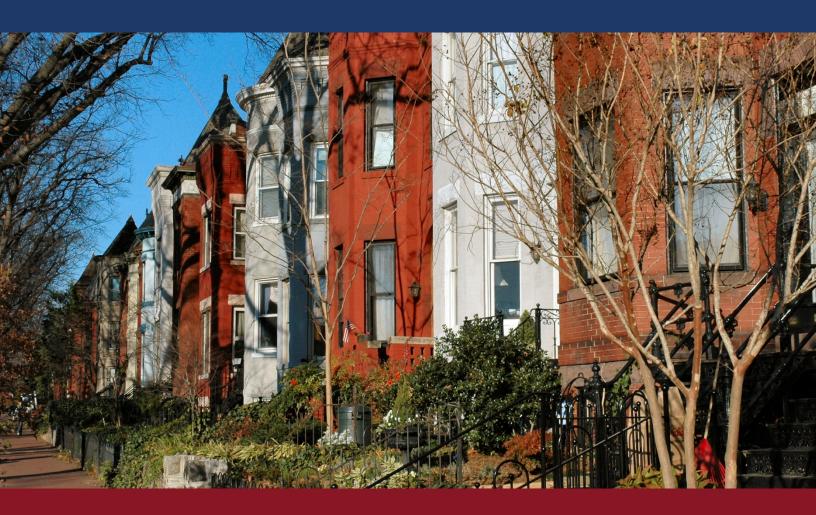
The Costs and Benefits of Community-Based Substance Abuse Treatment in the District of Columbia



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Introduction

This is the first in a series of reports that forecast how cost-effective evidence-based programs would be if operated locally in the District of Columbia (DC). These reports use data from multiple research studies, combined with DC-specific costs and DC-specific case processing statistics, to forecast the costs and benefits of implementing the target programs in the District. This first report forecasts the annual costs and benefits of community-based substance abuse treatment (CBSAT) compared to probation. ¹

In this report, we briefly describe the expected outcomes of the CBSAT program, report the estimated costs of operating CBSAT in the District of Columbia, and estimate the benefits from those outcomes for DC residents and local and federal agencies. These data are then combined to produce estimates of the overall cost-benefit of CBSAT in the District.

Most cost-benefit analyses (CBAs) generate only average cost-benefit (CB) results without reporting on uncertainty, including statistical significance or confidence bounds. This makes forecasting how well those results will translate to other places difficult, particularly when positive results are largely driven by a small number of program participants with large benefits. When that occurs, while the average CB result is positive, there may be a low probability of achieving those outcomes. The District of Columbia's Crime Policy Institute's (DCPI's) CBA predicts the range and distribution of expected costs and benefits, and forecasts both the average expected CB result and the probability that the result will be positive.

On average, we find there is a 55 percent chance that a CBSAT program serving 150 people would yield benefits that exceed its costs. The median benefit of CBSAT is \$615 per person higher than its costs.

Community-Based Substance Abuse Treatment

The phrase "community-based substance abuse treatment" can refer to a wide variety of programs. This study focuses on programs that provide treatment in the community for offenders with histories of drug

abuse and dependence.² The CBSAT programs studied here are always provided in response to an arrest, whether ordered by a judge at sentencing or required as a condition of community-based supervision.

The criminal justice system's response to drug-involved arrestees often includes a combination of incarceration and community supervision, such as probation. CBSAT programs are appealing because they are less expensive than jail or prison and may reduce criminal activity more than probation. However, CBSAT programs do require far more drug treatment than typical probation, and are generally more costly as a result. This analysis tests whether the benefits of CBSAT, in terms of reduced victimization and justice system costs compared to probation, outweigh the costs of additional treatment.

Though program models vary considerably, most CBSAT programs follow a similar formula. Upon referral to a CBSAT program, participants are screened to determine their clinical and legal eligibility. Clinical eligibility is determined by formal assessments of each participant's need for drug treatment. Legal eligibility varies, but most jurisdictions limit eligibility to offenders with a drug-related offense or an offense that is often related to drug abuse (e.g., prostitution, theft). Additional restrictions based on current or past offending may be applied as well. Those with a current violent charge are routinely excluded, and many places exclude those with past violent offenses. Many CBSAT programs impose other legal eligibility criteria, such as excluding those with previous drug-related arrests or those who have participated in similar programs. Those meeting both legal and clinical eligibility are diverted from routine criminal case processing and placed into a treatment program based on their needs.

CBSAT programs encompass several treatment modalities. Treatments vary by type (residential, inpatient, outpatient), intensity, and length. Length of stay in the residential or inpatient options ranges from 30 days to 12 months. Outpatient treatment varies in intensity and length, but most treatment includes regular group therapy, some individual therapy, and routine drug testing over the course of several months.

¹ This report is neither an evaluation of existing CBSAT programs nor an evaluation of the CBSAT infrastructure in the District.

² One common oversight mechanism for community-based treatment is the drug court (the Superior Court Drug Intervention program in DC). Since the literature routinely considers drug court separately from CBSAT, we do not include drug courts in this study.

DCPI Cost-Benefit Estimates

The cost-benefit analyses presented here can be divided into the estimated impact of the program, the costs of operating the program, and the benefits from the program to agencies and to society.

Estimated Program Impacts

Estimated impacts refer to the program's effects, usually in terms of reduced reoffending and rearrest. These are estimated from prior evaluations of the program. Prior evaluations are combined statistically via a meta-analysis, which is used to generate the average program effect and a distribution about that average.

Because different programs avert different kinds of offending, and different kinds of offenses vary in terms of criminal justice costs and victim harm, arrests averted are combined with data on the relative frequency of different types of offending for different populations.

Costs of Program Operation

Prior cost-benefit analyses of the programs under study are used to estimate the resources (e.g., staff time, drug treatment) involved in program operations. These estimates are combined with DC-specific prices for these resources, which are developed from DC data sources and expert interviews from the DC agencies. Where possible, a range of program costs is used, because not all program participants use the same level of resources and not all providers have the same costs.

Agency Benefits from Averted Criminal Justice Costs

Agencies benefit from programs when prevented crimes reduce criminal justice system costs. For example, preventing an arrest saves police time, court time, jail time, and prison time. The amount of criminal justice resources saved depend on the probability that an averted arrest would have led to jail time, to probation, or to prison time. These probabilities are derived from District of Columbia adult criminal justice case processing statistics. These amounts are combined with prices for each criminal justice resource (e.g., the cost of one year of probation), which are developed from local agency budgets.

Societal Benefits from Averted Victimization

Society directly benefits from less crime through reductions in harm from criminal victimization. The number of victimizations that are prevented cannot be directly observed and must be estimated from changes in the number of arrests. Clearance rates are used to help infer how many victimizations were prevented from the reduction in arrests found the program evaluations.

The value of the harms to victims is based on jury-award data (Roman 2011). These are combined with the estimated number of crimes averted to estimate the total amount of harm prevented (the social benefit).

Using Simulation to Estimate Net Costs and Benefits

Our simulation-based Bayesian methods combine the range of the estimated impact of the program with the range of costs of operating the program and the range of benefits resulting from preventing new offenses and arrests. The estimates were based on 4,000 simulated programs, each serving 150 people. For each simulated program, the average costs and benefits per participant were calculated.

The end product is a final range of the costs or benefits that accrue to city agencies, to federal agencies, and to society from one program. These methods produce average costs and benefits, as well as ranges and probabilities of costs and benefits.

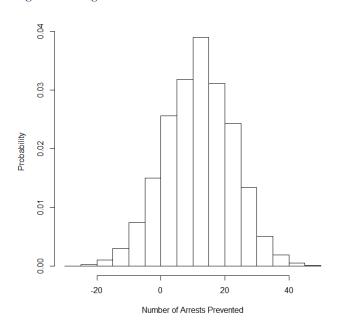
Those who fail drug tests can "fail" the program and return to court or be "stepped up" to a more intensive treatment regime.

Among the various CBSAT modalities, individuals who do well may move into a more loosely structured treatment, which can involve less frequent therapy meetings, surveillance without treatment, or drug testing without treatment.

Estimated Program Impacts

Six prior evaluations have been conducted of CBSAT programs and these studies have recently been meta-analyzed by the Washington State Institute of Public Policy (Aos et al. 2011) to combine their results (for more information about the evaluations, see **appendix A**). The meta-analysis found that, on average, the CBSAT model is effective. However, effectiveness varies considerably among programs. Thus, although the average CBSAT program improves outcomes, there is no guarantee that any one new program will be effective.

Figure 1. Histogram of Number of Arrests Prevented



To illustrate the magnitude of the program effects, **figure 1** describes the probable arrests prevented by a CBSAT program serving 150 offenders, based on the assumption that without the program, roughly 35 percent of these individuals would have been rearrested (52 arrests).³

Under these assumptions, a CBSAT program is expected to prevent an average of 12 arrests (a 22 percent reduction). The figure's interpretation is straightforward—the higher the bar, the greater the probability that that number of arrests will be prevented. Overall, there is an 86 percent chance that CBSAT will prevent at least one arrest.

Figure 1 also shows that there are small chances for both very positive and very negative effects. The most positive results appear on the far right-hand side of the figure, where there is a 25 percent chance that 19 or more arrests will be prevented. The far left-hand side of the figure shows the most negative outcomes, where crime and arrests increase—there is a 12 percent chance that the program will lead to at least one additional arrest than would occur if the CBSAT program had not been implemented.

Costs of Program Operation

Our estimates of the costs of a CBSAT program are based on estimates of the price of treatment in Washington, DC and estimates of the amount of treatment we expect CBSAT to deliver (from Washington State's Drug Offender Sentencing Alternative (DOSA) program (Phipps and Luchansky 2003).

Offenders who qualify for DOSA are placed into one of three programs—intensive outpatient, intensive inpatient, or long-term residential. The intensive outpatient treatment is a 5- to 12-week program that includes up to 72 hours of treatment. Intensive inpatient treatment is a 30-day residential program, and residential treatment lasts between 6 and 12 months. Those who complete the initial intensive treatment are often placed into continuing outpatient treatment for three months of weekly sessions.

To estimate the price of drug treatment in DC, we interviewed the DC Court Services and Offender Supervision Agency (CSOSA). Much of the treatment assigned by CSOSA is contracted. Typical outpatient treatment costs \$70 per session (often split across groups of about 10 participants). Costs to providers of inpatient/residential treatment range from \$2,000 to \$4,000 per patient per month.

Based on the types of treatment received in DOSA and the costs of treatment providers used by CSOSA, the costs of operating a CBSAT program like DOSA in the

are not included in the study, the drug court recidivism data are the best available approximation for this population.

³ This recidivism rate is the average of the rate of recidivism for control groups in five of the strongest drug court studies to date (weighted for length of the follow-up period). See Roman, Townsend, and Bhati 2003, p. 8. While drug courts

District can be estimated. As expected, costs vary considerably, as some offenders are referred to relatively inexpensive outpatient treatment and others receive up to a year of residential treatment along with additional months of outpatient therapy. In addition to variation in the type of treatment assigned, costs vary within treatment types because many participants fail to complete the entire treatment program (see **table 1**).

Table 1. Treatment Received in CBSAT

Percentage of participants referred to:	
Outpatient	56%
Completed, no further treatment	33%
Completed, follow-up treatment	34%
Did not complete	33%
Intensive Inpatient	20%
Completed, no further treatment	33%
Completed, follow-up treatment	36%
Did not complete	31%
Long-Term Residential	12%
Completed, no further treatment	33%
Completed, follow-up treatment	33%
Did not complete	34%
Not Assigned to Treatment	12%

Source: Washington State Institute of Public Policy.

There are substantial differences within participants in the same program in the amount of treatment received and the associated costs (see **table 2**). A majority (58 percent) of participants will receive less than \$1,000 in treatment, and more than one-third (36 percent) will receive less than \$500. Among these particularly low-cost participants are those who did not complete the treatment. They account for 62 percent of those who cost \$1,000 or less and all of those who cost \$500 or less. Thus, the vast majority of participants are relatively inexpensive to treat (with three-quarters costing less than \$2,000). However, a small group of participants are extremely costly. Nine percent of participants (all of whom receive long-term residential treatment) cost more than \$20,000.

Table 2. Costs of CBSAT Treatment

Percentage of participants co	sting less than:
\$500	36%
\$1,000	59%
\$1,500	65%
\$2, 000	74%
\$3,000	78%
\$5,000	88%
\$10,000	89%
\$20,000	91%
\$30,000	96%
\$40,000	99%

There is much less difference in costs between programs. On average, a CBSAT program costs \$4,055 more per participant than probation. Most programs

have average costs per person between \$3,000 and \$5,000 (see **figure 2**).

Agency Benefits from Averted Criminal Justice Costs

Cost-benefit analysis requires the program's key outcome, averted arrests, to be given a dollar value. This involves both criminal justice costs and victimization costs. Data obtained from the DC Pretrial Services Agency (PSA) were used to estimate the likelihood that an arrest leads to the use of other criminal justice resources (trial, jail, prison, etc.) for different types of offenses (see **appendix B**). Data from local budgets, for both city and federal agencies, were used wherever possible to estimate the price of each of these criminal justice resources in the District. The monetary value of harm experienced by victims of crime was estimated from national data based on jury awards (Roman 2011).

On average, preventing one arrest in the District of Columbia generates \$72,000 in social benefits. Of this, the overwhelming portion (86 percent) results from prevented victimization. About \$8,900 of the benefits are received by federal agencies (of which \$2,800 accrues to the Bureau of Prisons and \$1,500 to CSOSA). On average, each arrest prevented yields \$1,400 in benefits to city government, all of which accrues to the Department of Corrections (we estimate that a day in the District of Columbia jail costs approximately \$87).

The costs of preventing the average arrest are strongly influenced by rare but extremely costly crimes, such as homicide. Although homicides are very uncommon (for every homicide arrest, there are 233 arrests for other charges), they are very costly, averaging \$1.4 million in victimization costs alone. Thus, most averted arrests have a benefit that is much smaller than the average benefit for all arrests.

Program Benefits

The estimated 86 percent chance that CBSAT would prevent at least one arrest implies an 86 percent chance that the program will yield some positive benefits (*before* comparing benefits and costs). On average, as shown in **Table 3**, the program is expected to yield \$6,000 in social benefits per participant. Of these

⁴ Most of these data originate with police and the courts, and are obtained by PSA during the course of routine operations. PSA functions include interviewing arrestees, providing release and supervision recommendations to the court, and providing supervision and treatment for pretrial defendants.

benefits, \$5,100 are expected to come from averted victimization, with relatively small per participant benefits to government agencies.

However, as noted above, these average results are strongly influenced by a few offenders. The benefits of a typical program (represented by the median, rather than the average) are lower: \$4,600.

There is a moderate chance (25 percent) that the program will yield very large benefits—more than \$9,100 in benefits per participant. This must be balanced against the moderate probability (12 percent) that the program will be ineffective and result in no benefits or negative benefits (i.e., new costs).

Table 3. Expected Benefits per Participant

Stakeholder	Average	Median	25 percent chance greater than	25 percent chance less than
All society	\$6,000	\$4,600	\$9,100	\$1,200
City agencies	\$120	\$70	\$190	\$0
Federal agencies	\$760	\$550	\$1,100	\$190
Potential victims	\$5,100	\$3,800	\$7,9 00	\$850

Overall, a key implication of table 3 is that the benefits of CBSAT overwhelmingly accrue to citizens (who are less likely to be victimized) rather than to government agencies. This result is a common one in studies of effective criminal justice system reforms. To understand why the benefits mainly go to citizens and not the government, consider the following example: The most common type of arrest in the District is for assault (combining simple and aggravated assault), which accounts for 35 percent of all DC arrests. Twothirds of these cases are dismissed and only 29 percent result in conviction. Even among those that result in conviction, only about 55 percent result in incarceration; the other 45 percent lead to relatively inexpensive probation. Further, 74 percent of incarceration sentences resulting from assault arrests are for less than one year. Thus, only 4 percent of assault arrests result in the most expensive intervention—prison. In turn, the finding that the average arrest averted leads to fairly small criminal justice savings is not surprising.

However, the typical aggravated assault results in nearly \$90,000 in victimization costs (more than three times the annual cost of prison). In 10 percent of assaults, costs are greater than \$310,000 (more than 10 times the annual cost of prison). Thus, victimization, especially violent victimization, often drive the results of cost-benefit and cost-effective analyses.

Combining Cost and Benefits Using Bayesian Simulation

To combine the costs and benefits expected to accrue from a community-based substance abuse treatment program, we simulated 4,000 programs, each serving 150 people. For each program, the average net benefit is estimated per person, per year. **Figure 2** describes the probabilities of expected costs and benefits.

Our estimates suggest a 55 percent chance that a 150-person program will yield positive net benefits (figure 2). On average, we expect these net benefits to be about \$1,970 per participant. The typical program (represented by the median), however, is expected to yield only \$615 per participant. There is also a 45 percent chance that the program will yield negative net benefits. There is a 25 percent chance that the program will yield at least \$2,700 in net social costs per participant, although this must be balanced against the 25 percent chance that the net benefits will greater than or equal to \$5,200 per participant.

Costs/Benefits per person, per program, in dollars \$40,000 Benefits Costs C \$30,000 Net benefits: Net loss: about 45% of programs, -\$10,000 +\$20,000 -\$30,00 -\$40,000_f 100% 40% 60% Total percentage of programs by cost/benefit

Figure 2. Probabilities of CBSAT Costs and Benefits in Washington, D.C.

The costs of program operation (in red) are fairly consistent and relatively small. The costs are also always greater than zero, meaning that our model does not show any instances where implementation of CBSAT

leads to lower program costs relative to business as usual probation.

The benefits (the blue line) of the program—the types of crimes prevented and the criminal justice response—are much more volatile. There are two important points on this graph—the point where benefits exceed \$0, and the point where benefits exceed the costs. As noted above, the benefits exceed \$0 about 75 percent of the time.

More important, the portion of the graph where the blue line is above the red line is the portion where the benefits outweigh the costs. The lines cross at a probability of 0.45, meaning that we estimate there is a 45 percent chance that the net benefits will not be positive and costs will exceed the benefits. In other words, there is a 55 percent chance CBSAT will be costbeneficial. The amount by which the blue line is above the red line indicates the size of the net benefits in dollar terms (the reverse is true as well, with the distance of blue line below the red line indicating how much additional net costs there will be). The analysis suggests that while there is a chance the program's net benefits will be negative, the net benefits are more likely to be positive.

Discussion

These results suggest that CBSAT is only modestly more likely to yield net benefits than probation. That result would have been different if a different comparison were made. This report compares CBSAT to probation rather than to prison (this comparison was made because five of the six evaluations in the meta-analysis made a comparison to probation). If the population targeted by CBSAT in the District were mainly prisonbound, the results would likely change dramatically. However, there is no way to predict the final result in that situation. On one hand, the costs of CBSAT would be substantially lower than prison. On the other, participants would be served in the community rather than being incarcerated, and thus there would be more criminal victimizations. And, a prison-bound population would likely commit more new crimes in the community than the probation population studied in this analysis.

Figure 2 highlights that danger of focusing solely on the average effectiveness of CBSAT, which ignores a lot of important variation in CBSAT cost-effectiveness. There is a 20 percent chance that CBSAT will yield benefits that are more than twice the costs, and a small chance that CBSAT will yield very large benefits. There is also a small chance—about 12 percent—that

implementing CBSAT will yield additional costs to the citizens of the District of Columbia, as well as to District and federal criminal justice agencies. Citizens' and agencies' tolerance for this risk should be considered in the evaluation of CBSAT.

Figure 2 also highlights the importance of not viewing program types as monolithic. There is a lot of variation in CBSAT program effectiveness, and there are better and worse candidate CBSAT programs. Thus, in addition to considering whether the average effect of CBSAT warrants consideration of the program for operation in Washington, DC, evidence about what makes a CBSAT program effective should also be evaluated. That will increase the likelihood that CBSAT in the District falls in the blue area of **figure 2**.

Finally, since some CBSAT programs are very costeffective, it is reasonable to investigate the defining attributes of these effective programs. In subsequent analyses, DCPI will review the CBSAT evaluation literature and develop a set of guidelines that describe best practice.

References

- Aos, S., S. Lee, E. Drake, A. Pennucci, T. Klima, M. Miller, L. Anderson, J. Mayfield, and M. Burley. 2011. *Return on investment: Evidence-based options to improve statewide outcomes*. Document No. 11-07-1201. Olympia: Washington State Institute for Public Policy.
- Aos, S., P. Phipps, and R. Barnoski. 2005. Washington's drug offender sentencing alternative: An evaluation of benefits and costs. Document No. 05-01-1901. Olympia: Washington State Institute for Public Policy.
- Baird, C., D. Wagner, B. Decomo, and T. Aleman. 1994. *Evaluation of the effectiveness of supervision and community rehabilitation programs in Oregon.* San Francisco: National Council on Crime and Delinquency.

California Department of Corrections. 1997. Los Angeles Prison Parole Network: An evaluation report. California Department of Corrections.

Hepburn, J. R. 2005. "Recidivism among drug offenders following exposure to treatment." *Criminal Justice Policy Review* 16(2): 237–259.

Lattimore, P. K., C. P. Krebs, W. Koetse, C. Lindquist, and A. J. Cowell. 2005. "Predicting the effect of substance abuse treatment on probationer recidivism." *Journal of Experimental Criminology* 1(2): 159–189.

Phipps, P., and B. Luchansky. 2003. *Drug Offender Sentencing Alternative (DOSA): Treatment and Supervision, A Presentation to the Sentencing Guideline Commission*. Document No. 03-12-1901. Olympia: Washington State Institute for Public Policy.

Roman, J. 2011. "How do we Measure the Severity of Crime? New Estimates of the Cost of Criminal Victimization." In *Measuring Crime and Criminality: Advances in Criminological Theory*, Vol. 17, edited by John MacDonald (37–70). Piscataway, NJ: Rutgers University Press.

Roman, J., W. Townsend, and A. Bhati. 2003. National estimates of drug court recidivism rates. National Institute of Justice Research Report 201229. Washington, DC: Department of Justice.

Appendix A. Conditional Probabilities of Adult Case Processing

Study Citation	Dependent	Control Population	Treatment	Sample	Analytic	Notable	Follow-up	Findings	
	Variable		Population	Size	Technique	Features	Period		
Aos, Phipps,	Felony	Those who received	Offenders	323 each	Participants	Cost-benefit	Convicted of	DOSA effective for	
and Barnoski	conviction	full prison sentences	receive	treatment	matched for	analysis; only	felony w/in	drug offenders,	
2005		before DOSA was	treatment (out	and control	15 variables;	study to have	24 months	not for property	
(Washington		enacted and match	or inpatient)		logistic	prison as	(allowing	offenders	
State)		treatment	instead of		regression	counterfactual	extra 12		
		characteristics of	second half of			does not	months for		
		DOSA	prison			account for	case		
			sentence; for			crime	processing)		
			drug or			committed			
			property			while in			
			offenders			treatment			
Baird et al.	Placement in	Offenders matched	Offenders with	92 each,	Matched for	Six counties in	1 year follow-	Treatment group	
1994	prison, jail, or	on the basis of prior	assessed	treatment	previous	Oregon;	up	significantly less	
	probation	criminal history,	substance	and control	criminal	program		likely to be	
		risk, and	abuse issues		history and	implementati		sentenced to	
		demographics	receive some		demographi	on varied		probation and jail	
		placed on	form of		cs;	widely by		and equally likely	
		supervision similar	community		comparing	location		to be sentenced to	
		to treatment	treatment		means			prison as control	
		immediately before	(residential,						
		treatment became	outpatient, or						
		available	family-based)						
California	Return to	Parolees w/	Residential and	361	Logistic	No info on	12 months	28% reduction in	
Department of	prison (either	substance abuse	outpatient	treatment,	regression	program	(for	odds of return to	
Corrections	for violation or	problems who had	treatment for	1,364		completion	treatment;	prison	
1997	for new	not been referred to	parolees	control		rates	begins at		
		the program during					beginning of		

	offense)	same time period					treatment)	
Hepburn 2005	Arrest for any other charge besides a traffic moving violation; length to rearrest	(a) Offenders who are diversion-eligible and did not enter treatment (prosecuted) (b) Those who entered and failed treatment (prosecuted)	Offenders who opt into nonresidential community-based treatment	1,558 did not enter treatment, 493 dropped out, 1,277 completed treatment	Survival analysis	Prosecutorial Diversion; offender must pay for own treatment	Inconsistent (between 53 and 77 months)	197% increase in the time to rearrest for offenders who entered treatment; 210% increase in time to rearrest for those who complete treatment (relative to those who fail)
Lattimore et al. 2004	Any felony arrest or any felony drug arrest and the number of respective arrests	Probationers with previous drug offenses or drug involvement	Probationers diverted to nonresidential drug treatment (then subdivided into >/< 90 days)	51,979 treatment, 81,797 control	Logistic (rearrest); negative binomial (number of rearrests)	Estimated effect of any treatment and of treatment duration; no info on why offenders were placed or got different treatment lengths	12- and 24- month follow-up	Estimates that any treatment (but especially >90 days) reduces likelihood of rearrest (for both felony and felonydrug) at 12, 24 months; same is true of number of rearrests

Appendix B. Conditional Probabilities Used in the Analysis

In order to estimate the benefits from an arrest averted, it is critical to understand what would have happened if that arrest had occurred (i.e., had not been prevented). For instance, if an arrest would have led to costly prison sentences or jail stays, preventing a crime and the subsequent arrest yields considerable benefits beyond those accrued to the police department. Understanding the likelihood of these events, given an arrest, is essential to valuing the benefits of preventing an arrest. We refer to these as "conditional probabilities," as they are the probability of an event, conditional on there being an arrest. In order to accurately represent variation in a program's expected benefits, the analysis used simulation-based methods, rather than simply calculating a single value to represent the benefits of an averted arrest. This table, compiled using data from the DC Pretrial Services Agency, includes the probabilities used in this analysis.

	Overall Probabilities			Conditional on being arrested			Conditional on being convicted			
	Percentage	Prob. of having a public	Prob. of being held	Prob. of being acquitted in	Prob. of being convicted in	Prob. of pleading	Prob. of being sentenced to	Prob. of being sentenced to	Prob. of being sentenced to	Prob. of
Arrest charge	of all arrests	defender	pretrial	trial	trial	guilty	prison	jail	probation	being fined
Arson	0.1%	51.6%	0.0%	4.5%	50.0%	4.5%	58.3%	25.0%	16.7%	83.3%
Assault (Felony)	7.7%	56.0%	1.7%	4.8%	30.4%	4.3%	28.5%	33.1%	39.1%	87.8%
Assault (Misdemeanor)	27.7%	56.0%	0.9%	4.4%	21.2%	2.2%	0.7%	49.0%	53.7%	90.2%
Burglary	0.8%	62.0%	0.9%	3.0%	53.1%	4.8%	43.3%	29.9%	31.2%	91.1%
Disorderly Conduct	2.7%	52.7%	5.7%	0.3%	9.1%	0.2%	0.0%	29.3%	70.7%	113.8%
Drug (Felony)	11.6%	56.3%	1.9%	1.4%	47.6%	2.7%	25.4%	32.7%	53.9%	95.7%
Drug (Misdemeanor)	22.4%	61.0%	2.5%	1.2%	30.9%	4.5%	1.3%	47.6%	47.7%	90.9%
Family	1.1%	0.0%	1.1%	6.5%	32.6%	2.9%	0.8%	53.7%	57.9%	85.1%
Fraud/Forgery	0.4%	55.6%	0.0%	3.9%	22.5%	2.9%	19.2%	23.1%	57.7%	69.2%
Motor Vehicle Theft	2.8%	67.5%	0.9%	0.7%	13.7%	3.1%	4.2%	45.4%	42.9%	82.4%
Murder	0.4%	36.0%	2.1%	8.9%	42.0%	4.5%	82.2%	2.7%	6.8%	90.4%
Property	5.9%	60.6%	2.5%	1.5%	20.1%	6.2%	1.2%	46.2%	37.4%	76.9%
Prostitution	4.8%	0.0%	3.9%	0.5%	25.2%	7.2%	1.1%	59.5%	21.9%	78.4%
Rape/Sexual Abuse	0.2%	46.0%	4.0%	8.3%	46.7%	0.0%	57.1%	35.7%	25.0%	78.6%
Robbery	1.8%	55.1%	1.2%	1.6%	40.7%	5.2%	42.1%	24.6%	36.4%	86.4%

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DCPI is a nonpartisan, public policy research organization focused on crime and justice policy in Washington, D.C. DCPI connects a diverse team of prominent scholars and policy experts. With funding from the Justice Grants Administration (JGA) in the Executive Office of the District of Columbia Mayor (EOM), DCPI was established at the Urban Institute in 2009.

Administered by the Justice Policy Center at the Urban Institute, DCPI's mission involves three tasks: conduct analyses of the costs and benefits of justice policies and programs for the District of Columbia; create a publicly accessible research library of crime and justice research in the District of Columbia; and conduct research and evaluation projects concerning District of Columbia crime and public safety, crime prevention, and crime policy.

