84	3.22	1.41
Prior Conviction	.89	1.01	1.63	.79	.72
Treatment Program Eligibles	1.10	.96	1.51	1.34	1.28
B. Treatment Program Participants	n= 437	n= 437	n= 437	n= 437@	n= 437@
Age	.95***	.96*	.86***	.98	.98
Male	1.89	2.33	2.33	.51	.68
Employed	1.10	.60	.99	1.80	1.23
Propdrty	2.65*	3.12*	1.24	1.55	1.53
Prior Conviction	1.05	1.16	2.11	.83	.86
Treatment Program Participants	.93	.43*	1.79	1.52	1.27

* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

Figure 8.6. Survivor Function Estimate of Street Days to First Arrest



There was no indication of fewer arrests among treatment program eligibles compared to the standard docket eligibles. However, treatment program participants had fewer drug arrests in the year after sentencing than standard docket eligibles (see Table A8.3) as shown in the Poisson regression results shown in Table 8.3.

Table 8.3
Poisson Regression: Number of Arrests during the Year after Sentencing

	Number of Arrest	Number of Arrest on Drug Charges	Number of Arrest for a Violent Offense	Number of Arrest for a Property Offense	Number of Other Arrest
A. Treatment Program Eligibles	n=636	n=636	n=636	n=636	n=636
Age	-.04***	-.05***	-.16***	-.01	-.03*
Male	-.06	.84*	-.17	-.30	-.77**
Employed	-.08	-.38*	-.22	.49	.06
Propdrty	.79***	1.02**	-.15	1.57**	.56
Prior Conviction	-.07	.09	.45	-.36	-.21
Treatment Program Eligibles	.17	-.08	.36	.58	.23
B. Treatment Program Participants	n=437	n=437	n=437	n=437@	n=437@
Age	-.04***	-.04**	-.14***	-.02	-.02
Male	-.13	.75	.79	-.81	-.74
Employed	-.12	-.66*	-.02	.59	.11
Propdrty	.57*	.73	.18	.51	.65
Prior Conviction	.13	.20	.67*	-.03	-.05
Treatment Program Participants	-.09	-.71*	.50	.18	.17

* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

Reductions in Self-Reported Criminal Activity in the Year after Sentencing

Arrests only measure criminal activity that is detected. However, the majority of offenses go undetected and are known only to offenders. For this reason, the survey asked about the crimes committed in the year after sentencing. The questions, modeled on the Bureau of Justice Statistics Survey of Adult Probationers, asked about 14 types of offenses.¹² The 14 types of offenses were grouped into five categories: drug crimes (possession and trafficking), violent crimes (assault, sexual assault, robbery, murder/manslaughter and other violent offenses), property crimes (burglary, larceny, fraud, other property offenses), other crimes (weapons offenses, driving while intoxicated, other public order offenses), and probation/parole violations. Those who reported offenses in the year after sentencing were asked how many times they committed each type of offense.

There were no significant differences between the treatment eligibles or participants and the standard docket sample members in the prevalence of these offenses in the year after sentencing. Over 45% of those interviewed reported some criminal activity: about 30% reported a drug offense, 8% reported a violent offense, about 10% a property crime, and over 25% another type of offense (Table A8.4). Logistic regression models which control for self-reported criminal offending prior to the drug felony arrest also show no significant differences (Table 8.4). Similarly, the eligible defendants on the treatment docket were no less likely to be arrested than those on the standard docket. The survey data do not provide dates of reoffending and thus do not allow analysis of the days to first offense.

The number of crimes in the year after sentencing were estimated from questions about 14 offenses (see the Glossary). If respondents said they had ever committed that type of offense, they were asked the number of times prior to their arrest (lifetime prior to court entry) and the number of times in the year after sentencing. If the number was 10 or fewer, that number was recorded. If greater than 10, the answers were coded in categories (11-20, 21-30, 31-40, 41-50, and 51 or more) to avoid gross distortions due to recall errors. The midpoint of the categories between 11 and 50 or the number 51 were used as estimates of number of offenses when combining categories. For analysis, the responses were combined into four offense types: drug offenses, violent offenses, property offenses, and other offenses. Overall, 54% of the respondents reported no criminal offenses in the year after sentencing, 20% reported one to ten crimes, 8% reported eleven to 50 crimes, and 18% reported 51 or more.

In order to evaluate the reliability of the self-report data and assess the bias introduced by grouping the answer categories in this way, the mean number of crimes for violent and property offenses was combined with the FBI and DC records of number of arrests for violent and

¹²Although self-report data on stigmatized behaviors are subject to underreporting (see Harrell, 1985), the analysis assumes similar willingness to report in both groups in this experimental comparison.

property offense to create a ratio of detected crimes (number of self-reported crimes divided by number of officially reported arrests). This ratio was then compared to a similar ratio constructed from number of crimes reported on the National Crime Victimization Survey and the number of arrests from Uniform Crime Reports. The ratio based on national data showed that about 5% of violent crimes and 4.6% of property crimes result in arrest. The sanctions participant ratios were very close to these at 4.9% and 4.3%. However, the comparable ratios for the treatment group participants were 40.0% and 22.4%. This suggests that treatment participants may be more reluctant to admit illegal activities on a survey because they attach greater social stigma to such behavior. The alternative, that they are arrested for a variety of crime types at much higher rates, seems less plausible. This suggests that the findings, reported below, may result from underreporting and should be interpreted cautiously.

Exhibit 8.1 - Validation of Survey Data			
	Total Number of Criminal Incidents ¹	Total Number of Arrests ²	Ratio of Detected Crimes (% Arrested)
Violent Crimes (National)	10,860,630	543,435	5.0%
Violent Crimes (SCDIP Survey Treatment Participants)	35	14	40.0%
Property Crimes (National)	31,012,200	1,431,11	4.6%
Property Crimes (SCDIP Survey Treatment Participants)	49	11	22.4%

The data indicate that treatment participants averaged approximately 13 crimes per person in the year after sentencing, compared to 20 or more among defendants on the standard docket or treatment docket who did not participate (Table A8.5). Poisson regression (negative binomial) results show significant reductions in the number of criminal offenses in all categories (Table 8.5). The reductions in the numbers of self-reported offenses was also significant at the docket level except for drug offenses. As Table A8.5 shows, the reductions in the number of crimes occurred among participants, not among non-participants. The reduction in drug offenses among treatment participants is consistent with the significant reduction in drug arrests shown in the Poisson regression. However, the significant reductions in other crime categories among treatment participants compared to the standard docket were not accompanied by significant reductions in arrests or number of arrests in those categories.

The impact of the treatment program on criminal activity, measured both by rearrest and self-reported reoffending, was not found to vary significantly by characteristics of the participant or eligible for treatment samples. Logistic regression models showed no significant interactions of group (participant or standard docket) with age, gender, employment, prior convictions, gender, and proportion of drug tests with bad outcomes in the first 60 days after arrest.

Table 8.4

Logistic Regression Odds Ratios: Any Self-Reported Crimes during the Year after Sentencing

	Any Crime	Any Drug Offense	Any Violent Offense	Any Property Offense	Any Other Offense
A. Treatment Program Eligibles	n= 302@	n= 305	n= 301@	n= 298@	n= 302@
Age	.97	.98	.94	1.00	.97
Male	.78	.88	.71	.50	1.08
Employed	1.29	1.37	1.18	.86	1.33
Propdrty	1.84	1.91	3.19	2.71	1.42
Prior Conviction	.75	.39**	.34	.82	1.01
Treatment Participants	1.52	1.33	1.03	.78	1.49
B. Treatment Program Participants	n= 213@	n= 212@	n= 207@	n= 205@	n= 210
Age	.98	.98	.96	1.02	.98
Male	.79	.68	1.15	.37	1.09
Employed	1.13	1.08	.93	1.48	.99
Propdrty	2.17	1.42	2.25	4.88	2.31
Prior Conviction	.69	.43	.32	1.02	.97
Treatment Program Eligibles	1.00	.79	1.13	.65	.80

* p<.05. ** P<.01. *** p<.001.

@ Model is not significant.

Table 8.5

Poisson Regression Odds Ratios: Number of Self-Reported Crimes in the Year after Sentencing

	Number of Crimes	Number of Drug Sales	Number of Violent Offenses	Number of Property Offenses	Number of Other Offenses
A. Treatment Program Eligibles	n=310	n=310	n=310	n=310	n=310
Age	-.02***	-.02***	-.01	-.05***	-.02***
Male	.14***	.14**	.41	-.06	-.08
Employed	.04	-.05	-.10	.24	-.01
Propdrty	.29***	.01	.52	-.28	.51***
Prior Arrest by Type	.01***	.02***	.04***	.02***	.02***
Treatment Program Eligibles	-.12***	.10	-1.17***	-.66***	-.22***
B. Treatment Program Participants	n=216	n=216	n=216	n=216	n=216
Age	-.02***	-.01**	.01	-.04***	-.01**
Male	.02	.01	.14	.05	-.07
Employed	-.05	-.26***	-.30	.96***	.02
Propdrty	.39***	-.15	-.18	2.92***	.43***
Prior Arrest by Type	.01***	.01***	.05***	.04***	.02***
Treatment Program Participants	-.85***	-.52***	-2.08***	-2.29***	-.75***

* p<.05. ** P<.01. *** p<.001.

̄ Model is not significant.

The Impact of Program Participation on Other Outcomes

Improvements in social and economic well-being are hypothesized to result from reductions in drug use among program participants. The survey asked about employment, participation in education or vocational training, and income in the year after sentencing to assess improvements related to economic well being. The results, shown in Table 8.7, indicate that treatment participants and eligibles did not have better economic outcomes during the year after sentencing than standard docket sample members. There were no indications of improved employment, income or participation in training or education. It should be noted that many factors other than reduced drug use affect these outcomes and that reductions in drug use alone might not be sufficient to create improvements in these areas given the other problems faced by these sample members, including their criminal history and poor educational and work histories. There was also no significant difference in being homeless at any time during the year.

Table 8.7
Outcomes Related to Economic Well-being in the Year After Sentencing

	Treatment Program Eligibles (<i>n</i>)	Treatment Program Participants (<i>n</i>)	Standard Docket Eligibles (<i>n</i>)
Employed*	47% (160)	45% (67)	58% (152)
Employed full-time	25% (131)	20% (51)	32% (121)
Employed part-time	8% (131)	4% (51)	11% (121)
Occasional employment	3% (131)	4% (51)	4% (121)
Mean income	\$5,663 (160)	\$3,758 (66)	\$6,335 (142)
Enrolled in educational program in year	34% (164)	38% (68)	31% (153)
Enrolled in vocational training in year	28% (161)	34% (67)	27% (153)

*Type of employment not reported by 16 treatment participants and 31 of the standard docket sample.

Those interviewed one year after sentencing were asked about problems related to drug use during the year. The problems included: having an accident with a while under the influence of a drug, having an argument with a spouse, girlfriend/boyfriend, family or friends while under the influence of a drug, losing a job because of drug use, having trouble at school or at a job due to drug use, getting arrested or held by the police due to drug use, or getting into a physical fight while under the influence of a drug.

Treatment participants were significantly less likely than standard docket sample members to have accidents with a vehicle while under the influence of drugs: 3% of the treatment participants reported an accident compared to 11% of the standard docket ($p < .05$). They were also significantly less likely to have arguments with a family member or friend while under the influence of drugs: 6% of the treatment participants reported such arguments compared to 15% of the standard docket ($p < .05$).

Table 8.8
Percentage Reporting Problems Related to Drug Use in the Year After Sentencing

	Treatment Program Eligibles (<i>n</i>)	Treatment Program Participants (<i>n</i>)	Standard Docket Eligibles (<i>n</i>)
Vehicle accident while under the influence of drugs	19% (105)	5%* (43)	18% (88)
Arguments while under the influence of drugs	21% (100)	9%* (46)	25% (89)
Lost a job because of drug use	9% (47)	10% (21)	8% (24)
Had trouble at school or job because of drug use	8% (66)	11% (27)	5% (41)
Arrested or held by police because of drug use	3% (66)	0% (27)	5% (56)
Gotten into a physical fight while under the influence of drugs	9% (75)	6% (32)	11% (56)
Any of these problems	25% (148)	16% (63)	24% (134)

^a Based on one-tailed test of the hypothesis that program eligibles and participants have better outcomes than the standard docket. ** $p < .01$. * $p < .05$

Differential Effects of the Treatment Program

The impact of the treatment program on drug use in the year after did not vary significantly by characteristics of the participants. A large number of models tested for significant interactions of group (participant or standard docket) with age, gender, employment, prior convictions, gender, and proportion of drug tests with bad outcomes in the first 60 days after arrest. The results are summarized in Exhibit 8.2. The variables on the left are those that were hypothesized to interact with group in models predicting the dependent variables shown at the top of the columns.

Exhibit 8.2
Tests of Interactions Between Treatment Program Participation and Other Independent Variables:
Probability for those with $p < .05$.

Group Interaction	Any Drug Use (Self-Report)	Any Stronger Drug Use (Self-Report)	Any MJ Use (Self-Report)	Drug Use Weekly (Self-Report)	Stronger Drug Use Weekly (Self-Report)	MJ Use Weekly (Self-Report)	Any Crime Committed (Self-Report)	Any Violent Crime (Self-Report)
Age								
Gender								
Employment								
Proportion of dirty tests		p=0.02						
Any Conviction								
	Any Drug Crime (Self-Report)	Any Property Crime (Self-Report)	Any Other Crime (Self-Report)	Any Arrests After Sentencing	Any Drug Arrests After Sentencing	Any Violent Arrests After Sentencing	Any Property Arrests After Sentencing	Any Other Arrests After Sentencing
Age			p=0.05					
Gender								
Employment								
Proportion of dirty tests				p=0.02				
Any Conviction								

CHAPTER 9

PROGRAM COSTS AND CRIME REDUCTION BENEFITS

Overview

This chapter describes the additional costs of implementing the graduated sanctions and treatment programs in the DC Superior Court. The costs for 1995, the second full year of program operation, are extrapolated to create estimates of costs associated with treating participants over the entire program period. The cost estimates are based on differences in use of resources between the experimental programs and the standard docket. As a result, costs of some program elements, such as the MIS and part of the drug testing costs, are not considered because these resources are used routinely in this jurisdiction.

SCDIP's primary objective was to reduce crime by reducing drug consumption by participants. The benefits analysis uses estimates of changes in incidence and prevalence of crime associated with program participation to create monetized estimates of the benefits of SCDIP. The relationship between program participation and reduced crime, described in the impact analysis results in Chapters 6 and 8, was used as the basis for estimating averted criminal incidence, arrest, and corrections utilization resulting from the programs. Secondary sources were used to estimate the value of these types of criminal justice contact and the costs that were averted as a result of crimes not having been committed by program participants.

Overall, SCDIP yielded a net benefit in reduced cost of crime of about two dollars for each dollar spent treating participants in the sanctions programs. This result comes from two findings. First, as has been demonstrated earlier, sanctions program participants were significantly less likely to be re-arrested during the one-year follow-up period. As a result, benefits accrue to the public in the form of expenditures that did not have to be made to arrest and incarcerate these individuals. Additionally, sanctions program participants were significantly less likely to commit a criminal offense during this period. From this finding, the public accrues benefits in the form of avoided victimization, that is, costs that did not accrue to victims of crime because these crimes were not committed.

The evaluation of the impact of the treatment program produced mixed results concerning reductions in criminal activity. The data show a significant decrease in the number of self-reported criminal incidents, it is not clear how valid treatment participants responses were on these items given the lack of accompanying reductions in arrests and the extraordinarily high rate of arrest per incident their responses indicate. As a result, this analysis describes the benefits associated with averted criminal incidence, but does not attribute any overall crime reduction benefits to the program.

We do not believe, however, that the results should be interpreted as suggesting that graduated sanctions will generally yield greater benefits than treatment programs given the serious implementation problems that detracted from the potential impact of this treatment

program. Rather, these results suggest that a well-run sanctions programs produced net benefits, and a treatment program that experienced severe problems in service delivery did not.

A conservative methodology was employed in reaching these conclusions. The analysis does not attribute benefits to avoided pain and suffering resulting from reductions in crime. Benefits associated with averted pain and suffering are generally quite substantial and would greatly increase the value of averted crimes. These benefits were omitted because there is a lack of consensus on how to measure these benefits and, from the point of view of some policymakers, these harms do not directly involve use of public funds or resources.

Because the cost-benefit analysis was designed to focus on returns to justice system investments in the form of reduced crime, the monetary value of benefits that accrue to the public as a result of improved health of program participants (through decreased use of publicly-funded medical care), increases in tax collection resulting from greater employment by participants, and increases in child-support payments that lessen the public burden are not estimated. Although questions concerning health, labor and family outcomes were included in the SCDIP participant survey, the focus on criminal justice outcomes precluded collection of data of sufficient depth to identify changes resulting from participation. Collection of appropriate data for calculating these benefits is difficult and would have greatly expanded the questionnaire and other data collection activities. However, as part of this evaluation, a methodology for estimating these benefits in conjunction with experimental or quasi-experimental evaluations of court-based drug intervention programs was developed and presented in a separate report (Roman, Woodard, Harrell, and Riggs, 1999). While increases in labor market participation and financial support for children may yield relatively small benefits, the value of benefits in improved participant health and reductions in child welfare utilization are potentially even larger than those associated with crime reduction. As a result, a case can certainly be made that the net benefit of these programs might be substantially higher if all types of benefits could be included.

The first section of this chapter describes how costs associated with SCDIP operations were calculated. The second section describes how benefits were derived.

Costs of Operating the Treatment and Sanctions Programs

The costs of operating the experimental SCDIP programs are estimated for calendar year 1995, the second year of program operation. The second year of operation was selected for analysis to allow for estimates derived from fully implemented programs with steady caseloads. Because the key evaluation question concerns the costs of continuing operations, start-up costs are therefore excluded. The total costs for this year of operations are calculated as the difference in costs (incremental costs) between the sanction and the standard docket and the treatment and standard dockets. Because incremental treatment and sanctions docket costs are those in excess of standard docket costs, *standard dockets costs are not analyzed separately*. Program cost categories include:

- *project expenditures*, paid out of project funds including salaries, fringe benefits, supplies, contractual services, and drug testing;
- *court expenditures*, including hearings for program participants;
- and, *below market expenditures*, including the in-kind costs of detoxification and jail space for sanctions.

Costs described in this analysis include: aggregated incremental costs; per program participant incremental costs; and, because the duration of participation varies widely across programs and defendants, incremental costs per participant per day of operation. The first section describes how total costs for 1995 were calculated. However, because admission to SCDIP was ongoing throughout the first three years of program operations, defendants may have participated in the program for only a part of 1995 or their participation may have extended beyond that year. Therefore, total costs are based on the average cost per day times the number of days participants were enrolled in the program. A description of how these costs were calculated follows the discussion of overall costs incurred in 1995.

Project Costs

Project expenditures were gathered from a review of the programs' financial reports, invoices, and progress reports to the funding agencies. Both the treatment and sanctions programs were operated by Pretrial Services under a single budget, and some staff divided their time between the two programs. Where costs were shared, expenditure estimates are based on a review of program records and interviews with the project director, project staff, court officials, and others affiliated with the SCDIP. Costs incurred in 1995 include:

- **Personnel costs.** These costs were divided between the treatment and sanctions programs based upon assignments during the 1995 year. Four employees worked solely on the sanctions program and nine worked on the treatment program. One person worked half the year with each program. Three employees, the project director, his assistant, and the computer programmer, divided their time equally between the programs. The treatment program personnel costs also included an acupuncturist and literacy tutor, hired under contract.

Treatment program cost = \$442,258 Sanctions program costs = \$200,736

- **Transportation.** Bus tokens were provided to some treatment program participants for travel to and from the treatment program activities, and to participants of both programs for travel to and from court hearings. It was estimated that 90% of the bus tokens were used for treatment program clients and 10% were used for sanctions program clients.

Treatment program costs = \$12,780 Sanctions program costs = \$1,420

- **Materials, supplies, and equipment.** This category includes: general office supplies; education supplies; and medical supplies; telephone bills; furniture; and computers. Expenditures were split equally between the two programs, except for the cost of acupuncture supplies (treatment program) and furniture purchased exclusively for use in the day program (treatment program).

Treatment program cost = \$16,345 Sanctions program costs = \$11,612

- **Drug tests.** Net drug screen costs include only the additional costs of the two experimental programs. These costs included lab fees and the personnel costs of escorts responsible for monitoring these tests. Lab fees totaled \$0.85 per drug included in a test, with the number of drugs being tested for varying by docket. On average, the treatment docket screened for 1.29 more drugs than the standard docket for a cost of about \$1.10 per drug test. On average, the sanctions docket screened for 1.18 more drugs than the standard docket for a new cost of about \$1.00 per drug test. Total lab fee costs are the product of these additional costs by the number of tests. Escort cost estimates are the 1995 cost of salaries and benefits of drug test monitors divided by the total number of defendants tests by program, and totals \$1.51 per test. Total escort costs are the difference between total escort cost by docket and total standard docket escort costs.

Treatment program costs = \$61,397 Sanctions program costs = \$30,935

- **Miscellaneous expenses.** Printing and maintenance were divided equally between the two programs. Travel expenditures were divided according to the personnel traveling.

Treatment program costs = \$2,805 Sanctions program costs = \$2,645

Court Costs

The costs to the court include the costs of additional hearings required by the two programs: warrants for noncompliance with experimental program requirements; and, other court resources used to support experimental program operations. One important court costs is excluded because of measurement difficulties: the costs associated with out-of-court time for prosecutors and public defenders to prepare their cases.

- **Hearing Costs.** The incremental cost of hearings was estimated by: calculating a per hearing cost for each docket (the product of the average hearing length and the cost per minute); multiplying the cost per hearing by the number of participant hearings in 1995

for each docket; and, subtracting standard docket costs from experimental docket costs.¹³ Total hearing costs are estimated from the hourly personnel costs of the judge, clerk, aide, U.S. Attorney, defense attorney, and U.S. Marshal, and total \$3.50 per minute. This rate was multiplied by the average hearing length, based on court observations conducted by The Urban Institute in 1994. Treatment docket hearings averaged 9.7 minutes per hearing longer than standard docket hearings, for a cost of \$33.95. Sanctions docket hearings averaged 8.1 additional minutes for a per hearing cost of \$28.35. These costs were multiplied by the number of 1995 hearings for program eligible defendants on each docket. Total hearing costs were estimated at \$76,947 for the treatment docket, \$77,764 for the sanctions docket and \$29,869 for the standard docket.

Treatment program costs = \$47,078

Sanctions program costs = \$47,895

- **Warrants.** The intensified supervision of defendants on the two experimental dockets resulted in an increase in the number of warrants issued as a result of violations of program requirements. During 1995, 71 warrants were issued for treatment docket participants, 98 for sanctions docket participants, and 22 for those on the control docket, with the difference representing new warrants. Since per warrant costs were not available, an estimate was created for warrants issued for drug felons. Average warrant cost was estimated as the product of total personnel costs of the Office of the U.S. Marshall and the proportion of drug felon warrants. An estimate of \$1,235 per drug court warrant served was calculated by dividing the total Marshall cost of fugitive investigation by .244 times the total number of warrants they handled. Incremental cost by docket is \$1,235 multiplied by the number of new warrants.

Treatment program costs = \$60,518

Sanctions program costs = \$93,864

- **Facilities.** The D.C. Superior Court provided office space to the SCDIP without charge. The space included offices for treatment and sanctions program staff and clinical space for use by the day treatment program. Of the approximately 4,500 square feet of space provided to SCDIP, 25% was used for office space and the remainder for treatment space. Sixty percent of the office space was used by the treatment program and the remainder for the sanctions program, and all treatment space was attributed as a cost to the treatment program. Overall, the treatment program used 4,050 square feet of space and the sanctions program used 450 square feet. The value of downtown office space of \$35 per square foot, based on rates provided by a real estate agent, was discounted to half the market value (\$17.50 sq. ft.) due to the less than professional quality of the space.

Treatment program costs = \$70,875

Sanctions program costs = \$7,875

¹³ Costs for courtroom space and utilities were not estimated due to the likelihood that the courtroom would be in use if the Drug Court hearing was not being held, as well as the difficulty in obtaining such estimates.

- **Other Costs.** The cost to Pretrial Services of managing this program and maintaining the automated data system was not included in these estimates. Some of the program management costs were expected to be attributable to the program's demonstration status and would therefore not be expected to be recurring and are not included. The automated data system was already in place at the time this program began, and therefore start-up MIS costs were negligible. In jurisdictions without such a data system in place, these costs might be significant.

Partnerships/In-Kind Contributions

Expenditures by other agencies for services provided to program participants include the costs of detoxification, and the cost of incarceration at the District of Columbia jail as a result of a SCDIP sanction. Detoxification and substance abuse treatment provided outside of SCDIP were available to defendants on all dockets, and are counted as program costs only when mandated by an experimental program. The costs of incarceration of defendants for non-programmatic reasons, such as re-arrest or violation of probation/parole conditions while on pretrial release are not included in program costs.

- **Detoxification** services for sanctions program participants were provided by the District of Columbia's Department of Social Services. The cost per day of detoxification was estimated at \$85.00 based on research conducted by Lewin-VHI, Inc. Cost estimates are the product of the number of days spent in detoxification by defendants in the sanctions program by the cost per day. Estimates total \$33,830 from mandated detoxification.

Treatment program costs¹⁴ = \$0

Sanctions program costs = \$33,830

- **Jail.** Sanctions program participants sent to jail for noncompliance were incarcerated by the District of Columbia's Department of Corrections. The cost per day of incarceration at the D.C. Detention Facility, as estimated by the D.C. Department of Corrections, was \$62.31. Total costs are a product of per day costs and the number of jail days.

Treatment program costs = \$0

Sanctions program costs = \$40,211

A little more than a third of sanctions program participants were voluntarily referred to treatment, for a total additional cost of \$39,270. Because this does not represent a differential expenditure with respect to sanctions docket referrals (the difference in utilization of voluntary treatment between the standard docket and sanctions participants was not significant at $p < .05$) this additional cost was not counted as a new cost of the program. Costs of additional services provided to defendants through referrals to other social service and health agencies are not included because data were not available on utilization.

¹⁴ Detoxification was not mandated as a part of treatment participation. Treatment program participants defendants were not significantly more likely than defendants on the standard docket to receive these services.

Total Program Costs

The total incremental costs of the SCDIP during 1995 are estimated to be \$714,056 for the intensive day treatment program and \$471,023 for the sanctions program. Figure 1 illustrates the percentage of program costs in key areas including: personnel, drug tests, and court costs. Total incremental costs for the two programs are broken down into costs per participant. Because the length of time participants spend in the program varies by docket, participant costs are calculated per day.

- **The Treatment Program.** The incremental cost of the treatment program in 1995 totaled \$714,056. Sixty-two percent of incremental treatment program cost was for personnel; additional hearings total 25% of new costs; and additional drug tests added nine percent.
- **The Sanctions Program.** Total incremental costs for the sanctions program were \$471,023 for 1995. Personnel costs were 43% of the total; court costs totaled 32%; with outside services (corrections and the health agencies for jail and detoxification provided as sanctions for noncompliance with drug testing conditions) accounting for 16%.

The costs of these programs in 1995, however, only represents a portion of the total costs of the program. Exhibit 9.1 calculates the ratio the number of participant days in 1995 over the total number of days in treatment. For sanctions participants, 60.4% of treatment days occurred in 1995. Therefore, total program costs are 1995 costs multiplied by 1.66 (1/.604). The same method was used for calculating total treatment participant costs.

Exhibit 9.1 - Total Costs Associated with the Graduated Sanctions Program					
	Number of Participants Served in 1995	Total Number of Participants	% Served in 1995	1995 Costs	Total Program Cost (1995 Costs / % Served in 1995)
Sanctions Participants	145	240	60.4%	\$471,023	\$779,624
Treatment Participants	82	140	58.6%	\$714,056	\$1,219,120

Per Participant Costs

Costs per participant are calculated in two steps. First, a daily cost of treatment is calculated by dividing the annual total program costs by the average number of days in the program, which is then divided by the number of participants. Then, the cost per participant is calculated by multiplying the daily cost of treatment by the average number of days participants spend in the program.

The Treatment program. Overall, participants averaged about 414.5 total days in the program, yielding a cost per participant of \$8,708 and a cost per participant per day of \$21.01.

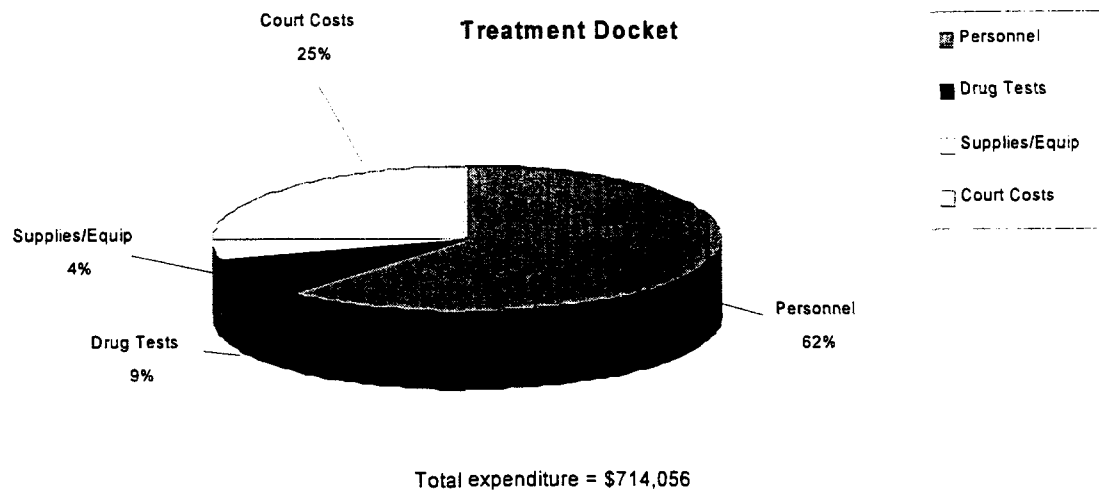
The Graduated Sanctions program. Overall, participants averaged 301.5 days in the program, yielding a cost per participant of \$3,248 and a cost per participant per day of \$10.78.

These per day costs appear relatively modest when contrasted with the per day cost of incarceration in the DC jail, which is estimated to be \$62.31 per day.

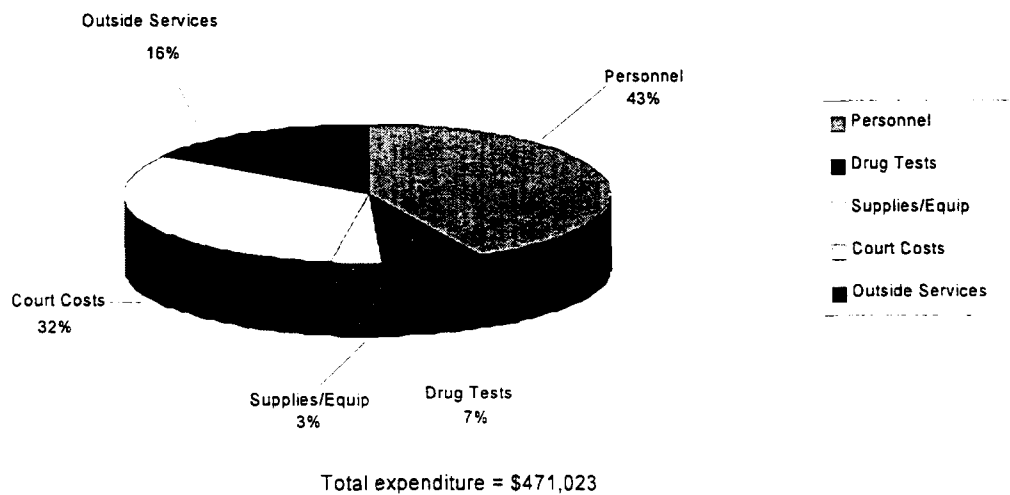
It is extremely important to recognize that per day and per participant costs of the treatment and sanctions program would vary with the number of participants and program duration. Other factors would also impact these rates, including the types of treatment modalities available and the intensity of judicial oversight. The costs per person and per day can be expected to vary with compliance and as information about the frequency of sanctions applications becomes more apparent to participants.

In generalizing from these estimates, it should be remembered that the standard docket which provided the "baseline" court costs included frequent drug testing and judicial monitoring. Thus, incremental costs for similar services may be higher in jurisdictions that do not currently offer these services. Other influences on program costs include the prevalence and drug use patterns among the targeted population, which shape: the amount and type of treatment required; the extent to which different kinds of community-based treatment are available and used; and, the intensity and consistency of judicial oversight.

Figure 9.1: Annual Program Costs for 1995 by Type



Sanctions Docket



Benefits of the Treatment and Sanctions Programs

The primary interest of the court in implementing SCDIP was to reduce crime among drug involved offenders. The benefits analysis thus focused on estimating benefits (costs averted) due to a decrease in criminal activity.¹⁵ Benefits in this category are measured by a decrease in the number of crimes committed by defendants in the experimental programs as compared to defendants on the standard docket. The benefits from reduced crime therefore are measured in terms of *cost savings resulting from crimes not committed*, referred to here as 'cost of averted crimes.' In order to capture the net benefit from each crime averted due to SCDIP, the costs associated with various types of crime must be estimated. For this analysis, the total cost of a crime is split into three areas:

- the commission of a crime (costs associated with victimization);
- the arrest for a crime (criminal justice processing including court costs);
- and, penalties associated with a crime (incarceration, probation).

Analysis of each of these three categories is divided into two sections:

- an *analysis of the costs associated with a commission of a crime*. Costs related to the commission of a crime (incidence costs) are derived from survey data. Arrest costs and corrections costs are derived from official records;
- and an *analysis of the benefits for each category* that accrue as a result of those crimes having not occurred as a result of program participation. Again, because those costs did not occur, they are referred to here as averted costs. Benefits are estimated for all three categories of crime in terms of incremental averted costs. This estimate is the product of the costs associated with each crime by the difference in the number of crimes committed by defendants on the standard dockets and those in the experimental programs. The estimates of the number of crimes is based on self-reported data on undetected crimes from the one year follow-up survey of defendants on all three dockets and from official arrest records.

Final estimates of total net benefits of averted crime as a result of SCDIP are the sum of *averted costs* in the three crime categories. Unless otherwise noted, all estimates are in 1995 dollars. This chapter includes a section describing how each of the three types of criminal justice costs (incidence, arrest and incarceration) were calculated, the procedures for calculating averted costs (benefits) and the net benefits that result.

The costs that result from a criminal incident (commission of a crime) include:

¹⁵ The terms 'benefits' and 'averted costs' are used interchangeably throughout this chapter.

- costs incurred by the victim of a crime (including medical care, mental health care expenditure, lost productivity, property loss, and pain and suffering);
- costs that accrue to the public as a result of a criminal incident (police response, victim's services and compensation, personal protection expenses, private security and other expenses associated with crime avoidance behavior, as well as some of the cost of medical and mental health expenditure through insurance premiums). While these are public costs, for the most part they are not costs borne by a public payer. Rather, they are costs to the general public.

The costs associated with arrest and criminal processing, unlike incidence costs, are borne entirely by the tax-paying public. Costs of arrest include:

- the cost of legal services provided to the defendants. While this cost is divided between the defendant and the criminal justice system, this evaluation only includes the portion paid by the criminal justice system;
- costs to the criminal justice system, including investigation and arrest, booking, pretrial jail, screening and pre-filing process, arraignment, pretrial hearings, trial, sentencing, post-trial jail and conditional release.

Corrections costs are also borne entirely by the public, and include:

- criminal justice costs of corrections, including prison, jail and probation.

Not all of these costs are included in the estimates of benefits from averted crimes. Intangible costs, including the cost of pain and suffering, are not included, since they measure changes in quality of life rather than a measurable opportunity cost. Use of estimates for costs associated with pain and suffering in cost-benefit analysis remains controversial and there is no widely accepted means of valuing pain and suffering. However, since there is clearly some cost of pain and suffering to many crimes, such as the psychological cost of rape, this analysis would tend to underestimate the true benefits of SCDIP. In addition, averted costs as a result of reduced fear (including decreased expenditures for personal protection, private security, and other crime avoidance behavior) are excluded because no reliable estimates of the incremental benefits are available. Finally, given the very limited number of participants in SCDIP, it is expected that changes in overall crime rates as a result of the program are small, and therefore calculations of intangible benefits would have little meaning.

Calculating Benefits

A two-step process was used to estimate the costs associated with avoided crime. The first step involved creating crime categories that were comparable across the data sources to be used in benefit estimation -- the Survey of Adults Served by SCDIP, published research on the

costs of specific types of crime, and Uniform Crime Report arrest records. The crime types considered included arson, assault, burglary, child abuse, child neglect, drug possession, drug trafficking, drunk driving, fencing, forgery, gambling, larceny, motor vehicle theft, murder, prostitution, rape, and, robbery. The crimes were grouped into four general categories (drug, violent, property, and other) to resolve discrepancies in the categories in the survey, the UCR, and published studies. A full description of the methods used to make this transformation are provided in a separate report on costs and benefits (Roman, Woodard, Harrell and Riggs, 1998).

The second step in this process was to use official records data to determine the whether program participants were less likely to commit a crime during the one-year follow-up period, and whether they committed significantly fewer crimes during that period. Logistic regression results controlling for the year following disposition (odds ratio=.68, $p<.05$) show that sanctions program participants were significantly less likely to re-arrested in the year following sentencing. In addition, results from the survey were used to determine the rates of averted incidence cost by category. Poisson regression results, which controlled for gender, age, any prior convictions, proportion of early positive tests and the defendant's employment status at arrest, show that sanctions program participants committed significantly fewer crimes during the same period ($p<.01$). No significant differences were found between groups in the four categories for either measure, possibly due to small sample sizes. Because the court is concerned with overall levels of crime rather than type of crime, it is not inconsistent to use the raw differences in the number of Poisson regression results also show that treatment participants were less likely to self-report crimes during the year following sentencing. Again, however, the accuracy of this self-report data is not clear.

Because survey results may suffer from the under reporting of socially stigmatized behaviors, a very simple test is used to validate the survey results with respect to official records. The proportion of expected incidents reported in the survey and official arrests records from the same time period were compared with the proportion of national criminal incidents from the National Crime Victimization Survey (NCVS, 1994) to national arrest data from the Uniform Crime Report (UCR, 1996)).

Exhibit 9.2 confirms that the rates of criminal incidence reported in the SCDIP survey by sanctions participants closely follow the expected number of criminal incidence from national-level data, but the reports of treatment program participants do not. The apparent underreporting of criminal incidents among treatment participants, compared with the lack of significant differences with the standard docket in arrests (measured by any arrests, street days to first arrest or number of arrests), led to the decision not to attribute benefits in crime reduction to the program. In contrast, the sanction program participant reports of fewer crimes than the standard docket sample members are consistent with findings of significantly lower likelihood of arrest and significantly more street days before first rearrest.

Exhibit 9.2 - Validation of SCDIP Survey					
	Number of Criminal Incidents	Number Reported	% of Incidents Reported	Number of Arrests	% Resulting in Arrests
<i>Violent Crimes (National)</i>	10,860,630	1,798,792	16.6%	543,435	5.0%
<i>Violent Crimes (SCDIP Survey Sanctions Participants)</i>	306	N/A	N/A	15	4.9%
<i>Violent Crimes (SCDIP Survey Treatment Participants)</i>	35	N/A	N/A	14	40.0%
<i>Property Crimes (National)</i>	31,012,200	12,063,095	38.9%	1,431,11	4.6%
<i>Property Crimes (SCDIP Survey Sanctions Participants)</i>	459	N/A	N/A	17	3.7%
<i>Property Crimes (SCDIP Survey Treatment Participants)</i>	49	N/A	N/A	11	22.4%

Data sources for national statistics: On number of criminal incidents: NCVS. Pg. 21 (violent crime). Pg. 30 (property crime). On number of reported incidents: UCR. Pg. 10 (violent crime). Pg. 35 (property crime). On number of arrests: UCR, pg. 222.

The remainder of this chapter will describe the magnitude of benefits that accrue as a result of the finding that:

- significantly fewer arrests occurred for sanctions program participants in the year following sentencing as compared to defendants on the standard docket;
- significantly fewer criminal acts were committed by sanctions program participants;

In addition, the finding of significantly fewer self-reported criminal acts in the year following sentencing by treatment participants is discussed, but is not included in the final benefits estimates.

Estimating the Value of Costs Associated with Criminal Incidence

The benefit from averted criminal acts (incidents) is calculated by multiplying the number

of averted incidents by the cost associated with each event. The estimated incidence cost is derived from Miller, Cohen and Wiersema (1996) and Rajkumar and French (1997).

Miller, Cohen and Wiersema provide the incidence cost estimates for: arson, assault, burglary, child abuse, child neglect, drunk driving, larceny, motor vehicle theft, murder, rape and robbery. Their estimates for each crime are calculated as average costs per victimization/crime committed, and include attempted crimes as well as completed crimes. Their data are derived from the National Crime Victimization Survey (NCVS) for many of their estimates and used as proxies for the costs of crime in Washington, D.C. The direction or magnitude of bias that results can not be estimated.

Rajkumar and French provide the incidence cost estimates for the remaining crimes: drug possession, drug trafficking, fencing, forgery, gambling and prostitution. Rajkumar and French refer to the cost of incidence as the victim crime cost which includes: medical care costs, decreased productivity, and property loss. Their estimates use information from surveys including the NCVS, and data from the Bureau of Justice Statistics and the Federal Bureau of Investigation. Rajkumar and French categorize these crimes as ‘victimless crimes,’ and therefore associate no cost of incidence to them. Exhibit 9.3 describes cost of incidence.

Exhibit 9.3 - Cost Associated with a Criminal Act					
Offense	Cost of Incidence ^a	Cost of Incidence ^b	Offense	Cost of Incidence ^a	Cost of Incidence ^b
Arson	\$19,372		Forgery		\$0
Assault	\$1,654		Gambling		\$0
Burglary	\$1,183		Larceny	\$385	
Child Abuse	\$7,350		Motor Vehicle Theft	\$3,681	
Child Neglect	\$1,877		Murder	\$386,026	
Drug Possession		\$0	Prostitution		\$0
Drug Trafficking		\$0	Parole/Probation Violation	N/A	N/A
Drunk Driving	\$6,246		Rape	\$5,341	
Fencing		\$0	Robbery	\$2,416	

a. Miller, Cohen and Wiersema estimates

b. Rajkumar and French estimates

Estimating the Value of Benefits from Averted Incidence

Analysis of official records indicate that sanctions participants are less likely to commit a crime in the year following sentencing than those on the standard docket. In addition, as was reported in Chapter 6, sanctions program participants report having committed significantly fewer crimes during the year following arrest ($p < .05$ - see Table 6.5). While there was no finding that treatment program participants were significantly less likely to be arrested in the year following sentencing, they reported committing significantly fewer crimes ($p < .01$ - see Table

8.5). From these findings of fewer criminal acts for both groups, an estimate of the benefits from averted crime can be determined. The number of averted criminal incidents is calculated using SCDIP survey data comparing experimental and standard docket defendants' self-reported number of crimes by type (Exhibit 9.4). An estimate of the differential number of crimes committed by group is included in the exhibit, using the differences in mean number of self-reported crimes by group from the survey data.

Exhibit 9.4 - Potential* Benefit of Averted Criminal Incidence			
Sanctions Participants			
Offense Type	Cost of Incidence	Crimes Averted	Benefit
Drug	0	(302)	(\$0)
Property	\$1,243	(115)	(\$142,857)
Violent	\$11,358	10	\$113,581
Other	\$3,108	525	\$1,631,594
Total net benefit of averted criminal incidence		98	\$1,488,737
Treatment Participants			
Offense Type	Cost of Incidence	Crimes Averted	Benefit
Drug	0	250	(\$0)
Property	\$1,243	152	\$189,141
Violent	\$11,358	150	\$1,703,850
Other	\$3,108	473	\$1,471,273
Total net benefit of averted criminal incidence		1,025	\$3,364,264

* The benefits estimated for the sanctions participants are well supported by other data in this analysis. As was noted, the number of arrests and self-reported criminal acts were each significantly lower for the sanctions participants. In addition, the validation study of survey responses presented in Exhibit 9.1 suggests that the survey responses by this group are reliable. It should be noted that the small sample size in the survey, aggregate number of crimes committed is particularly sensitive to outliers. In this case, while a participant in the sanctions program was significantly less likely to commit any crime, and committed fewer crimes overall, a small number of sanctions participants reported committing a disproportionate number of criminal acts. Therefore, participants were not found to commit fewer crimes in each crime category.

The finding of benefits from fewer criminal incidents committed by the treatment participants is not well supported by other findings in this analysis. While treatment participants self-reported significantly fewer criminal acts in the year following disposition, the validity study in Exhibit 9.2 suggests this finding may not be reliable. In validating treatment participant responses, it is clear that this group reported far fewer criminal acts per officially reported arrest. The finding that treatment participants were not significantly less likely to be re-arrested also suggests that the benefits estimated in Exhibit 9.4 may be a function of self-report bias rather than real reductions in criminal acts. Therefore, the benefits accruing to treatment participation are not reported in the final calculations of program benefits.

Estimating the Value of Costs Associated with Arrest and Conviction

Cohen, Miller and Rossman (1994) provide estimates for the cost of arrest associated with a limited number of crimes including: assault, murder, rape and robbery. No other estimates for costs associated with arrest appear to be available in the existing literature. Arrest costs include a defendant's legal services and the cost of criminal justice processing, including court hearings.

The cost of legal defense is based on 1979 estimates of: the time federal district court judges spend on the average case for each crime; and, the hourly rate of legal services. The direction and magnitude of bias that results from using data from 1979 are not clear. On one hand, given the increasing volume of criminal cases since that time and the added responsibility judges now bear, it is certainly possible that costs associated with their activities may have increased at a pace exceeding inflation. Therefore, these estimates would tend to underestimate their costs. On the other hand, a case could be made that these same increases in caseload have forced judges to spend less time on each case, suggesting that these are overestimates of the costs associated with their time. The national average hourly rate for legal services, used for estimates of both judges' time and other legal services, is estimated at \$57, in 1987 dollars. These costs are divided proportionately between the criminal justice system (48 percent) and the amount paid by the defendant (52 percent), and are adjusted to 1995 dollars. The amount paid by the defendant is not included in this analysis.

The cost of criminal justice processing includes: investigation and arrest, booking, pretrial jail, screening and pre-filing process, arraignment, pretrial hearings, trial, sentencing, post-trial jail, and conditional release. The cost associated with each of these stages is based on the costs in Metropolitan Dade County Department of Justice Assistance. It was not possible to estimate how closely the costs of arrest for Dade County compare to those of Washington, D.C. Given that arrest costs were available for only a limited number of crimes, and that the magnitude of these benefits was small, it is not clear if differences that do exist had a significant impact on the final analysis of net benefit. No estimates of arrest and court costs for other types of crimes are currently available.

Exhibit 9.5 shows costs of arrest for these crimes as calculated by Cohen, Miller and Rossman.

Exhibit 9.5 - Costs of Associated with an Arrest	
Offense	Cost of Arrest
Assault	\$1,929
Murder	\$8,955
Rape	\$3,307
Robbery	\$1,898

Estimating the Value of Benefits from Averted Arrest and Conviction

The cost estimates described in preceding sections and official records data are used to calculate the value of benefits from averted arrests. These net benefits are the difference in number of arrests from official records between sanctions participants and the standard docket multiplied by the cost of arrest. Exhibit 9.6 contains the differential number of arrests by crime type and the associated net benefit. Again, the only costs associated with arrest that are currently available are those associated with the violent crimes described in the preceding section.

Exhibit 9.6 - Benefits of Sanctions Participants Averted Arrests			
Offense Type	Cost of Arrest	Arrests Averted	Benefit
Drug	N/A	8.2	N/A
Violent	\$2,357	(2.3)	(\$5,420)
Property	N/A	2.7	N/A
Other	N/A	5.6	N/A
Total net benefit of averted arrests		14.2	(\$5,420)

Estimating the Value of Costs Associated with Corrections

A significant amount of effort has been made to estimate costs associated with incidence and arrest, and this analysis closely follows the literature. However, sanctions costs are not as easily estimated because of the difficulty in determining the level of supervision imposed (prison, jail or probation) from aggregated sentencing records. As such, these costs must be imputed by comparing the relative proportion of defendants sentenced to each type of facility by the cost associated with each facility. Sanction cost estimates use weighted averages of the mean costs for different facilities (including probation), where the weights are the percentage of defendants sentenced to each type of facility for a given crime.

The net benefit from averted convictions is calculated as the product of the number of convictions that do not occur as a result of SCDIP by the cost of the sanction associated with each conviction. The cost of sanctions for each crime is not derived from a secondary source, as are estimates of incidence and arrest costs, but rather is estimated directly, using data published by the Bureau of Justice Statistics (BJS) and the Criminal Justice Institute (CJI). BJS provides information describing sentence lengths for various crimes. These data are sorted by the type of sentence imposed, including prison, jail and probation. CJI estimates the average daily cost per inmate for each level of supervision by state or county, depending on the type of facility. To obtain sanctions costs, data from CJI and BJS are combined to calculate estimates of the cost of different sanctions for crimes. Again, because this is an aggregated data set, the final estimates are weighted averages estimating costs per convicted crime for each type of crime.

The following several sections describe the costs associated with three types of sentencing outcomes: prison, jail and probation/parole.

Cost of Prison Sentences

The estimated cost of prison sentences for each type of crime are calculated by multiplying the average prison sentence length in years by the estimated annual cost (Exhibit 9.7). Under the 1984 Sentencing Reform Act, good time credits were capped at 15% per year and therefore, the minimum time served would be 85% of the original sentence (18 U.S.C. § 3624(b)). According to the BJS *Compendium of Federal Justice Statistics* for 1995, the minimum proportion of time served for any sentence of any length was 87%. Therefore, it is assumed here that convicted felons will serve 87% of the mean length of the maximum prison sentence imposed. The length of sentence refers to the total length of maximum sentence for a single crime when the conviction gives a range of years. If an individual is sentenced for multiple offenses, the length of sentence equals the total sentence, and in addition, the sentence is categorized according to the most severe crime for which the felon was convicted using 1994 data (Lanagan and Brown, table 11, pg. 9). *The Corrections Yearbook* provides estimates of the average daily cost of an inmate in federal and state prisons in 1995 (Camp and Camp, pg. 68). Exhibit 9.7 below shows the cost of a weighted average maximum prison sentence in federal and Washington, D.C. prisons, which is a function of the average daily cost of housing a prisoner and the length of sentence, as described above.

It should be noted that at the time these data were collected, there was no determinate sentencing in Washington, D.C. Therefore, it is quite likely that defendants incarcerated in Washington, D.C. served less than 87% of the sentence imposed. As a result, prison costs in D.C. may tend to overestimate the true benefit of an averted incarceration. However, given the relatively small proportion of defendants in this population likely to serve time in D.C. prison, and the relatively small magnitude overall of averted corrections benefits, this bias is not expected to meaningfully impact the net benefit of the program

Unlike other costs and benefits in this report, averted prison costs include costs that accrue beyond a one-year time frame. Therefore, it is appropriate to discount future benefits to reflect the time value of money. Exhibit 9.7 includes these discounts.

Exhibit 9.7- Costs of Prison		
<i>Offense</i>	Mean Maximum Prison Sentence	
	Federal Prison	D.C. Prison
Arson	N/A	N/A
Assault	\$112,700	\$163,783
Burglary	\$114,610	\$143,051
Child Abuse	N/A	N/A
Child Neglect	N/A	N/A
Drug Possession	\$126,071	\$103,660
Drug Trafficking	\$175,735	\$136,831
Drunk Driving	N/A	N/A
Fraud/Forgery	\$66,856	\$105,733
Larceny	\$82,137	\$93,294
Motor Vehicle Theft	\$82,137	\$103,660
Murder	\$292,256	\$557,691
Rape	\$150,903	\$327,556
Robbery	\$194,837	\$240,491
Weapons Offenses	\$173,825	\$97,440
Other Offenses	\$85,958	\$85,001
Other Violent Offenses	\$210,118	\$145,124

Estimated Cost of Jail for Various Crimes

The mean maximum jail sentence for felons sentenced to jail is calculated from BJS statistics. Because the Bureau of Justice Statistics does not publish the average time served in jail by type of crime, length of sentence is assumed to equal the mean maximum jail sentence by crime (Langan and Brown, table 8-10, pg 8). However, unlike prison sentences, jail sentences are generally served in their entirety (Under the 1984 Sentencing Reform Act federal misdemeanants are ineligible for good time credits) 18 U.S.C. § 3624(b). No estimates of the daily cost per inmate were available for Washington, D.C.'s jail from BJS, so the D.C. jail system's estimate of an average daily cost per inmate of \$65 is used instead. Because many felons sentenced to federal jail terms reside in state prisons, the daily cost per inmate in a federal jail is assumed to equal the average daily cost per inmate in a D.C. prison, as calculated by *The Corrections Yearbook*. Final cost estimates of jail are calculated as the product of the mean maximum jail sentence by the average maximum jail sentence in months. The costs associated with the average maximum jail sentence per crime appear in Exhibit 9.8. It should be noted that because incarceration in jail is limited to sentences less than one year, the costs associated with different offenses may not reflect the underlying severity of the crime. For instance, the jail costs for burglary exceed those of murder, because very few murder sentences are served in jail, and therefore those incarcerated in jails tend to be unusual cases.

Exhibit 9.8 - Costs of Jail Sentences				
<i>Offense</i>	Mean Maximum Jail Sentence		Mean Time Served in Jail	
	Federal Jail	D.C. Jail	Federal Jail	D.C. Jail
Arson	N/A	N/A	N/A	N/A
Assault	\$12,439	\$11,863	\$5,813	\$10,573
Burglary	\$18,659	\$13,840	\$5,397	\$15,860
Child Abuse	N/A	N/A	N/A	N/A
Child Neglect	N/A	N/A	N/A	N/A
Drug Possession	\$14,512	\$7,908	\$2,531	\$12,336
Drug Trafficking	\$16,586	\$13,840	\$5,259	\$14,098
Drunk Driving	N/A	N/A	N/A	N/A
Fraud/Forgery	\$14,512	\$9,885	\$3,460	\$12,336
Larceny	\$14,512	\$11,863	\$4,745	\$12,336
Motor Vehicle Theft	\$16,586	\$9,885	\$4,448	\$14,098
Murder	\$16,586	\$13,840	\$6,505	\$14,098
Rape	\$18,659	\$13,840	\$7,612	\$15,860
Robbery	\$16,586	\$17,794	\$8,185	\$14,098
Weapons Offenses	N/A	\$9,885	N/A	N/A
Other Offenses	N/A	\$9,885	N/A	N/A
Other Violent Offenses	\$16,586	\$11,863	\$6,287	\$14,098

Cost of Probation for Various Crimes

The average probation costs for Washington, D.C. are calculated as the product of the average probation sentence by the weighted average cost of probation. In addition, an average cost of federal probation/parole for various crimes is calculated using the same formula. Because estimates of the mean length of parole are not currently available, only average probation costs by type of crime are included in Exhibit 9.9.

Exhibit 9.9 - Costs of Probation By Crime		
Offense	Washington, D.C.	Federal
Arson	N/A	N/A
Assault	\$3,123	\$11,243
Burglary	\$3,494	\$12,396
Child Abuse	N/A	N/A
Child Neglect	N/A	N/A
Drug Possession	\$2,751	\$9,225
Drug Trafficking	\$2,974	\$14,414
Drunk Driving	N/A	N/A
Fraud/Forgery	\$3,048	\$11,243
Larceny	\$2,974	\$11,531
Motor Vehicle Theft	\$3,048	\$11,243
Murder	\$4,387	\$11,820
Rape	\$4,461	\$13,838
Robbery	\$3,792	\$12,684
Weapons Offenses	N/A	N/A
Other Offenses	N/A	N/A
Other Violent Offenses	\$3,197	\$11,243

Average Cost of Conviction for Various Types of Crimes

The Bureau of Justice Statistics publishes the number of convicted felons receiving prison, jail or probation sentences, but does not disaggregate these numbers by crime type. In order to estimate an average cost of sanctions by crime, the distribution of sentence types (prison, jail, probation) by crime must first be estimated. These estimates are derived from the proportion of the total number of convicted felons sentenced to each type of facility for each crime, which are used as the probability of receiving each type of sentence by the type of crime.

The probabilities were used to construct upper and lower bound estimates of the average conviction cost by crime in Washington, D.C. The upper bound estimate is the product of the cost of the mean maximum sentence for each type of sanction by the probability of receiving that sentence for each crime. The lower bound estimates are calculated with the average time served in prison and jail being substituted for the mean maximum sentence. The estimated cost of probation is the same for the lower and upper bound estimates.

Exhibit 9.10 shows upper and lower bound estimates of the total cost of sanctions for defendants convicted of a crime in Washington, D.C.

Exhibit 9.10 - Estimated Cost of Sentences by Crime		
<i>Offense</i>	Upper Bound Estimate	Lower Bound Estimate
Arson	N/A	N/A
Assault	\$82,575	\$41,278
Burglary	\$79,754	\$31,798
Child Abuse	N/A	N/A
Child Neglect	N/A	N/A
Drug Possession	\$38,741	\$13,087
Drug Trafficking	\$76,774	\$35,811
Drunk Driving	N/A	N/A
Fraud/Forgery	\$36,055	\$14,818
Larceny	\$39,517	\$16,637
Motor Vehicle Theft	\$43,650	\$20,717
Murder	\$526,616	\$248,042
Rape	\$234,459	\$115,685
Robbery	\$187,501	\$129,634
Weapons Offenses	N/A	\$89,032
Other Offenses	N/A	N/A
Other Violent Offenses	\$70,318	N/A

Estimating the Value of Benefits From Averted Corrections Contact

Exhibit 9.11 describes the net averted costs of sentences by types of crime. Averted costs by crime type are again aggregated into offense types, using the same type of methodology employed for averted incidents and arrests. To maintain a conservative bias, the net averted costs of sentences utilizes the *lower bound estimates* for sentence costs. Net benefits are a function of the product of the probability of conviction, the number of arrests, and the cost of sentence (which is the product of the weighted average probability of receiving each type of sentence by the cost of each type of sentence).

Exhibit 9.11 - Averted Costs of Sentences by Crime Sanctions Participants				
Offense Type	Conviction Rate	Cost of Sentence	Averted Incarcerations	Benefit
Drug	.62	\$31,039	5.1	\$158,299
Property	.77	\$21,339	1.5	\$32,009
Violent	.57	\$100,239	(1.8)	(\$180,430)
Other	.57	N/A	5.6	N/A
Total net benefit of averted sentences				\$9,877

Total Benefits of the Graduated Sanctions Program From Averted Crime

Total benefits from crime averted by SCDIP are \$0 for the treatment docket and \$1,493,194 for the sanctions program. The calculations are shown in Exhibit 9.12.

Exhibit 9.12 - Net Benefits From Averted Crime	
	Sanctions Participants
Averted Incident Benefit	\$1,488,737
Averted Arrest Benefit	(\$5,420)
Averted Corrections Benefit	\$9,877
Total	\$1,493,194

Total net benefits are the difference in total net costs of operation (shown in exhibit 9.1) and total net benefits (exhibit 9.12) from averted crime. The treatment program yielded a net cost of \$1,219,120, and a net cost of \$8,708 per participant. The sanctions program yielded a net benefit of \$713,570, and a net benefit of \$2,973 per participant, for a benefit-cost ration of almost 2:1.

Exhibit 9.13 - The Graduated Sanction Program Net Benefits	
	Sanctions Participants
Net Program Costs	(\$779,624)
Net Program Benefits	\$1,493,194
Total Net Benefits	\$713,570

Cost-Effectiveness

Cost-effectiveness analysis is often used as a means of evaluating the impact of programs such as SCDIP. Generally, the costs are derived in the same manner as in a cost-benefit analysis, but the benefits are measured in terms of outcomes rather than converted into dollars. For a program such as SCDIP where benefits in many areas are difficult to measure and the benefits side of the equation is therefore very conservative, it is useful to also present these results. Once a benefit-cost analysis has been performed, converting the results into a cost-effectiveness model is a simple and straightforward exercise, and the results of this analysis are presented below.

This analysis has shown a cost of \$3,248 per sanctions program participant. Sanctions program participants were re-arrested about 6% less often than standard docket participants. Therefore, each \$542 spent of sanctions program participants is associated with a 1% reduction

in re-arrest rates. Put another way, sanctions program participants were 22% less likely to be re-arrested. Therefore, each \$146 spent on sanctions program participants is associated with a 1% reduction in likelihood of re-arrest. In total, a little more than 14 arrests were averted by the program, for a cost per averted arrest of about \$226. Finally, 98 crimes were prevented by SCDIP, yielding a cost per averted crime of about \$7,955.

However, a note of caution is warranted in interpreting these results. Economists tend to suggest that cost-effectiveness models are most appropriate where one-side of the equation is constrained. That is to say, if either the costs are static (i.e. two programs are each spending \$10,000 to reduce crime) or the outcomes are static (two programs have budgets that are unlimited up to the point a certain amount of crime is prevented) cost-effectiveness analysis is an effective tool. Where costs and outcomes are unconstrained, the results may not be comparable across programs. For example, if it can be shown that there are economies of scale in the SCDIP program (if each averted crime is less costly than the last due to increasing efficiency of operations) a cost-effectiveness model only reflects the cost per outcome at that particular cost. If the program is expanded slightly, or if the client case load changes, the cost per outcome will also change, as a function of the economies of scale. Therefore, it is only a useful barometer where the economies of scale of the programs with which it is being compared are the same.

Conclusion

This analysis of the costs and benefits of SCDIP clearly shows that the sanctions program yields a positive net benefit for participants. Given the relatively precise data available for calculating program costs, the relative lack of data available for measuring many significant benefits, and the notably omitted averted health costs associated with reductions in participant drug use, it is quite likely that the net benefit of the program is somewhat greater. Finally, while multivariate regression analysis does not show a net benefit to treatment participation associated with crime reduction, the findings of reduced drug arrests (odds ratio=0.43, $p<0.01$) and reduced drug use in the month before sentencing (odds ratio=2.2, $p<0.01$) suggest that a fully implemented treatment program may also yield net social benefits.

Several limitations to this analysis should be considered. The use of a single site obviously limits the generalizability of these results because of contextual issues in the administration of SCDIP. Unique features of SCDIP include, D.C. Superior Court and Pretrial Services use of a highly automated drug testing laboratory located in the court house, and a sophisticated system for electronic exchange of information that expedited access to information on defendant compliance. In particular, this data system was an essential element in both facilitating program operations and minimizing costs. Jurisdictions without this capacity will likely have higher costs and more difficulty in providing effective treatment. However, while costs may therefore be higher as a result, if these improvements are only made for those receiving treatment, it would be expected that benefits would be proportionately increased as well.

In addition, the program's targeted population (drug felony defendants) had strong incentives (considerable risk of incarceration) and were under the court's supervision for a sufficient length of time to allow for effective treatment (felony defendants were under court supervision for approximately six months before sentencing, in addition to probation or incarceration). Programs serving defendants with less incentive to participate, or shorter periods of court supervision, will likely be more expensive to administer and have less positive outcomes. Finally, local drug enforcement policies may influence defendant recidivism and compliance.

CHAPTER 10

SUMMARY AND DISCUSSION

This evaluation examined the impact of the Washington, DC Superior Court Drug Intervention Programs a target population of drug-using felony defendants by comparing outcomes of eligible defendants randomly assigned to three dockets in the DC Superior Court. Defendants remain on these dockets until sentencing if they accept an early, one-time plea offer, or defendants transfer to trial dockets if they reject the plea offer. Although the offer of services could be offered to those who rejected the plea offer, this was relatively rare and the evaluation samples consist of those who remained on the docket and were eligible for intervention on the basis of two failed drug tests after pretrial release or, in a relatively few cases, other evidence introduced in court.

Each docket offered a different set of services to drug using defendants on pretrial release aimed at helping them achieve abstinence and reducing their subsequent offending. These are summarized in Exhibit 10.1.

The Standard Docket

Standard case processing for drug felony defendants in D.C. Superior court included twice weekly drug testing and judicial monitoring of drug test results. A sophisticated MIS system on computers on the judge's bench provides current information on drug test results, which were available to the judge at each hearing. The standard docket judges typically encouraged defendants who test positive or miss tests to seek treatment, but did not have case management staff to assist them and did not use sanctions for test failures. Cases of those defendants who would have been eligible for intervention on the basis of two failed drug tests after pretrial release reached disposition in about 7-1/2 months (233 days) and averaged 6.8 hearings. Many of these defendants voluntarily participated in community-based treatment programs during pretrial release, primarily attending NA/AA meetings. One-third reported detox services and one-quarter reported outpatient treatment. Nearly two-thirds (65%) were sentenced to probation: 88% of those who consistently tested drug free in the month before sentencing; and 63% of those who tested positive for drugs or skipped tests.

The Graduated Sanctions Program

Eligible defendants on the sanctions docket were offered greatly increased chances of probation rather than incarceration at sentencing for successful participation in a graduated sanctions program. Those who accepted this offer (66% of the eligibles) and entered the program about 2 months (64 days) after arrest. At program acceptance, participants signed contracts agreeing to submit to twice weekly urinalysis tests and report to court for sanctioning if they tested positive, submitted a tampered sample, or skipped a test. Sanctions were assigned as follows;

Exhibit 10.1 Comparison of the Three SCDIP Interventions

	<i>Graduated Sanctions Program</i>	<i>Treatment Program</i>	<i>Standard Docket</i>
Intervention Content	<ul style="list-style-type: none"> • Drug tests—2x per week • Judicial monitoring • Court-imposed penalties for bad drug tests • Case manager assisted entry into community-based treatment as needed 	<ul style="list-style-type: none"> • Drug tests—3-5x per week • Judicial monitoring • Daily intensive outpatient drug treatment in court-based program • Court penalties or termination from the program for repeated violation of treatment program rules • Progression and graduation ceremonies for success 	<ul style="list-style-type: none"> • Drug tests—2x per week • Judicial monitoring • Voluntary participation in community-based treatment encouraged
Costs of Intervention	<ul style="list-style-type: none"> • Additional costs \$3,248 • Per participant • Per day per participant \$10.78 	<ul style="list-style-type: none"> • Additional costs \$8,708 • Per participant • Per day per participant \$21.01 	<ul style="list-style-type: none"> • Standard costs of court processing
Intervention Delivery to Participants	<ul style="list-style-type: none"> • Average # days to entry program 64 • Accepted program offer 66% • Average # Days in program 132 • Average # sanction hearings 4.7 • Average # hearings total 12.5 • Median days to case disposition 251 • Total # of sanctions imposed 437 <ul style="list-style-type: none"> • 3 days in jury box 182 • 3 days in jail 121 • 5-7 days detox 82 • 7 days in jail 52 • Percent dropped out of drug testing¹ 38% • Self-reported drug or alcohol treatment during pretrial period 82% <ul style="list-style-type: none"> • Residential treatment (assisted by program) 13% • Detox 63% • NA/AA 60% • Outpatient 26% • Methadone 17% • Partial/day program 17% • Other 31% 	<ul style="list-style-type: none"> • Average # of days to program entry 92 • Accepted program offer 40% • Average # of days in program 188 • Total # of progression, compliance and graduation ceremonies 9.5 • Average # hearings total 15.6 • Median days to case disposition 394 • Percent scheduled treatment days attended 36% • Percent dropped out of drug testing* 50% • Self-reported drug or alcohol treatment during pretrial period 97% <ul style="list-style-type: none"> • Residential treatment (assisted by program) 8% • Detox 48% • NA/AA 73% • Outpatient 36% • Methadone 3% • Partial/day program 30% • Other 52% 	<ul style="list-style-type: none"> • Average # hearings total 6.8 • Median days to case disposition 223 • Percent dropped out of drug testing* 41% • Self-reported drug or alcohol treatment during pretrial period 74% <ul style="list-style-type: none"> • Residential treatment (assisted by program) 6% • Detox 33% • NA/AA 63% • Outpatient 26% • Methadone 7% • Partial/day program 12% • Other 25%

¹ Those who dropped out of drug testing were counted as having 2 missed tests per week in comparing docket outcomes.

Exhibit 10.1 <i>(continued)</i>	<i>Graduated Sanctions Program</i>	<i>Treatment Program</i>	<i>Standard Docket</i>	
<i>Intervention Outcomes</i>	Graduated/completed 30%	Graduated 19%		
		Left doing well 9%		
	Dropped out/absconded/terminated 70%	Dropped out/absconded/terminated 67%		
		Transferred to other treatment program 5%		
	Sentenced to probation 65%	Sentenced to probation 67%	Sentenced to probation	65%
	Mean days in jail during year after sentencing** 79	Mean days in jail during year after sentencing 74.5	Mean days in jail during year after sentencing	63.8

** Includes sentenced days and days for new arrests.

- three days in the jury box for the first infraction;
- three days in jail for the second infraction;
- seven days in detox for the third infraction;
- and, seven days in jail for subsequent infractions.

Graduated sanctions program participation averaged about 4-1/2 months (132 days) and required an average of 4.7 sanction hearings per participant. Cases of participants remained open about 18 days longer than cases of eligible defendants on the standard docket (based on median days to case disposition). The court responded to 97% of drug test violations, imposing a total of 437 sanctions. In general, the sanctions followed the rules although a few defendants received the first sanction of three days in the jury box more than once and some defendants were sent to detox before the third sanction, generally at their own request.

Participants were significantly more likely than standard docket eligibles to receive detox during the program, but otherwise resembled the standard docket eligibles in their use of community-based treatment. Sixty percent of the participants reported attending NA/AA during the program as did 63% of those on the standard docket. The cost of providing the case management, hearings, warrants, detoxification, jail space for sanctions, additional drug tests and other aspects of the program was \$3,248 per participant.

Although the overall rates of defendants receiving probation was 65% on the sanctions and standard dockets, those who tested clean in the month before sentencing did increase their chances of probation. Of those who tested drug free in the month before sentencing, 95% received probation (some had prior criminal histories that precluded probation) compared to 56% who never participated, dropped out of testing, or tested positive for drugs.

The Treatment Program

Eligible defendants on the treatment docket were offered an intensive day treatment program and told that successful completion would greatly increase the likelihood that they would be placed on probation rather than incarcerated at sentencing. Those who accepted this offer (40% of the eligibles) entered treatment about 3 months after arrest (92 days). Participants were expected to move through sequential treatment stages, which consisted of an Orientation Phase and a five-level Intensive Treatment Phase. Progression through the program was contingent upon the participant's progress toward the treatment objectives outlined in the treatment plan, academic functioning, participation, and, social adjustment. The treatment program included frequent drug testing (daily or three times per week). Level movement was designed to reward defendants for positive behavior and to acknowledge the completion of 21 days of treatment. The treatment team reviewed each defendant's progress and made recommendations for movement to the next level to the judge. Penalties were imposed by the

treatment staff for non-attendance, tardiness, and behavior problems in treatment, but not for positive drug tests, which were handled by judges. Judicial admonishment and program termination were used to respond to persistent, serious problems. Progression to the next level was celebrated in a court ceremony during which the judge congratulated defendants for their success and presented small gifts to recognize their achievement of treatment goals. Treatment graduates were honored with certificates presented by the judge at ceremonies in the court room attended by friends, family members, fellow program participants, and staff from the court and treatment program.

Treatment participation averaged about 6.3 months (188 days) and entailed an average of 9.5 hearings per participant. These included progression and sanction hearings. Cases of participants remained open about 171 days longer than cases of eligible defendants on the standard docket (based on median days to case disposition). This included the longer time to program entry as well as the duration of the program. The cost of providing the treatment, hearings, additional drug tests and supplementary services was \$8,708 per participant.

The program experienced substantial implementation problems and participants attended just over one-third of the scheduled treatment days. Overall, 19% of the 140 participants graduated from the treatment program and 9% left the program doing well. The remainder were terminated unsuccessfully, absconded or, in some cases, transferred to other treatment programs. Like the standard docket eligibles, about two-thirds of the participants, including all graduates, received probation.

The Evaluation Design

The graduated sanctions program and the intensive outpatient program were each independently compared to the standard docket that offered only drug testing and judicial monitoring. The evaluation examines the impact of the programs on eligible defendants, the target group of defendants, and on those who agreed to participate in the two programs. The evaluation samples include: 346 eligible defendants on the treatment docket (140 treatment participants), 365 eligible defendants on the graduated sanctions docket (240 program participants), and 311 eligible defendants on the standard docket. These represent the population of eligible defendants randomly assigned to the dockets between September 1, 1994 and January 31, 1996.

Data on defendant outcomes (see Glossary for variable definitions) included:

Drug use. Results of twice weekly drug tests administered during pretrial release and self-report data from a survey of defendants one year after sentencing.

Criminal activity. Records from Washington, DC and the FBI on arrests and self-report data from a survey of defendants one year after sentencing.

Other outcomes. Social and economic outcomes and post-program use of services were provided by self-report data from a survey of defendants one year after sentencing.

This information was linked to court and program records on services delivered, results of focus group interviews with defendants, and process evaluation findings based on observations, interviews with program staff and judges, and review of policies, procedures and reports. A summary of impact evaluation findings is shown in Exhibit 10.2.

Reductions in Drug Use

Both experimental programs significantly reduced drug use during pretrial release. The entire target group of drug-using defendants on both the sanctions and treatment dockets were significantly more likely to test drug-free in the month before sentencing and a larger proportion of their tests were negative. The reductions in drug use were even more significant when program participants were compared to the standard docket eligibles.

The survey did not indicate significant reductions in any or weekly drug use during the year after sentencing among participants in either program. However, the combination of sanctions and self-help treatment did produce significant reductions in stronger drug use. Those participants who attended NA/AA during the sanctions program were significantly less likely than standard docket members and sanction program participants who did not attend these meetings to report stronger drug use in the year after sentencing (odds ratio=.21, $p<.05$).

Reductions in Criminal Activity

The full targeted sample of the eligible defendants on the experimental dockets did not show significant reductions in criminal activity measured by arrest records. However, sanctions program participants were significantly less likely than the standard docket sample to be arrested in the year following sentencing (19% compared to 27%). Most of the difference was in the form of reduced likelihood of an arrest for a drug offense. Although the sanctions program participants averaged 15 fewer street days in the year after sentencing, this difference in opportunity to be arrested does not appear to be of sufficient magnitude to account for the differences in arrest rate. The estimated per day probability of arrest among the pooled group was .0006. Adjusting for the 15 days of extra risk among the standard docket would lower their arrest rate to 26%, but would not change the significance of the difference between the groups. The lower likelihood of arrest was consistent with the finding that sanction program participants had more days on the street prior to their first arrest after sentencing than did the standard docket sample.

Treatment participants were not significantly less likely to be arrested in the year after sentencing, nor did they have more street days before first arrest during the year. However, they were significantly less likely to be arrested for a drug offense than those on the standard docket.

**Exhibit 10.2 Findings on the Impact of the
SCDIP Graduated Sanctions and Treatment Programs**

	<i>Sanctions Program Eligible Defendants</i>	<i>Sanction Program Participants</i>	<i>Treatment Program Eligible Defendants</i>	<i>Treatment Program Participants</i>
<i>Impact during the Program Period</i>				
Reduced Drug Use				
Tested Drug Free in Month before Sentencing ¹	P<.001	P<.001	P<.01	P<.01
% of Tests Dirty in Month before Sentencing	P<.01	P<.001	P<.01	P<.01
<i>Impact in the Year after Sentencing</i>				
Reduced Drug Use				
Any Self-reported Use	NS	NS (P<.05) ²	NS	NS
Weekly Self-reported Use	NS	NS	NS	NS
Reduced Criminal Activity				
Any Arrests	NS	P<.05	NS	NS
Any Drug Arrests	NS	NS	NS	NS
Any Violent Arrests	NS	NS	NS	NS
Any Property Arrests	NS	NS	NS	NS
Any Other Arrests	NS	NS	NS	NS
Number of Arrests	NS	NS	NS	NS
Number of Drug Arrests	NS	NS	NS	P<.05
Number of Violent Arrests	NS	NS	NS	NS
Number of Property Arrests	NS	NS	NS	NS
Number of Other Arrests	NS	NS	NS	NS
Number of Arrests per Street Day	NS	P<.05	NS	NS
Any Self-reported Offenses	NS	NS	NS	NS
Any Drug Self-reported Offenses	NS	NS	NS	NS
Any Violent Self-reported Offenses	NS	NS	NS	NS
Any Property Self-reported Offenses	NS	NS	NS	NS
Any Other Self-reported Offenses	NS	NS	NS	NS
Number of Self-reported Offenses	P<.001	P<.001	P<.001	P<.001
Number of Drug Self-reported Offenses	NS	NS	NS	P<.001
Number of Violent Self-reported Offenses	NS	NS	P<.001	P<.001
Number of Property Self-reported Offenses	NS	NS	P<.001	P<.001
Number of Other Self-reported Offenses	P<.001	P<.001	P<.001	P<.001
Other Outcomes				
Economic Gains	NS	NS	NS	NS
Reduction in Drug-related Problems	NS	NS	NS	P<.05 ³

1 Based on two tests per week per sample group. Defendants who dropped out of testing were counted as having two skipped tests per week.

2 Sanctions program participants who also attended NA/AA were significantly less likely to use stronger drugs in the year after sentencing.

3 Treatment program participants were significantly less likely to have an accident with a vehicle while under the influence of drugs and less likely to have arguments while under the influence of drugs in the year after sentencing.

Defendants on all three dockets, program participants and nonparticipants alike, reported relatively low levels of criminal activity in the year after sentencing. Sanctions program participants reported significantly fewer offenses overall and significantly fewer crimes in the other offense category. Treatment participants reported significantly fewer offenses in all categories. These differences were also significant when all eligible defendants on these dockets are compared to eligible defendants on the standard docket. However, the finding on significantly lower criminal activity among the treatment program participants must be interpreted cautiously because the validity of the self-report data for treatment program participants is questionable, compared to that for respondents on the standard and sanctions dockets. The validity assessment compared the ratio of defendant self-reported crimes to the number of arrests by group to a national level ratio of crimes per arrest. National data showed that about 5% of violent crimes and 4.6% of property crimes result in arrest. The sanctions participant ratios were very close to these at 4.9% and 4.3%. However, the comparable ratios for the treatment group participants were 40.0% and 22.4%. This suggests that treatment participants may be more reluctant to admit illegal activities on a survey because they attach greater social stigma to such behavior. Such an attitude change may have resulted from treatment program education aimed at reducing criminal thinking and behavior. The alternative, that they are arrested for a variety of crime types at much higher rates, seems less plausible.

Social and Economic Impacts

Reductions in drug-related social problems in the year after sentencing were reported on the survey by treatment program participants. These participants were less likely to have an accident with a car or other vehicle while under the influence of drugs and arguments with others while under the influence of drugs. Economic gains were not reported on the survey by those on the experimental dockets or in the programs.

Influences on Program Impact

All three SDCIP dockets emphasized early detection and monitoring of drug use through regular twice weekly drug testing and judicial monitoring. In addition, the graduated sanctions program emphasized the swiftness and certainty of the sanction imposed.

Swiftness. Drug tests were required on Mondays and Thursdays between 7 a.m. and 6:30 p.m. Each defendant was tested for a full screen of illegal drugs -- cocaine, marijuana, PCP, heroin -- and alcohol. Participants were instructed to call a Pretrial Service Officer between 8:30 and 9:30 p.m. on the evening of their drug test to learn test results. If a participant tested positive, he or she was instructed to come before the judge the following day at 9:30 a.m. for a compliance hearing. If a participant failed to appear for the hearing, a bench warrant for arrest was issued.

Certainty. Defendants signed agreements at program entry agreeing to the program rules.

Because the court wanted the consequences of a bad test outcome clearly understood by the defendants and all concerned, the type of penalty was the same for a missed test, tampered sample, or positive test. Ninety-seven percent of the bad drug tests resulted in a scheduled compliance hearing.

A related contribution to program success was defendants' up-front commitment to the rules. Decisions to join the sanctions program appeared to be driven by a desire to avoid incarceration. Despite concerns about the risks of sanctions, most eligible defendants and their defense attorneys were attracted by the increased likelihood of being placed on probation instead of being sentenced to a period of incarceration.¹⁶ In the focus group, program participants said that agreeing in advance to the sanctions and the rules for applying penalties gave them a feeling of control and a sense that they were being treated fairly. These defendants knew that they could avoid penalties by not using drugs, and that it was their responsibility to show the judge that they were clean through drug test results. This "contingency contract" between the judge and defendant clearly differentiates these sanctions from penalties that are imposed using rules that are poorly understood or inconsistently enforced. Because the sanctioning rules were simple and clearly explained in advance, defendants in the focus groups viewed the penalties they received as fair.

The success of the treatment program is impressive in view of the implementation problems encountered. In this experiment, the treatment program experienced substantial operational problems. The program was repeatedly forced to close due to flooding, heating problems, and poor air quality. District financial problems meant that service components such as health screening, literacy training, and other support services could not be purchased. Recruitment was also a problem for the treatment program. Relatively few (40%) of the eligible defendants agreed to join the program. The reluctance to join the program stemmed from its requirements to attend programming three to five days during the week. For some, this conflicted with work and child care responsibilities. Others wanted less intensive treatment. Thus, the impact analysis does not test the effect of treatment under optimal conditions.

One lesson of the demonstration program was recognition that multiple treatment options are needed because drug-involved defendants vary widely in the severity and duration of their drug abuse. The court has subsequently broadened the array of treatment options for drug-involved offenders, placing a large percentage in a highly focused day reporting program for several hours each week and reserving more intensive treatment for those who are more severely addicted to drugs. Another lesson was the need for courts to establish standards for monitoring treatment quality.

Twice weekly drug tests proved to be a relatively inexpensive strategy for screening defendants for drug use, identifying the majority of those who ever failed two drug tests within a

¹⁶ One unintended consequence of the repeal of mandatory minimum sentences for drug felonies was an increase in defendants deciding to go to trial, hoping that they would be placed on probation even if convicted.

month to six weeks of arrest. The intervention programs were then able to devote their staff resources to conducting individualized assessments (in the treatment program) or seeking community based treatment programs (in the sanctions program) for those known to be using drugs. The wide net cast by this strategy enabled the court to reach a diverse and relatively large group of drug-involved offenders.

One of the strengths of the experimental demonstration was the commitment of the judges. Judges are reassigned annually in Washington and the drug felony dockets were treated as one of the regular assignments. A total of nine judges, three per docket, presided during the demonstration period. Despite the expected diversity in style (some were viewed by defendants as stricter than others, some as friendlier than others), all performed effectively in these assignments, closely followed the program procedures, actively participated in monthly meetings to discuss procedures and issues, and worked to solve problems and modify procedures as needed. They were assisted by the active collaboration of the US Attorney's Office, public defenders, and the pretrial and probation agencies. The strong and cohesive leadership of the project was important to the success of the programs. It also had a very positive effect on the internal validity of the experiment through assuring adherence to the random assignment procedures and encouraging cooperation of agencies, defendants, and their attorneys with the research.

Interpreting the Findings

This report devotes considerable space to describing the programs and D.C. Superior Court procedures for handling drug felony defendants. This is necessary because the results are based on specific programs offered in a single site. Generalizing the findings to other jurisdictions requires an understanding of the context of the interventions.

The evaluation may underestimate the potential impact of the graduated sanctions and treatment programs in other jurisdictions. The standard docket devoted much more attention to defendant drug use than many courts. Defendants who tested positive for drugs at arrest were tested twice a week during pretrial release. The judges on this docket frequently referred to the results -- easily visible from the bench on the computers used to record data on the case -- and encouraged defendants who continued to use drugs to seek treatment. Because D.C. Superior Court already had these services in place for both the treatment and control populations, any crime reduction that resulted from these activities would not have been captured. One finding, that the number of crimes committed by these drug-involved felony defendants in the year after sentencing was so much lower (by several hundred crimes per year) than reported by addicts in other studies (Bureau of Justice Assistance, 1990), suggests that the level of supervision and services provided were exercising a substantial deterrent effect on all dockets.

However, this evaluation may underestimate the costs to implementing these programs in areas that do not currently have a drug testing program or encourage judicial monitoring of drug use. The program cost estimates presented in this report account for the additional expenditures

for the sanctions and treatment services (including additional drug tests), but do not include the costs of the basic testing and the very sophisticated computer system in place to support the D.C. Superior Court. For similar reasons, jurisdictions without computerized records of test results and active judicial involvement might expect to see additional significant impacts of program operation.

The impacts reported must also be considered in light of the characteristics of the eligible population targeted for intervention. The target population consisted of all defendants charged with drug felonies. Unlike many drug courts that exclude defendants who have been convicted for a violent offense or face pending charges for a violent offense (required for federal drug court funding), the programs were open to those with long criminal histories as well as first offenders. Unlike many drug courts, the program was not limited to addicts because eligibility for the program was based on drug tests results, not individualized assessments of addiction. As a result, the program participants varied widely in the severity and duration of their drug use.

The research has several limitations to consider when interpreting the results. Defendants were randomly assigned to dockets and comparisons of eligible defendants are based on a robust experimental design. However, defendant decisions to join the program were voluntary, and comparisons of participants to the standard docket eligibles represent quasi-experimental comparisons. Although statistical procedures, described in earlier chapters, are used to adjust for potential bias, these adjustments may not fully control for self-selection into treatment. Despite the support provided by the court, the response rate to the survey was not as high as hoped. Follow up interviews were completed with 59% of the cases assigned. In addition, the sample size of treatment participants was substantially lower than originally projected and limits the power of the analysis to detect differences which may exist in the population. Procedures used to analyze and adjust for non-response bias are described in Chapter 3.

On the positive side, the data quality appears to be robust. Analysis to validate the self-report data indicates considerable consistency between self-report data and official records of criminal activity and drug use. The records on arrests, convictions, hearings, drug tests and treatment status are exceptionally complete and free of apparent errors.

Future research should evaluate similar programs in other jurisdictions to examine the extent to which the results can be duplicated in different settings. In addition, experimentation with programs that combine graduated sanctions with treatment is needed. The positive interaction of the sanctions program with participation in NA/AA indicates that combining treatment with structured monitoring may have positive effects. In addition, studies of alternative sanctioning rules are needed to determine whether sanctions need to escalate in severity to be effective and how severe they must be to have an effect on defendant behavior. What this research does confirm is that court interventions can significantly reduce drug use and crime among a population of relatively serious offenders.

REFERENCES

- American Hospital Association. (1994). *Health care cost and utilization project: Statistics from the nationwide inpatient sample for 1994 hospital inpatient stay [based on diagnosis-related groups]* [On-line]. Available: www.ahcpr.gov/data/94drga.htm.
- American University. (June 1998). *Looking at a Decade of Drug Courts*. Washington, D.C.:Office of Justice Programs, U.S. Department of Justice
- Anglin, M. Douglas, and Hser, Yih-Ing . (1990). "Treatment of Drug Abuse." From *Drugs and Crime*. M. Tonry and J.Q. Wilson, eds. The University of Chicago Press: Chicago.
- Anglin, M. Douglas, and Maugh, II, Thomas H.. (May 1992). "Ensuring Success in Interventions with Drug-Using Offenders." *Annals, AAPSS*, 521, 66-90.
- Belenko, Steven. (Summer 1998). "Research on Drug Courts: A Critical Review." *National Drug Court Institute Review*, Vol I, Issue I, 1-42.
- Bureau of Justice Assistance.(March 1990) *Offenders, Drugs, Crime and Treatment: Literature Review*, Washington,DC: Author.
- Bureau of Justice Statistics. (1995). *Compendium of Federal Justice Statistics, 1995*. (Publication No. NCJ-164259). Washington, D.C.: Author.
- Camp, C. G., and Camp, G. M. (1996). *The Corrections Yearbook, 1996*. Criminal Justice Institute, Inc.: South Salem, NY.
- Cavanagh, David P. and Harrell, Adele. (February 1995). *Evaluation of the Multnomah County Drug Testing and Evaluation Program*. Final Report to the National Institute of Justice under NIJ Cooperative Agreement #91-DD-CX-K057. Cambridge, MA: BOTEC Analysis Corporation.
- Cohen, M. A., Miller, T. R., and Rossman, S. B. (1994). The Cost and Consequences of Violent Behavior in the United States. In A. J. Reiss and J. A. Roth (Eds.), *Understanding and Preventing Violence, Volume III: Social Influences and Volume IV: Consequences and Control*. Washington, D.C.: National Academy Press, National Research Council.
- Cox, D.R. (1972). "Regression Models and Life Tables" (with discussion). *Journal of the Royal Statistical Society*, B34, 187-220.
- Crime in the United States, Uniform Crime Results*. (1996).

- Criminal Victimization in the United States, A National Crime Victimization Survey Report.*
(1994)
- Deschenes, Elizabeth P., Turner, Susan, and Greenwood, Peter . (1995). "Drug Court or Probation?: An Experimental Evaluation of Maricopa County's Drug Court." *The Justice System Journal*, 18: 55-73.
- Falkin, Gary. (December 1989). "The Effects of Intensive Treatment on Reducing the Criminal Recidivism of Addicted Offenders." *Federal Probation*: 51-56.
- Falkin, Gary. (October 1993). *Coordinating Drug Treatment for Offenders: A Case Study.* Report to the National Institute of Justice.
- Federal Bureau of Investigation. (1996). *Uniform crime reports for the United States.* Washington, DC: U.S. Government Printing Office.
- Federal Register.* (November 22, 1996). No. 227, Vol. 61: 59687.
- Field, Gary. (December 1989). "The Effects of Intensive Treatment on Reducing the Criminal Recidivism of Addicted Offenders." *Federal Probation*: 51-56.
- Finigan, Michael. (1998). "An Outcome Program Evaluation of the Multnomah County S.T.O.P. Drug Diversion Program." Paper prepared for the State Justice Institute and the Multnomah County Department of Community Corrections: West Linn, Oregon.
- The Gallup Organization. (March 1998). *Evaluation of the Superior Court Drug Intervention Program: Methodology Report.* Rockville, MD: Author.
- Government of the District of Columbia. (1996). *Indices: A Statistical Index to District of Columbia Services.* Washington, D.C.: Author.
- Goldkamp, John. (1994). "The Relative Risk of Implementing a Treatment-Oriented 'Drug Court': Findings from Dade County." Paper presented at the 45th annual meetings of the American Society of Criminology, Phoenix, Arizona. October 1993.
- Gramlich, E. M. (1981). *Benefit-cost analysis of government programs.* New York: Englewood Cliffs, Prentice-Hall.
- Gropper, Bernard A. (1985). "Probing the Links Between Drugs and Crime." *National Institute of Justice Research in Brief.* U.S. Department of Justice, National Institute of Justice: Washington, D.C.

- Harrell, Adele V. (1985.) "Validation of Self-Report: The Research Record in Self-Report Methods of Estimating Drug Use: Meeting Current Challenges to Validity." *NIDA Research Monograph 57*. B.E. Rouse, N.J. Kozel, and L.G. Richards, eds. National Institute on Drug Abuse: Rockville, MD.
- Harrell, Adele, and Cavanagh, Shannon. (November 1995). "Compliance with Drug Abstinence Requirements During Pretrial Release: A Comparison of Graduated Sanctions and Treatment for Drug Felony Defendants. Paper presented at the 47th annual meeting of the American Society of Criminology, Boston, MA.
- Inciardi, James A., McBride, Duane C. and. Rivers, James E. (1996). *Drug Control and the Courts*. Sage Publications: Thousand Oaks, CA.
- Kennedy, David M. (Spring 1997). "Pulling Levers: Chronic Offenders, High-Crime Settings, and a Theory of Prevention. *Valparaiso University Law Review*, Vol. 31, No. 2, 449-484.
- Kolb, J. A., & Scherga, J. D. (1990) Discounting the benefits and costs of environmental regulations. *Journal of Policy Analysis*, 9(3), 381-390.
- Langan, P. A., & Brown, J. M. (July 1997). Felony Sentences in the United States, 1994. *Bureau of Justice Statistics Bulletin* (pp. 8-9, Tables 8-11).
- Lipton, Douglas. (1994). "The Correctional Opportunity: Pathways to Drug Treatment for Offenders." *Journal of Drug Issues, Inc.*, 24:331-348.
- McCull, William D. (1996). "Baltimore City's Drug Treatment Court: Theory and Practice in an Emerging Field." *Maryland Law Review*, Vol. 55, No. 2: 467-518.
- Mendelsohn, R. (1981). The Choice of Discount Rates for Public Projects. *The American Economic Review*, 71, 239-241.
- Merrill, J., and Langenbucher, J. (1998). "Methods for the Study of Long-term Socioeconomic Outcomes in Drug Abuse Treatment." Unpublished manuscript.
- Metzger, D., G.E. Woody, D. Wilson, A.T. McLellan, B. Vandergrift, and C.P. O'Brien. (1996). "Naltrexone Pharmacotherapy for Opioid Dependent Federal Probationers." *Journal of Substance Abuse Treatment*.
- Miller, T. R., Pindus, N. M., Douglass, J. B., and Rossman, S. B. (1995). *Data book on Nonfatal Injury: Incidence, Costs and Consequences*. Washington, DC: The Urban Institute Press.

- Miller, T. R., Cohen, M. A., and Wiersema, B. (1996). *Victim Costs and Consequences: A New Look*. Washington, D.C.:National Institute of Justice.
- Mueller, Michael D. and Wyman, J. R. (1997). "Study Sheds New Light on the State Of Drug Abuse Treatment Nationwide." *NIDA Notes*, Vol. 12, No. 5, 1-9.
- Pendergast, Michael, Anglin, Douglas M. and Wellisch, Jean . (December 1995). "Treatment for Drug-Abusing Offenders Under Community Supervision." *Federal Probation*: 66-75.
- Petersilia, Joan, and Turner, Susan . (1992). "An Evaluation of Intensive Probation in California." *The Journal of Criminal Law and Criminology*, Vol. LXXXII, No. 5, 610-658.
- Petersilia, Joan, Turner, Susan, and Deschenes, Elizabeth Piper .(December 1992). "The Costs and Effects of Intensive Supervision for Drug Offenders." *Federal Probation*: 12-17.
- Physician Payment Review Commission. (1996). Monitoring access and financial liability for Medicare beneficiaries. In *Annual Report to Congress*: 218.
- Plotnick, R. (1994) Applying benefit-cost analysis to substance use prevention programs. *The International Journal of the Addictions*, 29(3): 346-353.
- Prendergast, Michael, Hser, Yi-Ing , and Hsieh, J. (November 1992). "Drug Treatment Need Among Offender Populations." Paper presented at the 44th annual meetings of the American Society of Criminology.
- Rajkumar, A., and French, M. T. (1996). "Drug Abuse, Crime Costs and Economic Benefits of Treatment." *Journal of Quantitative Criminology*, 13(3), 294-302.
- Reeves, B. A. (1998). "Felony Defendants in Large Urban Counties, 1994." *Bureau of Justice Statistics Bulletin* (p. 24, Table 23).
- Roman, John, Woodard, Jennifer, Harrell, Adele and Riggs, Stacia. (1999). *A Methodology for Measuring Costs and Benefits of Court-Based Drug Intervention Programs Using Findings from Experimental and Quasi-Experimental Evaluations*. The Urban Institute: Washington, D.C.
- Satel, Sally L. (Summer 1998). "Observational Study of Courtroom Dynamics in Selected Drug Courts." *National Drug Court Institute Review*, Vol. I, No. I, 43-72.
- Sentencing Reform Act*. (1984). 18 U.S.C., §3624(b).

- U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. (1998). "National Hospital Discharge Survey: Annual Summary, 1995." *Vital Health Statistics*, Series 13, No. 133.
- U.S. Department of Health and Human Services, Health Care Financing Administration. (1996). *Health Care Financing Review: Medicare and Medicaid Statistical Supplement, 1996*. Baltimore, MD: Office of Research and Demonstrations.
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration/Center for Substance Abuse Treatment. (1997). *National Treatment Improvement Evaluation Study (NTIES) Highlights*. [On-line]. Available: www.health.org/nties97/index.htm.
- U.S. General Accounting Office. (July 22, 1998). "Drug Abuse: Studies Show Treatment is Effective, but Benefits May be Overstated." (Report No. GAO/T-HEHS98-185). Washington, D.C.
- Visher, Christy A. (September 1992). "Pretrial Drug Testing." *National Institute of Justice Research In Brief*. U.S. Department of Justice, National Institute of Justice: Washington, D.C.
- Vito, Gennaro F. (March 1989). "The Kentucky Substance Abuse Program: A Private Program to Treat Probationers and Parolees." *Federal Probation*: 65-72.

GLOSSARY OF RESEARCH VARIABLES

Court Records

Age at Start of Drug Court Case. This variable indicates the defendant's age at the time of arrest. The mean was 31.7 for those on the control docket, 30.1 for those on the treatment docket, and 31.2 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 29.6. For those respondents assigned to *and participating in* the sanctions docket, the mean was 33.0.

Gender. The mean percentage of men was .86 for those on the control docket, .88 for those on the treatment docket, and .89 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean percentage was .85. For those respondents assigned to *and participating in* the sanctions docket, the mean percentage was .86.

Race. The mean percentage of black defendant's was .96 for those on the control docket, .96 for those on the treatment docket, and .96 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .99. For those respondents assigned to *and participating in* the sanctions docket, the mean was .96.

Employed at Time of Arrest. This variable indicates whether the defendant was employed at the time of arrest. Responses were coded as 0 = no and 1 = yes. The mean was .39 for those on the control docket, .39 for those on the treatment docket, and .43 for the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .31. For those respondents assigned to *and participating in* the sanctions docket, the mean was .42.

Prior Convictions. This variable indicates the number of convictions in the 5 years prior to arrest. Responses were coded as 0 = no and 1 = yes. The mean was .09 for those on the control docket, .14 for those on the treatment docket, and .13 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .09. For those respondents assigned to *and participating in* the sanctions docket, the mean was .14.

Proportion of Early Drug Tests (First 60 Days After Arrest) that were Positive. This variable indicates the proportion of early drug tests that were positive for drugs. The mean was .75 for those on the control docket, .72 for those on the treatment docket, and .68 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .74. For those respondents assigned to *and participating in* the sanctions docket, the mean was .69.

Clean in the Month Before Sentencing. This variable indicates that the defendant tested negative for drugs in the month before sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .11 for those on the control docket, .17 for those on the treatment docket, and .21 for those on the sanctions docket. For those respondents assigned to *and participating in* the

treatment docket, the mean was .22. For those respondents assigned to *and participating in* the sanctions docket, the mean was .27.

Proportion of Positive Drug Tests in the Month Before Sentencing. This variable indicates the proportion of drug tests that were positive in the month before sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .71 for those on the control docket, .63 for those on the treatment docket, and .59 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .63. For those respondents assigned to *and participating in* the sanctions docket, the mean was .53.

Tested Positive for Cocaine or Opiates (first 60 days after arrest). This variable indicates that the defendant tested positive for cocaine or heroin use. Responses were coded as 0 = no and 1 = yes. The mean was .73 for those on the control docket, .65 for those on the treatment docket, and .70 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .63. For those respondents assigned to *and participating in* the sanctions docket, the mean was .79.

Number of Days on the Street to First Arrest. This variable indicates the number of days the defendant was on the street to first arrest and includes only those who were re-arrested. Street days are defined as days after sentencing during which a defendant was not incarcerated. The mean was 38 days for those on the control docket, 41 days for those on the treatment docket, and 29 days for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 36 days. For those respondents assigned to *and participating in* the sanctions docket, the mean was 30 days.

Number of Days in Jail During Drug Court Case. This variable indicates the number of days the defendant spent in prison under D.C. Department of Corrections supervision during the drug court case. The mean was 22 days for those on the control docket, 45 days for those on the treatment docket, and 42 days for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 54 days. For those respondents assigned to *and participating in* the sanctions docket, the mean was 44 days.

Number of Days in Jail in Year Following Sentencing. This variable indicates the number of days the defendant spent in jail under D.C. Department of Corrections supervision in the year after sentencing. The mean was 64 days for those on the control docket, 77 days for those on the treatment docket, and 79 days for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 74 days. For those respondents assigned to *and participating in* the sanctions docket, the mean was 79 days.

Number of Days During Drug Court Case. This variable indicates the length of time, in days, between case filing and case deposition of drug court cases. The mean was 274 days for those on the control docket, 335 days for those on the treatment docket, and 310 days for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 417 days. For those respondents assigned to *and participating in* the sanctions docket,

the mean was 301 days.

Criminal Justice Contact - Official Records

Any Arrest After Sentencing. This variable indicates whether any arrests occurred in the year following sentencing. Data were collected from D.C. and FBI official crime records. Crimes includes: drug trafficking, drug possession, driving while intoxicated, weapons violations, robbery, sexual assault/rape, assault other than sexual assault, murder and manslaughter, other violent offenses, burglary, larceny and auto theft, fraud and bad checks, other property offenses, other public order offenses and probation/parole violations. Responses were coded as 0 = no and 1 = yes. The mean was .27 for those on the control docket, .29 for those on the treatment docket, and .22 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .26. For those respondents assigned to *and participating in* the sanctions docket, the mean was .19.

Number of Arrests After Sentencing. This variable indicates the number of arrests in the year following sentencing. Data were collected from D.C. and FBI official crime records and includes all types. Responses ranged from 0 to 7 arrests. The mean was .45 for those on the control docket, .39 for those on the treatment docket, and .38 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .33. For those respondents assigned to *and participating in* the sanctions docket, the mean was .33.

Violent Crime Arrests After Sentencing. This variable indicates whether any arrests for violent crimes occurred in the year following sentencing. Data were collected from D.C. and FBI official crime records. Crimes include weapons violations, robbery, sexual assault/rape, assault other than sexual assault, murder and manslaughter, kidnaping, reckless endangerment, coercion/extortion, and hit and run with bodily injury. Responses were coded as 0 = no and 1 = yes. The mean was .05 for those on the control docket, .08 for those on the treatment docket, and .04 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .10. For those respondents assigned to *and participating in* the sanctions docket, the mean was .04.

Property Crime Arrests After Sentencing. This variable indicates whether any arrests for property crimes occurred in the year following sentencing. Data were collected from D.C. and FBI official crime records. Crimes include burglary, larceny and auto theft, fraud and bad checks, receiving or trafficking in stolen property, destruction of property/vandalism, arson, trespassing, and possession of burglary tools. Responses were coded as 0 = no and 1 = yes. The mean was .06 for those on the control docket, .08 for those on the treatment docket, and .05 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .08. For those respondents assigned to *and participating in* the sanctions docket, the mean was .05.

Drug Crime Arrests After Sentencing. This variable indicates whether any arrests for drug crimes occurred in the year following sentencing. Data were collected from D.C. and FBI official

crime records. Crimes include drug trafficking and drug possession. Responses were coded as 0 = no and 1 = yes. The mean was .14 for those on the control docket, .13 for those on the treatment docket, and .13 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .07. For those respondents assigned to *and participating in* the sanctions docket, the mean was .10.

Other Arrests After Sentencing. This variable indicates whether any arrests for other types of crime occurred in the year following sentencing. Data were collected from D.C. and FBI official crime records. Crimes include driving while intoxicated, gambling, prostitution, liquor/tax violation, disorderly conduct, and probation/parole violation. Responses were coded as 0 = no and 1 = yes. The mean was .09 for those on the control docket, .10 for those on the treatment docket, and .08 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .10. For those respondents assigned to *and participating in* the sanctions docket, the mean was .07.

Crimes Committed Before Arrest and After Sentencing (Self-Report)

Any Crimes Committed Before Arrest. This variable indicates whether respondents reported ever committing any crimes. Data were collected from Follow up Survey of Adults Served by SCDIP. Crimes include all types. Responses were coded as 0 = no and 1 = yes. The mean was .99 for those on the control docket, 1.0 for the treatment docket, and .98 for the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 1.0. For those respondents assigned to *and participating in* the sanctions docket, the mean was 1.0.

Any Crimes Committed After Sentencing. This variable indicates whether respondents reported committing any crimes in the year after sentencing. Data were collected from Follow-up Survey of Adults Served by SCDIP. Crimes include all types. Responses were coded as 0 = no and 1 = yes. The mean was .46 for those on the control docket, .54 for those on the treatment docket, and .44 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .44. For those respondents assigned to *and participating in* the sanctions docket, the mean was .43.

Violent Crimes Committed Before Sentencing. This variable indicates whether respondents reported ever committing any violent crimes. Data were collected from Follow-up Survey of Adults Served by SCDIP. Questions asked were "Before your arrest in (date) did you commit": (a) weapons violations, (b) robbery, (c) sexual assault/rape, (d) assault other than sexual assault, (e) murder and manslaughter, or (f) other violent offenses (kidnaping, reckless endangerment, coercion/extortion, or hit and run with bodily injury). Responses were coded as 0 = no and 1 = yes. The mean was .37 for those on the control docket, .45 for those on the treatment docket, and .49 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .44. For those respondents assigned to *and participating in* the sanctions docket, the mean was .49.

Violent Crimes Committed After Sentencing. This variable indicates whether respondents reported committing any violent crimes in the year after sentencing. Data were collected from Follow-up Survey of Adults Served by SCDIP. Questions asked were "After your arrest in (date) did you commit": (a) weapons violations, (b) robbery, (c) sexual assault/rape, (d) assault other than sexual assault, (e) murder and manslaughter, or (f) other violent offenses (kidnaping, reckless endangerment, coercion/extortion, or hit and run with bodily injury). Responses were coded as 0 = no and 1 = yes. The mean was .08 for those on the control docket, .07 for those on the treatment docket, and .08 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .08. For those respondents assigned to *and participating in* the sanctions docket, the mean was .08.

Property Crimes Committed Before Sentencing. This variable indicates whether respondents reported ever committing any property crimes. Data were collected from Follow-up Survey of Adults Served by SCDIP. Questions asked were "Before your arrest in (date) did you commit": (a) burglary, (b) larceny and auto theft, (c) fraud and bad checks, or (d) other property offenses (receiving or trafficking in stolen property, destruction of property/vandalism, arson, trespassing, or possession of burglary tools). Responses were coded as 0 = no and 1 = yes. The mean was .53 for those on the control docket, .69 for those on the treatment docket, and .64 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .75. For those respondents assigned to *and participating in* the sanctions docket, the mean was .62.

Property Crimes Committed After Sentencing. This variable indicates whether respondents reported committing any property crimes in the year after sentencing. Data were collected from Follow-up Survey of Adults Served by SCDIP. Questions asked were "After your arrest in (date) did you commit": (a) burglary, (b) larceny and auto theft, (c) fraud and bad checks, or (d) other property offenses (receiving or trafficking in stolen property, destruction of property/vandalism, arson, trespassing, or possession of burglary tools). Responses were coded as 0 = no and 1 = yes. The mean was .12 for those on the control docket, .09 for those on the treatment docket, and .09 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .09. For those respondents assigned to *and participating in* the sanctions docket, the mean was .08.

Drug Crimes Committed Before Sentencing. This variable indicates whether respondents reported ever committing any drug crimes. Data were collected from Follow-up Survey of Adults Served by SCDIP. Questions asked were "Before your arrest in (date) did you commit a": (a) drug trafficking crime (delivery, sale, manufacturing, importation or cultivation or possession with intent to distribute or (b) drug possession crime (use/possession of a controlled substance without intent to distribute). Responses were coded as 0 = no and 1 = yes. The mean was .96 for those on the control docket, .98 for those on the treatment docket, and .96 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .96. For those respondents assigned to *and participating in* the sanctions docket, the mean was .99.

Drug Crimes Committed After Sentencing. This variable indicates whether respondents reported committing any drug crimes in the year after sentencing. Data were collected from Follow-up Survey of Adults Served by SCDIP. Questions asked were “After your arrest in (date) did you commit a”: (a) drug trafficking crime (delivery, sale, manufacturing, importation or cultivation or possession with intent to distribute or (b) drug possession crime (use/possession of a controlled substance without intent to distribute). Responses were coded as 0 = no and 1 = yes. The mean was .33 for those on the control docket, .37 for those on the treatment docket, and .32 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .27. For those respondents assigned to *and participating in* the sanctions docket, the mean was .31.

Other Crimes Committed Before Sentencing. This variable indicates whether respondents reported ever committing any other crimes. Data were collected from Follow-up Survey of Adults Served by SCDIP. Crimes include driving while intoxicated, other public order offenses (gambling, prostitution, liquor/tax violation, or disorderly conduct), and probation/parole violation. Responses were coded as 0 = no and 1 = yes. The mean was .74 for those on the control docket, .84 for those on the treatment docket, and .79 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .88. For those respondents assigned to *and participating in* the sanctions docket, the mean was .78.

Other Crimes Committed After Sentencing. This variable indicates whether respondents reported committing any other crimes the year after sentencing. Data were collected from Follow-up Survey of Adults Served by SCDIP. Crimes include driving while intoxicated, other public order offenses (gambling, prostitution, liquor/tax violation, or disorderly conduct), and probation/parole violation. Responses were coded as 0 = no and 1 = yes. The mean was .30 for those on the control docket, .38 for those on the treatment docket, and .30 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .25. For those respondents assigned to *and participating in* the sanctions docket, the mean was .32

Drug Use After Sentencing (Self-Report)

Crack Use After Sentencing. This variable indicates the self-reported consumption of crack in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .32 for those on the control docket, .30 for those on the treatment docket, and .27 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .26. For those respondents assigned to *and participating in* the sanctions docket, the mean was .31.

Cocaine Use After Sentencing. This variable indicates the self-reported consumption of cocaine in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was 0.18 for those on the control docket, .13 for those on the treatment docket, and .12 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .09. For those respondents assigned to *and participating in* the sanctions docket, the

mean was .15.

Heroin Use After Sentencing. This variable indicates the self-reported consumption of heroin in the year after sentencing. Responses were coded as 0 = no and 1= yes. The mean was 0.35 for those on the control docket, .25 for those on the treatment docket, and .20 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .18. For those respondents assigned to *and participating in* the sanctions docket, the mean was .24.

Weekly Drug Use After Sentencing. This variable indicates the self-reported weekly consumption of seven types of drugs in the year after sentencing. Responses were coded: 0 = no, if self-reported drug use was monthly, occassional, or none; and 1= yes, if self-reported drug use was once a week or none. The mean was .23 for those on the control docket, .23 for those on the treatment docket, and .21 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .15. For those respondents assigned to *and participating in* the sanctions docket, the mean was .22.

Weekly Hard Drug Use After Sentencing. This variable indicates the self-reported weekly consumption of hard drugs (crack, cocaine, heroin) in the year after sentencing. Responses were coded as 0 = no and 1= yes. The mean was .12 for those on the control docket, .13 for those on the treatment docket, and .09 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .09. For those respondents assigned to *and participating in* the sanctions docket, the mean was .12.

Weekly Marijuana Use After Sentencing. This variable indicates the self-reported weekly consumption of marijuana in the year after sentencing. Responses were coded as 0 = no and 1= yes. The mean was .14 for those on the control docket, .13 for those on the treatment docket, and .13 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .06. For those respondents assigned to *and participating in* the sanctions docket, the mean was .11.

Drug Use During the Month Before Arrest. This variable indicates the self-reported consumption of the seven types of drugs during the month before the respondents' arrest. Responses were coded as 0 = no and 1= yes. The mean was .87 for those on the control docket, .89 for those on the treatment docket, and .9 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .84. For those respondents assigned to *and participating in* the sanctions docket, the mean was .9.

Drug Use in the Year After Sentencing. This variable indicates the self-reported consumption of any of seven kinds of drugs during the year following sentencing. Responses were coded as 0 = no and 1= yes. The mean was .41 for those on the control docket, .4 for those on the treatment docket, and .39 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .29. For those respondents assigned to *and participating in* the sanctions docket, the mean was .39.

Hard Drug Use During Month Before arrest. This variable indicates the self-reported consumption of crack, cocaine, or heroin during the month before arrest. Responses were coded as 0 = no and 1 = yes. The mean was .49 for those on the control docket, .56 for those on the treatment docket, and .59 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .52. For those respondents assigned to *and participating in* the sanctions docket, the mean was .69.

Hard Drug Use During Year After Sentencing. This variable indicates the self-reported consumption of crack, cocaine, or heroin in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .24 for those on the control docket, .22 for those on the treatment docket, and .19 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .16. For those respondents assigned to *and participating in* the sanctions docket, the mean was .24.

Marijuana Use in the Month Before Arrest. This variable indicates the self-reported consumption of marijuana or hashish during the month before arrest. Responses were coded as 1 = yes and 2 = no. The mean was 1.44 for those on the control docket, 1.46 for those on the treatment docket, and 1.49 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 1.5. For those respondents assigned to *and participating in* the sanctions docket, the mean was 1.59.

Marijuana Use in the Year After Sentencing. This variable indicates the self-reported consumption of marijuana or hashish in the year after sentencing. Responses were coded as 1 = yes and 2 = no. The mean was 1.69 for those on the control docket, 1.73 for those on the treatment docket, and 1.69 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 1.8. For those respondents assigned to *and participating in* the sanctions docket, the mean was 1.72.

Participation in Services to Help with Drinking or Drug Use (Self-Report)

Alcohol or Drug Detoxification. This variable indicates self-reported alcohol or drug detoxification in the time between arrest and sentencing and the time after sentencing. Responses were coded as 0 = no and 1 = yes.

Between Arrest and Sentencing. The mean was .25 for those on the control docket, .31 for those on the treatment docket, and .36 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .42. For respondents assigned to *and participating in* the sanctions docket, the mean was .48.

After Sentencing. The mean was .16 for those on the control docket, .15 for those on the treatment docket, and .11 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .13. For those respondents assigned to *and participating in* the sanctions docket, the mean was .13.

Inpatient Unit of a Hospital. This variable indicates self-reported participation in inpatient services in the time between arrest and sentencing and the time after sentencing. Responses were coded as 0 = no and 1 = yes.

Between Arrest and Sentencing. The mean was .04 for those on the control docket, .06 for those on the treatment docket, and .08 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .05. For respondents assigned to *and participating in* the sanctions docket, the mean was .10.

After Sentencing. The mean was .04 for those on the control docket, .05 for those on the treatment docket, and .07 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .03. For those respondents assigned to *and participating in* the sanctions docket, the mean was .09.

Outpatient Clinic. This variable indicates participation in outpatient services in the time between arrest and sentencing and the year after sentencing. Responses were coded as 0 = no and 1 = yes.

Between Arrest and Sentencing. The mean was .18 for those on the control docket, .26 for those on the treatment docket, and .20 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .31. For respondents assigned to *and participating in* the sanctions docket, the mean was .20.

After Sentencing. The mean was .16 for those on the control docket, .17 for those on the treatment docket, and .11 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .17. For those respondents assigned to *and participating in* the sanctions docket, the mean was .13.

Day Reporting Program. This variable indicates participation in a day treatment program in the time between arrest and sentencing and the year after sentencing. Responses were coded as 0 = no and 1 = yes.

Between Arrest and Sentencing. The mean was .09 for those on the control docket, .15 for those on the treatment docket, and .11 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .27. For respondents assigned to *and participating in* the sanctions docket, the mean was .14.

After Sentencing. The mean was .08 for those on the control docket, .09 for those on the treatment docket, and .06 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .11. For those respondents assigned to *and participating in* the sanctions docket, the mean was .07.

Received Any Treatment Services. This variable measures participation in any 19 types of

treatment in the time between arrest and sentencing and the year after sentencing. Responses to each services were coded as 0 = no and 1 = yes. The 19 services include: alcohol or drug detoxification, inpatient (psychiatric or general hospital), outpatient clinic, day treatment, residential treatment, methadone maintenance, alcohol or drug rehab, AA/NA, crisis center, emergency room, private physician, private therapist, a community mental health center, family or other social service agency, Employee Assistance Program, clergy, or other type of treatment.

Between Arrest and Sentencing. The mean was .51 for those on the control docket, .72 for those on the treatment docket, and .57 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .88. For respondents assigned to *and participating in* the sanctions docket, the mean was .62.

After Sentencing. The mean was .54 for those on the control docket, .68 for those on the treatment docket, and .56 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .73. For those respondents assigned to *and participating in* the sanctions docket, the mean was .62.

Number of Treatment Services Received. This variable measures the number of the 19 types of treatment in the time between arrest and sentencing and the year after sentencing. Responses to each service were coded 0 = no and 1 = yes, with a range of 0 to 19. The 19 services include: alcohol or drug detoxification, inpatient (psychiatric or general hospital), outpatient clinic, day treatment, residential treatment, methadone maintenance, alcohol or drug rehab, AA/NA, crisis center, emergency room, private physician, private therapist, a community mental health center, family or other social service agency, Employee Assistance Program, clergy, or other treatment.

Between Arrest and Sentencing. The mean was 1.41 for those on the control docket, 1.89 for those on the treatment docket, and 1.65 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 2.34. For respondents assigned to *and participating in* the sanctions docket, the mean was 1.91.

After Sentencing. The mean was 1.34 for those on the control docket, 1.55 for those on the treatment docket, and 1.21 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was 1.56. For those respondents assigned to *and participating in* the sanctions docket, the mean was 1.41.

Consequences of Drug Use (Self-Report)

Consequences of Drug Use Before Arrest. This variable indicates whether respondents reported ever having any consequences of drug use. Consequences included: driving under the influence of a drug, arguing under the influences of a drug, having trouble in school or at work because of drugs, being arrested because of drugs, or fighting while under the influence of a drug. Responses were coded as 0 = no and 1 = yes. The mean was .88 for those on the control docket, .90 for those on the treatment docket, and .85 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .93. For those

respondents assigned to *and participating in* the sanctions docket, the mean was .83.

Consequences of Drug Use After Sentencing. This variable indicates whether respondents reported any consequences of drug use in the year after sentencing. Consequences included: driving under the influence of a drug, arguing under the influences of a drug, having trouble in school or at work because of drugs, being arrested because of drugs, or fighting while under the influence of a drug. Responses were coded as 0 = no and 1 = yes. The mean was .21 for those on the control docket, .22 for those on the treatment docket, and .17 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .15. For those respondents assigned to *and participating in* the sanctions docket, the mean was .18.

Fighting Because of Drug Use After Sentencing. This variable indicates whether respondents reported fighting because of drug use in the year after sentencing. Consequences included: Responses were coded as 0 = no and 1 = yes. The mean was .04 for those on the control docket, .04 for those on the treatment docket, and .05 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .03. For those respondents assigned to *and participating in* the sanctions docket, the mean was .06.

Enrollment in Other Services (Self-Report)

Voluntary Enrollment in Vocational Training Before Arrest. This variable indicates whether respondents reported ever voluntarily enrolling in vocational training. Responses were coded as 0 = no and 1 = yes. The mean was .24 for those on the control docket, .26 for those on the treatment docket, and .22 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .30. For those respondents assigned to *and participating in* the sanctions docket, the mean was .18.

Voluntary Enrollment in Vocational Training After Sentencing. This variable indicates whether respondents reported voluntarily enrolling in vocational training in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .75 for those on the control docket, .47 for those on the treatment docket, and .70 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .60. For those respondents assigned to *and participating in* the sanctions docket, the mean was .75.

Voluntary Enrollment in Other Educational Programs Before Arrest. This variable indicates whether respondents reported ever voluntarily enrolling in educational programs. Responses were coded as 0 = no and 1 = yes. The mean was .22 for those on the control docket, .27 for those on the treatment docket, and .22 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .31. For those respondents assigned to *and participating in* the sanctions docket, the mean was .23.

Voluntary Enrollment in Other Educational Programs After Sentencing. This variable indicates whether respondents reported voluntarily enrolling in other educational programs in the

year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .95 for those on the control docket, .76 for those on the treatment docket, and .80 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .80. For those respondents assigned to *and participating in* the sanctions docket, the mean was .77.

Socio-Economic Status (Self-Report)

Employment Before Arrest. This variable indicates whether respondents reported any employment in the month before arrest. Responses were coded as 0 = no and 1 = yes. The mean was .43 for those on the control docket, .47 for those on the treatment docket, and .39 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .30. For those respondents assigned to *and participating in* the sanctions docket, the mean was .35.

Employment After Sentencing. This variable indicates whether respondents reported any employment in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .58 for those on the control docket, .47 for those on the treatment docket, and .49 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .45. For those respondents assigned to *and participating in* the sanctions docket, the mean was .47.

Full-Time Employment Before Arrest. This variable indicates whether respondents reported any full-time employment in the month before arrest. Responses were coded as 0 = no and 1 = yes. The mean was .34 for those on the control docket, .47 for those on the treatment docket, and .39 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .27. For those respondents assigned to *and participating in* the sanctions docket, the mean was .32.

Full-Time Employment After Sentencing. This variable indicates whether respondents reported full-time employment in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .32 for those on the control docket, .25 for those on the treatment docket, and .27 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .20. For those respondents assigned to *and participating in* the sanctions docket, the mean was .31.

Part-Time Employment Before Arrest. This variable indicates whether respondents reported any part-time employment in the month before arrest. Responses were coded as 0 = no and 1 = yes. The mean was .04 for those on the control docket, .05 for those on the treatment docket, and 0 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .03. For those respondents assigned to *and participating in* the sanctions docket, the mean was 0.

Part-Time Employment After Sentencing. This variable indicates whether respondents reported part-time employment in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .11 for those on the control docket, .08 for those on the treatment docket, and .08 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .04. For those respondents assigned to *and participating in* the sanctions docket, the mean was .04.

Occasional Employment Before Arrest. This variable indicates whether respondents reported any occasional employment in the month before arrest. Responses were coded as 0 = no and 1 = yes. The mean was .13 for those on the control docket, .11 for those on the treatment docket, and .08 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .09. For those respondents assigned to *and participating in* the sanctions docket, the mean was .08.

Occasional Employment After Sentencing. This variable indicates whether respondents reported occasional employment in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .04 for those on the control docket, .03 for those on the treatment docket, and .05 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .04. For those respondents assigned to *and participating in* the sanctions docket, the mean was .03.

Income After Sentencing. This variable indicates self-reported income in the year after sentencing. The mean was \$6,334 for those on the control docket, \$5,662 for those on the treatment docket, and \$4,346 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was \$3,757. For those respondents assigned to *and participating in* the sanctions docket, the mean was \$4,955.

Child Support Required After Sentencing. This variable indicates whether child support was required in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .13 for those on the control docket, .22 for those on the treatment docket, and .13 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .35. For those respondents assigned to *and participating in* the sanctions docket, the mean was .17.

Child Support Paid After Sentencing. This variable indicates whether child support was paid in the year after sentencing. Responses were coded as 0 = no and 1 = yes. The mean was .46 for those on the control docket, .40 for those on the treatment docket, and .43 for those on the sanctions docket. For those respondents assigned to *and participating in* the treatment docket, the mean was .31. For those respondents assigned to *and participating in* the sanctions docket, the mean was .46.

APPENDIX A
SUPPLEMENTAL TABLES

Table A6.1

Percentage of Sanctions Participants and Standard Docket Samples Reporting Drug Use in the Year after Sentencing: Survey Data

	Sanctions Program ^a Eligibles (<i>n</i>)	Sanctions Program Participants (<i>n</i>)	Standard Docket Eligibles (<i>n</i>)
Any stronger drug use	32%* (95)	35%* (77)	49% (76)
Any crack use	24% (95)	27% (77)	34% (74)
Any other cocaine use	9% (95)	12% (77)	16% (76)
Any heroin use	15% (94)	17% (77)	21% (76)
Any marijuana use	43% (72)	40% (40)	42% (76)
Weekly stronger drug use	16% (95)	17% (77)	25% (76)
Weekly crack use	9% (95)	10% (77)	14% (76)
Weekly other cocaine	3% (95)	4% (77)	7% (76)
Weekly heroin use	7% (95)	8% (77)	12% (76)
Weekly marijuana use	21% (72)	20% (40)	25% (77)

^a Based on one-tailed tests of the hypotheses that participants or eligibles have better outcomes than the standard docket.

** $p < .01$. * $p < .05$.

Table A6.2

Percentage Arrested in Year after Sentencing by Group: Official Crime Records

	Sanctions Program Eligibles ^a (n = 365)	Sanction Program Participants (n = 240)	Standard Docket Eligibles (n = 311)
Any arrest after sentencing	22%*	19%**	27%
Drug arrest	13%	10%	14%
Violent arrest	4%	4%	5%
Property arrest	5%	5%	6%
Other arrest	8%	7%	9%

^a Based on one-tailed tests of the hypotheses that participants have better outcomes than the standard docket.

**p < .01. *p < .05.

Table A6.3

Mean Number of Arrests in Year after Sentencing by Group: Official Crime Records

	Sanctions Program Eligibles ^a (n = 365)	Sanctions Program Participants (n = 240)	Standard Docket Eligibles (n = 311)
Number of arrests after sentencing	0.41	0.35	0.44
Drug arrests	0.16	0.14	0.17
Violent arrests	0.06	0.06	0.05
Property arrests	0.08	0.07	0.08
Other arrests	0.11	0.08	0.12
Arrests per 100 Street Days ^b	0.16	0.12	0.21

^a Based on one-tailed test of the hypotheses that sanctions participants have better outcomes than the standard docket.

^b Mean street days in year for sanctions participants = 286, for sanctions program eligibles = 291 and for standard docket = 301.

**p < .01 *p < .05

Table A6.4

Percentage of Sanctions Program and Standard Docket Samples Committing Offenses in Year After Sentencing: Self-Report Survey Data

	Sanctions Program Eligibles ^a (<i>n</i> = 158)	Sanctions Program Participants (<i>n</i> = 111)	Standard Docket Eligibles (<i>n</i> = 153)
Any criminal offense	44%	43%	46%
Any drug offense	32%	31%	33%
Any violent offense	8%	8%	8%
Any property offense	10%	8%	12%
Any other offense	30%	32%	30%

^a Based on one-tailed tests of the hypotheses that sanctions participants have better outcomes than the standard docket.

** *p* < .01 **p* < .05.

Table A6.5

*Mean Number of Crimes in Year After Sentencing by Sanctions Program and Standard Docket
Samples: Self-Report Survey Data*

	Sanctions Program Eligibles ^a (<i>n</i>)	Sanctions Program Participants (<i>n</i>)	Standard Docket Eligibles (<i>n</i>)
Total number of offenses	19.7 (158)	19.9 (110)	20.4 (153)
Drug offenses	9.4 (157)	10.7 (109)	9.5 (153)
Violent offenses	1.2 (156)	1.3 (108)	1.3 (149)
Property offenses	2.0 (157)	1.9 (109)	1.4 (147)
Other offenses	7.2 (157)	6.2 (109)	8.4 (151)

^a Based on one-tailed tests of the hypotheses that sanctions participants have better outcomes than the standard docket.

** $p < .01$ * $p < .05$

PROPERTY OF
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000