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COST/BENEFIT ANALYSIS OF THE DOUGLAS COUNTY DRUG COURT

March 31, 2004

Submitted to:

The Douglas County District Court of Nebraska
Fourth Judicial District

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EXECUTIVE SUMMARY

The primary purpose of this cost-benefit evaluation of the Douglas County Drug Court (DCDC) is to provide administrators and policy-makers with critical information for future policy and funding decisions. This study expands and refines previous DCDC cost-benefit analyses through an investigation of drug court program investment, outcome and societal-impact costs and savings.

This study employs a Transaction Cost model that examines complex, multi-agency events and costs for participants in drug court and non-drug court comparison groups. A "cost-to-taxpayer" approach is used that includes any criminal justice related costs (or avoided costs) generated by drug court or non-drug court comparison group participants, that directly impacts citizens either through tax-related expenditures or personal victimization costs/losses due to crimes committed by drug offenders.

COST/BENEFIT EVALUATION FINDINGS

The majors findings and results of the cost-benefit analyses are as follows:

1. **Investment Costs** are defined as the total event costs which are incurred by participants during year-1 of their involvement with the drug court and/or criminal justice system as a result of the original drug or drug-related arrest which qualified them for inclusion in the study.

    - The average investment cost for drug court participants is $4,803 compared to $9,224 for traditionally-adjudicated offenders, or an average benefit/cost difference of $4,421 *less* for each drug court participant.

    - The annual investment cost savings for drug court participants compared to traditionally-adjudicated and sentenced offenders is $1,326,414. By far the greatest investment cost savings were for jail confinement ($622,098) and prison incarceration costs ($1,125,642).

    - Lesser "up front" investment cost savings of $125,703 were also realized by the Douglas County District Court and the other agencies involved with processing and prosecuting drug offenders at the district court level (not including the costs of the drug court program itself, which is administered by the District Court). The Douglas County Court and agencies involved at the county court level also realized a savings of $51,234.

2. **Outcome Costs** are defined as further event costs (or avoided costs) due to recidivism (re-arrest) during a 24-month follow-up period. Recidivism outcomes are significantly lower for drug court participants than for matching offenders who were traditionally adjudicated and sanctioned.

- Drug court participants averaged 1.23 new misdemeanor and felony arrests compared to 1.87 for non-drug court offenders. Those assigned to the drug court accounted for -132 fewer misdemeanor and -60 fewer felony arrests during the follow-up period.

- The fewer misdemeanor arrests resulted in outcome cost savings of $346,129 (-132 X $2,622) and the fewer number of felony arrests saved $533,468 (-60 X $9,224), or a total annual outcome cost savings of $899,597.

- The average annual outcome cost savings per drug court participant is $2,999. Total annual investment and outcome savings combined are $2,226,011.

3. **Societal Impact Costs** are defined as the costs of drug-offender crime on victims, taxpayers and the larger society. To the extent that the drug court program contributes to a reduction in crime (as measured in lower recidivism rates), it is also responsible for lower associated crime-victim, taxpayer and societal costs.

    - Victimization costs include tangible costs (*productivity/lost wages, medical and mental-health care, social/victim services, property and monetary "out-of-pocket losses*) and intangible costs (*pain, suffering and lost quality of life*). Victimization costs vary greatly, ranging from $370 for each larceny or attempt to $3,180,000 for fatal DWI victimizations.

    - Each year in the U.S., over 49 million personal crime victimizations cost victims an estimated $451 billion ($419 billion for violent crime [including drunk driving] and $32 billion in property crime).[1] The average estimated cost per violent victimization in the U.S. is $29,497, while the average cost of property victimizations is $913.

    - Those assigned to the drug court accounted for an estimated -38 fewer violent crimes, -71 fewer property crimes and -83 fewer drug or other "*victimless*" crimes during the 24-month follow-up period. The annual victimization cost savings due to the lower rates of recidivism of drug court participants are $1,120,886 for violent crimes (-38 X $29,497) and $64,823 (-71 X $913) for property crimes, or a total societal-impact (victimization) cost savings of $1,174,809.

[1] From "Victim Costs and Consequences: A New Look" by Ted Miller et al, a research report prepared for the National Institute of Justice (1996).

4. **Total annual cost savings.** When investment, outcome and societal-impact (victimization) costs are combined, the total annual savings due to the Douglas County Drug Court are $3,400,820, or $11,336 per drug court participant. The following table summarizes annual drug court savings and average savings per participant at each stage of the cost/benefit analysis.

Table *i.*
Total Annual Drug Court Investment, Outcome and Societal Impact Cost Savings

	Savings Per Drug Court Participant	**Total Annual Savings (Per 300 Participants)**
Investment Cost Savings	**$4,421**	**$1,326,414**
Outcome Cost Savings	**2,999**	**899,597**
Societal Impact Cost Savings	**3,916**	**1,174,809**
Participant Change Cost Savings	**N/A**	**N/A**
Total Cost Savings	**$11,336**	**$3,400,800**

These totals do not include other potentially substantial taxpayer and societal cost savings due to changes in participants and their behavior (non-criminal) resulting from the drug court program. While DCDC participant-change data (e.g., employment, education, medical/mental health conditions, formation and retention of stable relationships, etc) was not sufficiently available for use in this study, the major indicators of participant change and related cost/benefit variables were identified and recommendations for future study are presented in Appendix C.

I. INTRODUCTION

The primary purpose of this study is to provide Douglas County Drug Court (DCDC) administrators and local, state and national policy-makers with cost-benefit information that will be critical for future policy and funding decisions. This study is intended to expand and refine previous DCDC cost-benefit analyses and include additional societal impact measures that were not part of previous efforts.

The previous studies, the joint UNO-ISED evaluations of the DCDC, resulted in the completion and reporting of 12 and 24 month recidivism, drug treatment and testing and criminal justice system (public expenditure) cost-benefit analyses.[2] These analyses showed that felony drug-related offenders who were assigned to the drug court were less likely to recidivate at both the 12 and 24 month follow-up periods and incurred lower criminal justice costs (over $4,000 less per drug court participant) than similarly-situated offenders who underwent traditional adjudication.

These findings were important for informing local and national policy makers and the general public on the societal benefits to be obtained through the selective application of judicial monitoring coupled with substance-abuse treatment interventions.[3] In a review of drug court evaluations nationwide, Dr. Steven Belenko at Columbia University cited the multiple recidivism measures, detailed cost-benefit components and analytical

[2] See "Phase II [6/2/99] and Phase III [5/18/01] Douglas County Drug Court Evaluation: Final Report[s]," by Thomas J. Martin, Cassia C. Spohn, R.K. Piper, Erika Frenzel-Davis and Jill Robinson.

[3] Study results were published in the Journal of Drug Court Issues: Drug Courts as an Alternative Treatment Modality, Bruce Bullington, Editor; Volume 31, Number 1, Winter 2001, Florida State University. The major findings of both recidivism and cost-benefit analyses were also cited in the lead editorial "Drug Courts Show Potential" in the Omaha World-Herald, August 12, 2001.

strategies used in the DCDC studies as models for future evaluation efforts in other jurisdictions.[4]

Since that time, numerous cost-benefit studies of other drug courts have been conducted throughout the U.S., several of which have significantly improved methodologies, data collection practices and research findings.[5] One study in particular, *"A Detailed Cost Analysis in a Mature Drug Court Setting: A Cost-Benefit Evaluation of the Multnomah County [Portland, Oregon] Drug Court," prepared for the National Institute of Justice, by Dr. Michael Finigan and Dr. Shannon Carey (July, 2003),* stands out in this regard by refining and categorizing drug court costs and benefits in terms of public investments, offender outcomes and societal victimization impacts. Our study adopts a similar approach to expand and enhance the original DCDC cost-benefit findings.

In order to provide the most useful information to policy-makers, a "cost-to-taxpayer" approach is used that defines the type of cost data collected. This data includes any criminal justice related costs (or avoided costs) generated by drug court or non-drug court comparison group participants, that directly impacts citizens either through tax-related expenditures or personal victimization costs/losses due to crimes committed by drug offenders.

[4] "Research on Drug Courts: A Critical Review 2001 Update," by Steven Belenko, The National Center on Addiction Abuse at Columbia University, June 2001.
[5] "Cost Benefits/Costs Avoided Reported by Drug Court Programs (rev.)," OJP Drug Court Clearinghouse, Office of Justice Programs, U.S. Department of Justice, September 16, 2003.

II. FINDINGS AND RESULTS

The findings and results section is divided into three sub-sections: A) Investment Costs, B) Outcome Costs, and C) Societal Impact Costs. Descriptions of the methodologies used and related documentation are included in each sub-section and the Appendix.

A. INVESTMENT COSTS

This study employs a Transaction Cost model that examines complex, multiple-agency transactions or events for the participants in Drug Court and Non-Drug Court comparison groups.[6] Investment costs are defined as the transaction costs which are incurred by participants during year-1 of their involvement with the drug court and/or criminal justice system as a result of the original (presenting) arrest/case which qualified them for inclusion in this study.[7] Transactions/events are the major steps or stages through which all participants must pass as part of the drug court and/or traditional "business as usual" criminal justice system process.

A complete description of each major drug court/criminal justice system stage, individual transactions/events, activities within those events, actors involved with each, cost factors and cost totals are included in Appendix A. For example, the first stage for each participant is an arrest, containing the events "investigation and arrest; interrogation and booking," involving actors such as two uniformed officers, one supervisor and two booking/detention officers.

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[6] The study samples in the Phase II report contained 285 drug court participants and 194 traditional-adjudication offenders; the Phase III samples contained 279 drug court participants and 309 traditional adjudication offenders in comparison groups matched according to age, race, gender and criminal history.

[7] This one-year period coincides with the 12-month follow-up period of the Phase II recidivism study that examined re-arrests of offenders who were originally arrested for felony drug offenses between January 1997 and March 1998. For example, cost and re-arrest data for an individual arrested March 1998 was collected through March 1999.

1. Determination of Cost Factors

Most cost factors are determined through the use of Direct Resource Costing methods, typically arrived at by multiplying the cost determined for each activity or event (obtained through interviews with the appropriate agencies such as the Douglas County Attorney's Office, Omaha Police and Douglas County Sheriff's Departments, Douglas County District Court, etc.) by the time required for each. The costs for each stage are calculated by summing the costs for all associated transactions/events.

Where this approach was not possible, General Administrative Costing using pre-established unit or total administrative costs were used to calculate transaction costs.[8] Table 1. shows the major stages and events, the cost factors for each and provides an example of the total criminal justice system cost for one traditionally-adjudicated "business as usual" offender.

[8] In addition to the detailed cost information shown in Appendix A., a more complete description of the costing methodologies is provided in the Phase I and II evaluation reports.

Table 1.

Calculating the Cost of Criminal Justice System Involvement of a Traditional Adjudication Group Offender (2002 Dollars)*

Criminal Justice Event	Cost Factor	Number of occurrences / months / days	Cost of Event
Arrest	204.15	1	204.15
County Court Processing	417.07	1	417.07
District Court Processing			
Arraignment	63.13	2	126.26
Drug Court Petition	36.56		
Pre-trial Processing			
ordinary motions	34.00	2	68.00
motion to suppress	870.90		
plea in abatement	231.23		
pre-trial hearing	89.00	1	89.00
pre-trial plea proceeding	119.69		
Trial			
Jury	5,469.40		
bench	1,032.52		
Judgment and Sentencing	308.13	1	308.13
Other District Court Events			
appearance bond	19.93	2	39.86
affidavits	10.53	2	21.06
transcripts	3.45	1	3.45
court orders/rulings on motions	10.20	3	30.60
miscellaneous events	3.45	3	10.36

* Cost factor amounts are based on 1998 dollars used in the Phase II report adjusted for inflation based on the Consumer Price Index published by the U.S. Bureau of Labor Statistics.

Notes: Blank entries indicate that the event did not occur for this offender.

Table 1. (continued)

Calculating the Cost of Criminal Justice System Involvement of a Traditional Adjudication Group Offender (2002 Dollars)*

Criminal Justice Event	Cost Factor	Number of occurrences / months / days	Cost of Event
Drug Court (one month)			
Judicial monitoring and case management	112.24 per month		
Treatment	90.87 per month		
Total	203.11 per month		
Probation			
Regular	1.84 per day		
Intensive (ISP)	12.73 per day		
Jail Confinement	53.64 per day	251 days	13,463.36
Prison Incarceration			
NPCC	67.36 per day	293 days	19,735.79
SDCS	65.28 per day		
Omaha facility	45.74 per day		
Lincoln facility	66.51 per day		
Women's facility	79.49 per day		
Parole	6.72 per day		
Total Cost			**34,517.10**

* Cost factor amounts are based on 1998 dollars used in the Phase II report adjusted for inflation based on the Consumer Price Index published by the U.S. Bureau of Labor Statistics.

Notes: Blank entries indicate that the event did not occur for this offender.
The Drug Court treatment cost total includes BSA Region 6 treatment administration costs.

2. Participant Investment Costs and Savings

To determine the average "up front" investment cost per participant in each of the drug-court and non-drug court comparison groups, the total event costs for each participant in each group was summed and divided by the number of participants in each sub-sample.[9] The average event costs and total average criminal justice costs per participant are shown in Table 2.

Table 2.

Drug Court and Traditional Adjudication Average Investment Costs per Participant (2002 Dollars)*

Investment Cost	Drug Court	Traditional Adjudication	Benefit / Cost (difference)
Total Criminal Justice Cost	4,803.07	9,224.45	- 4,421.38
General Cost Categories			
Arrest	204.15	204.15	0
County Court	246.29	417.07	- 170.78
District Court	411.26	830.27	- 419.01
Drug Court			
Judicial monitoring, case management	1,125.60	0	1,125.60
Treatment	825.41	0	825.41
Total	1,951.01	0	1,951.01
Probation	261.69	207.79	53.90
Jail Confinement	1,541.93	3,615.59	- 2,073.66
Prison	182.95	3,935.09	- 3,752.14
Parole	3.79	14.49	- 10.70

* These estimates are based on 1998 dollars adjusted for inflation based on the Consumer Price Index published by the U.S. Bureau of Labor Statistics.

The average investment cost for drug court participants is $4,803.07 compared to $9,224.45 for a traditionally adjudicated "business as usual" offender, or an average benefit/cost difference of $4,421.38 *less* for each drug court participant. The total annual investment cost savings for drug court participants compared to non-drug court offenders

[9] In the Phase II study, cost-benefit sub-samples **(**drug court n=71, non-drug court n=64) were drawn from the larger samples selected for the recidivism study.

is $1,326,414 ($4,421.38 X 300),[10] not including the cost savings from reduced recidivism outcomes which are discussed in section B.

3. Criminal Justice System Investment Costs and Savings

Table 3. shows that the total investment cost savings of the drug court program vary by stage and are not shared equally among the agencies involved in processing drug offenders. By far the greatest "up front" savings during year-1 is realized in reduced jail confinement and prison incarceration costs, followed by some additional savings in direct processing costs for the agencies involved at both the county and district court levels (e.g., Omaha Police Department, Douglas County Sheriff's Department, city attorney, public defender, county attorney, Douglas County Court and Douglas County District Court, etc.).

[10] Three-hundred (300) annual drug-court participants is used as a standardized average number (near the actual number of participants per year) to allow easy comparisons and calculations between groups and with other drug-court jurisdictions in the U.S. For example, in the time-frame of the Phase II study between January 1997 and March 1998, 392 offenders entered drug court in the original sampling frame.

Table 3.

Annual Drug Court and Traditional Adjudication Investment Costs/Savings Per 300 Participants (2002 Dollars)*

Investment Cost	Drug Court	Traditional Adjudication	Benefit / Cost (difference)
Total Criminal Justice Cost	$1,440,921	$2,767,335	- $1,326,414
General Cost Categories/Stages			
Arrest	61,245	61,245	0
County Court	73,887	125,121	- 51,234
District Court	123,378	249,081	- 125,703
Drug Court			
Judicial monitoring, case management	337,680	0	337,680
Treatment	247,623	0	247,623
Total	585,303	0	585,303
Probation	78,507	62,337	16,170
Jail Confinement	462,579	1,084,677	- 622,098
Prison	54,885	1,180,527	- 1,125,642
Parole	1,137	4,347	- 3,210

*These estimates are based on 1998 dollars adjusted for inflation based on the Consumer Price Index published by the U.S. Bureau of Labor Statistics.

The annual estimated cost of confining drug court participants in the Douglas County Jail during year-1 is $462,579 compared to $1,084,677 for traditionally adjudicated and sentenced drug offenders, or a savings of $622,098. The savings for post-conviction incarceration in Nebraska Corrections Department facilities are even greater as drug court participants annually cost $54,885, while traditionally adjudicated offenders cost $1,180,527, or a savings of $1,125,642.

The Douglas County Court and agencies involved in preliminary hearings and prosecuting drug offenders at the county court level have a combined direct processing savings of $51,234. Similarly, the total costs for the District Court (not including the cost of the drug court program itself for judicial monitoring, case management and treatment) and the agencies involved with prosecuting and sentencing at the district court level are

$125,703 *less* for processing drug court participants compared to an equal number of "business as usual" felony drug offenders.[11]

When all costs are included for both comparison groups, the total annual investment costs for the "alternative-to-incarceration" drug court treatment method (including drug court program costs) are $1,440,921, compared with $2,767,335 for the "business as usual" adjudication, sentencing and incarceration method during year-1, or an estimated annual investment cost savings of $1,326,414.[12] While these figures do not address the comparative effectiveness of either "treatment" in reducing drug use and criminal activity, analyses of recidivism (re-arrest) outcomes and associated costs/savings are addressed in the following section.

B. OUTCOME COSTS

The transactions discussed above are considered "up-front" or investment costs incurred by either the drug court or traditional adjudication and sanctioning processes, as a result of the original (presenting) arrest/case which made participants eligible for inclusion in this study. Both of these processes lead to "outcomes" that can be measured in terms of further transactions (and associated costs/savings) due to recidivism.

The same type of outcome events (that come after the drug court eligible arrest, except those due to this initial arrest) are possible for both drug court and non-drug court

[11] Savings for law enforcement (Omaha Police and Douglas County Sheriff Departments) due to the drug court program are realized in less time and cost for investigation, preparation and testimony at hearings and trials, as well as guarding and transporting prisoners for court. (As a result of lower recidivism rates for drug court participants, additional savings for law enforcement also accrue as outcome savings due to less future drug and other criminal activity.)

[12] It should be noted that cost savings may not be reflected in changes in the drug court or other agency budgets, but may be reflected as opportunity cost savings. These savings likely are used to re-allocate scarce resources to areas needing heightened attention, such as the opportunity to make additional jail or prison beds available for violent and more-serious offenders instead of non-violent drug offenders.

participants. These outcome transactions may occur during both the year-1 investment time-period or during the 24-month outcome cost follow-up period.

The estimated average outcome costs for misdemeanor and felony re-arrests and the subsequent criminal justice processing are shown in Table 4. A conservative estimate of the total transaction costs for outcome felonies assumes they are, on average, the same as the total costs for the original felony drug-related offense for traditionally-adjudicated participants, or $9,224.25.[13]

Table 4.

Average Outcome Transaction Costs for Drug Court and Non-Drug Court Participants (2002 Dollars)*

Outcome Cost	Misdemeanor	Felony
Total Criminal Justice Cost	2,622.19	9,224.45
General Cost Categories		
Arrest	204.15	204.15
County Court	625.60	417.07
District Court		830.27
Probation	225.16	207.79
Jail Confinement	1,567.28	3,615.59
Prison		3,935.09
Parole		14.49

* These estimates are based on 1998 dollars adjusted for inflation based on the Consumer Price Index published by the U.S. Bureau of Labor Statistics.

Misdemeanor costs are similarly estimated based on investment cost factors for arrest, county court processing, probation and jail confinement, adjusted according to additional information on misdemeanor processing and outcomes obtained from

[13] It is likely that total transaction costs for subsequent felony arrests (about 75% of which were also drug or drug-related offenses) and traditional criminal justice system sanctioning are higher, on average, than the costs due to the initial drug court-eligible felony arrest, whether for drug court or non-drug court participants. Similarly, we assume that the rates of charges filed and convictions obtained per re-arrests are the same for both groups, despite the likelihood that (as is the case with re-arrest rates discussed below) they are lower for drug court participants.

interviews with court administrators and prosecutors. Total misdemeanor outcome costs per re-arrest are estimated to be $2,622.19, based on an average likely sentence (including cases that did not result in conviction) of 30 days in jail and 6 months probation.[14]

As Table 5. demonstrates, recidivism outcomes for the DCDC comparison group are significantly better than those in the traditional adjudication group.[15] Drug court participants averaged 1.23 new misdemeanor and felony arrests during the 24-month follow-up period compared to 1.87 for non-drug court offenders, or a difference of -.64 fewer new arrests.[16] Based on 300 participants per comparison group, those assigned to drug court accounted for a total of 369 new arrests (258 misdemeanor and 111 felony), while non-participants were arrested 561 times (390 misdemeanor and 171 felony), or a difference of –192 (-132 misdemeanor and –60 felony) fewer arrests.[17]

[14] Misdemeanor probation and incarceration sentence estimates are based on the average outcomes likely in 4 different sentencing scenarios for drug court-eligible offenders arrested for the following: a drug possession or DWI, a property crime, a violent crime or an "other" misdemeanor offense. Each of the offenders are assumed to have a typical criminal history for study participants of 1-2 prior felony arrests (none violent), one of which was a drug-related offense and 3-4 misdemeanor arrests, at least one of which was for drug possession or DWI.

[15] The Phase III evaluation shows that the recidivism differences for all new arrests and felony arrests are statistically significant at the $P \leq .05$ confidence level.

[16] It is interesting to note that this difference in re-arrests was virtually identical to the results of the Multnomah County (Portland, OR) study (Finigan and Carey, July 2003) where drug court participants were re-arrested an average of -.60 fewer times than non-drug court participants.

[17] Does not include arrests for failure to appear.

Table 5.

Annual Outcome Costs/Savings Based on 24-month Recidivism Rates

	Drug Court	Non-Drug Court	Recidivism Difference	Total Outcome Savings*
Misdemeanor Arrests (mean) number	(.86) 258	(1.30) 390	(-.44) -132	**$346,129**
Felony Arrests (mean) number	(.37) 111	(.57) 171	(-.20) -60	**$553,468**
Total Misdemeanor and Felony Arrests (mean) number	**(1.23) 369**	**(1.87) 561**	**(-.64) -192**	**$899,597**

* Per 300 drug court participants

When outcome transaction costs are applied to the differing recidivism rates, total outcome cost savings for drug court participants during the 2-year follow-up period are $899,597 (132 fewer misdemeanor arrests X $2,622.19 = $346,129) + (60 fewer felony arrests X $9,224.45 = $553,468). The average outcome savings per drug court participant is $2,998.65.

When total "up front" investment cost savings of $1,326,414 during year-1 (see previous section) are combined with 2-year outcome cost savings, total annual investment and outcome savings for the drug court are $2,226,011. While these cost savings are substantial, we now examine additional costs/savings that extend far beyond criminal justice system processing and sanctions.

C. SOCIETAL IMPACT COSTS/SAVINGS

A primary reason for conducting this study was the inclusion of important social or "societal-impact" cost/benefit measures that were not part of previous DCDC evaluation efforts. While our initial effort to collect drug court participant-change data to estimate societal impacts did not produce the desired results (see Appendix C), a re-

examination of the drug-court evaluation literature revealed a recently completed National Institute of Justice study detailing an innovative three-part model for drug court cost/benefit analyses.[18]

The first two parts, determining drug court investment and outcome costs/savings for taxpayers and the criminal justice system have been discussed in preceding sections. We now turn our attention to the third part, the use of crime victimization and cost data to measure additional DCDC societal and taxpayer costs/benefits. We begin with findings about the estimated costs of crime victimization in the U.S and describe how this data is used to determine social cost savings (if any) due to drug court participation.

1. Crime Victimization and Societal Costs/Benefits

The recent compilation of national crime victimization and related cost data provides evaluators and policy-makers with a new window through which to view the broader social impacts of public programs such as drug courts. To the extent that such programs contribute to a reduction in crime, they are also responsible for lowering associated crime-victim, societal and taxpayer costs.

Clearly, the impacts of crime on society are most closely and intensely felt by the victims of criminal acts, in terms of the pain, suffering, lost quality of life and the personal "out-of-pocket" monetary and property losses that result. Crime also exacts broader societal costs such as the enormous public expenses for victim services, disability and income-support transfer payments, as well as medical and mental health treatment. Finally, other important societal impacts are reflected in higher property, automobile,

[18] "A Detailed Cost Analysis in a Mature Drug Court Setting: A Cost-Benefit Evaluation of the Multnomah County [Portland, Oregon] Drug Court," prepared for the National Institute of Justice by Dr. Michael Finigan and Dr. Shannon Carey (July, 2003).

personal-injury, liability and medical insurance premiums which are passed on to all consumers.

Each year in the U.S., over 49 million personal crime victimizations cost victims an estimated $451 billion ($419 billion for violent crime [including drunk driving] and $32 billion for property crime). Costs for individual victimizations vary greatly depending on the type and severity of the crime, ranging from an average of $370 for each larceny or attempted theft to $3,180,000 for fatal DWI victimizations.[19]

Table 6. provides a summary of the estimated number of annual victimizations, average tangible costs (productivity/lost wages, medical care, mental-health care, police and fire services, social/victim services and property losses), average intangible costs (pain, suffering and lost quality of life) and total aggregate costs for each violent and property crime category. Comprehensive breakdowns of the categories of victimizations, losses per criminal victimization and annual losses in the U.S. are provided in the tables in Appendix B.

[19] From "Victim Costs and Consequences: A New Look" by Ted Miller et al, a research report prepared for the National Institute of Justice (1996).

Table 6.
Annual Victimization Costs in U.S. (1993 dollars)*

	Total # Victimizations**	Tangible Costs per Victimization	Intangible Costs per Victimization (Quality of Life)	Total Costs per Victimization	Total Aggregate Victim Costs (Billions)
Violent Crime					
Assault/ Attempt	9,906,000	$1,600	$7,800	$9,400	$93.0
Rape/Sexual Assault	1,467,000	5,100	81,400	87,000	36.0
Robbery /Attempt	1,351,000	2,300	5,700	8,000	11.0
Child Abuse	926,000	8,000	52,000	60,000	56.0
DWI (non-fatal injury)	509,000	22,300	48,400	71,000	36.0
Fatal Crimes	31,000	1,000,000	2,000,000	3,000,000	93.0
Arson (non-fatal injury)	15,000	49,000	153,000	202,000	3.0
Sub-total	**14,205,000**				**$419.0 B**
Property Crime					
Larceny/ Attempt	25,012,000	370	0	370	9.0
Burglary /Attempt	6,321,000	1,100	300	1,400	9.0
Vehicle Theft /Attempt	1,813,000	3,500	300	3,800	7.0
DWI (no injury)	1,774,000	1,300	1,400	2,700	5.0
Arson (no injury)	122,000	16,000	500	16,000	2.0
Sub-total	**35,042,000**				**$32.0 B**
Total	**49,247,000**				**$451.0 B**

* Totals may not add due to rounding.

** Estimates of crime victimizations from the National Institute of Justice are based on FBI Uniform Crime Report (UCR) and National Crime Victimization Survey (NCVS) data.

Dividing the total annual victimization costs for violent crimes ($419 billion) by the total number of violent-crime victimizations (14,205,000) reveals that the average estimated cost per violent victimization in the U.S. is $29,497. By comparison, the

average property victimization cost is about $913 ($32.0 billion divided by 35,042,000 property victimizations).

2. Victimization Cost Savings Due to Reduced Recidivism

Applying the average violent and property crime victimization costs to the 24-month recidivism findings for drug court and traditionally-adjudicated study participants allows us to estimate the annual victimization cost savings resulting from reduced criminal activity due to drug court participation.[20] While measurement of recidivism does not guarantee that an actual victimization occurred for every re-arrest, findings from other studies about drug-related criminal activity offsets this concern.

Recent estimates based on interviews with offenders and other data are that active drug offenders and addicts commit as many as 100 property and violent crimes per year, the vast majority of which do not result in arrest.[21] While offenders in our study likely did not commit this number of crimes per year, we assume that, on average, at least one property or violent victimization occurred for every property or violent crime re-arrest of drug court and non-drug court participants. Table 7. shows the re-arrest and estimated victimization differences by type of crime for drug court and non-drug court participants.

[20] As in the Multnomah County drug court study cited earlier, this estimate assumes the average local victimization costs [in Omaha and Douglas County] are about the same as national averages.
[21] The study "Behind Bars: Substance Abuse and America's Prison Population" by Steven Belenko et al, National Center on Addiction and Substance Abuse (1998), found that active drug offenders and addicts annually commit between 89 and 191 property and violent crimes.

Table 7.

Re-arrest and Victimization Differences for Violent and Property Crimes (300 Participants Per Group)

	Drug Court Re-Arrests Number (Percent)	Non-Drug Court Re-Arrests Number (Percent)	Victimization Difference
Violent Crimes			
Violent	50 (13.6%)	92 (16.5%)	-42
DWI (with injury)	11 (3.0%)	7 (1.2%)	+4
Sub-total	**61 (16.6%)**	**99 (17.7%)**	**-38**
Property Crimes			
Property	84 (22.7%)	141 (25.1%)	-57
Other (with victim)	50 (13.6%)	77 (13.7%)	-27
DWI (without injury)	39 (10.6%)	26 (4.6%)	+13
Sub-total	**173 (46.9%)**	**244 (43.4%)**	**-71**
"Victimless" and Other Crimes			
Drug	84 (22.7%)	141 (25.1%)	-57 (Re-Arrests)
Other Victimless	51 (13.8%)	77 (13.7%)	-26 (Re-Arrests)
Sub-total	**135 (36.5%)**	**218 (38.8%)**	**-83 (Re-Arrests)**
Total	**369 (100.0%)**	**561 (99.9%)***	**-192 (Re-Arrests)**
Total (not including drug/other victimless)	**234 (63.5%)**	**343 (61.1%)**	**-109**

* Does not equal 100.0% due to rounding.

Out of the total of 930 re-arrests of study participants in the comparison groups (300 participants per group) during the 24-month follow-up period, drug court participants were re-arrested a total of -192 fewer times. Drug court participants had –38 fewer arrests for violent crimes (despite having 4 more arrests for DWI's that resulted in injury), -73 fewer property crime arrests and -83 fewer arrests for drug offenses or other "victimless" crimes (such as prostitution).[22]

[22] Estimates of violent, property and "other" crimes are based on the actual percentages of misdemeanor and felony first arrests (re-arrests) for each group in the Phase III study. The study assumes that 50% of arrests for "other" crimes were victimless and 50% had victims.

Omitting the arrests for drug and other "victimless" crimes, the lower re-arrest rates of drug court participants equate to victimization cost savings of $1,120,886 for violent crimes (-38 X $29,497) and $64,823 for property crimes (-71 X $913) , or a total savings of $1,174,809.[23] The average victimization cost savings per drug court participant is $3,916.03.

D. TOTAL DRUG COURT COSTS/SAVINGS

When total investment, outcome and societal-impact (victimization) cost savings are combined, the total annual savings due to drug court are $3,400,820, or $11,336 per drug court participant.[24] Table 8. below presents a summary of the total drug court savings and average savings per drug court participant at each stage of the cost/benefit analysis.

Table 8.

Total Annual Drug Court Investment, Outcome and Victimization Cost Savings

	Savings Per Drug Court Participant	Total Annual Savings (Per 300 Participants)
Investment Cost Savings	**$4,421**	**$1,326,414**
Outcome Cost Savings	**2,999**	**899,597**
Societal Impact Cost Savings	**3,916**	**1,174,809**
Participant Change Cost Savings	**N/A**	**N/A**
Total Cost Savings	**$11,336**	**$3,400,800**

[23] These total savings are after a deduction of $10,900 (109 X $100) for initial police response and investigation costs already included in investment and outcome costs.

[24] Total cost savings are shown as "annual" even though outcome and victimization cost savings are calculated based on recidivism over a 24-month period. For every year of program operation, outcome and victimization savings from the 2nd year are adding to the preceding year's investment cost savings.

These totals do not include other potentially substantial cost savings to taxpayers due to drug court participant and behavioral (non-criminal) change. Examples of such societal-impact savings are decreased public medical costs due to drug free births or the early detection and treatment of infectious diseases and/or mental health problems.

Other drug court cost/benefit studies have similarly demonstrated taxpayer savings from the gainful employment and educational improvements attained by program participants.[25] Appendix C contains a description of our initial efforts to collect participant change data, a brief discussion of findings from drug court evaluations in other jurisdictions, as well as recommendations for collecting drug court participant-change information in the future.

[25] "Cost Benefits/Costs Avoided Reported by Drug Court Programs (rev.)," OJP Drug Court Clearinghouse, Office of Justice Programs, U.S. Department of Justice, September 16, 2003.

Appendix A.

Appendix B.

Appendix C.
Drug Court Participant and Behavioral Change Costs/Benefits

The initial drug court literature review identified numerous measures of social cost/benefit that have been used in drug court evaluations in other U.S. jurisdictions. Fifteen (15) such social cost/benefit variables were incorporated into the original study design and data collection instrument for the current DCDC evaluation effort.

These variables focus mainly on changes in drug court participants and social behavior (non-criminal) during and hopefully long-after their participation in the drug court program. For example, a drug court participant becoming employed or obtaining "a raise" in income would likely result in an increase in local and other tax-bases, as well as additional taxpayer savings due to less reliance on social welfare programs or other government transfer payments.

Similarly, drug court evaluations in other jurisdictions have documented participant changes occurring during and as a result of the drug court program, such as improvements in education, the formation/retention of stable personal/family relationships (including child custody) and treatment of medical and mental health conditions, which have measurable impacts on taxpayers and the larger society.

As part of the current drug court screening process and program participant monitoring, much of this type of information was thought to be collected and recorded in client/case files and the new Douglas County Drug Court case management and information system (MIS). Discussions with the former drug court coordinator (no longer with the DCDC) and a review of the MIS prior to the start of the study indicated to researchers that the necessary data could be located and collected from the drug court MIS or, if necessary, from client/participant paper files.

Soon after the data collection process began however, it became evident that data for many of the social cost/benefit variables had not been regularly entered into the drug court computer system. Once data collection had been completed, subsequent review confirmed that very limited amounts of information had been gathered from the MIS (including a sample inspection of 65 paper files). This insufficiency of data precluded any meaningful social-impact findings for the 253 drug court participants in the study.

Table 9-C. shows the results from the major social-impact areas investigated in this and other drug court evaluations, national findings and research questions currently being investigated in other drug courts, relevant findings from previous DCDC evaluations and process interviews, and a summary of current information and data needs to measure drug court participant change. This information was passed on to the current drug court coordinator and drug court MIS consultants for use in updating the procedures, data needs and system components of the DCDC MIS.

Table 9-C.

Cost/Benefit Variable	2001 Felony Drug Court Data n=253	Drug Court Clearinghouse 2003 National Findings	Douglas County Drug Court Previous Findings and Estimates	Current Information and Data Needs
Criminal Justice System 1. Jail Days Savings 2. Jail Cost Savings 3. Adjudication Costs 4. Probation/Parole 5. Recidivism Costs	N/A	1. In 2000, adult drug courts showed a median savings of 10,133 jail/prison days. 2. The annual per program jail-cost savings was $903,700.	In 1999, the average DCDC case saved $4,006 compared with traditional adjudication (saving $1,879 in jail and $3,400 in prison confinement costs). The estimated total annual savings for the DCDC was $1,141,710 compared with traditional adjudication (including $535,515 in jail and $969,000 in prison confinement savings).	Adjust savings for inflation. Calculate jail/prison days, adjudication, probation/parole and recidivism cost savings.

Employment 1. Employment Status	1. 64.1% employed, 35.5% unemployed (220 valid cases)	1. Less than 50% of drug court participants were employed full or part-time at time of program entry; many were on public assistance.	1. All DCDC participants must be working or attending school full-time for last 6 months of program.	1. When did employment occur? What proportion were employed full or part-time?
2. Change in Employment Status	2. 10 valid/243 missing	2. Over 90% were employed at graduation.	2. Most (more than 80%) are estimated to meet employment criteria.	2. What proportion were employed at graduation? What changes occurred in employment status during program?
3. Income	3. Monthly income range $0 to $8,333 (59 valid cases)	3. What is national average monthly income? How many dollars of income/other taxes do participants pay? How many taxpayer dollars are saved when participants move from public assistance to employment?	3. Estimated that almost all participants are simply maintaining their jobs and income (at best).	3. Compute average monthly income and estimate income/other taxes paid and taxpayer savings moving from welfare to work. (Change in income 9 valid/244 missing)
4. Benefits	4. 10 valid/243 missing	4. What proportion of participants nationally had or obtained health insurance (from employment or public sector) during the program?	4. Estimated that only 2-5% of participants had any form of health insurance during the program.	4. What proportion of full-time employees had health insurance?
Stable Relationships/Child Custody 1. Marital Status	1. 22.1% (48) of clients were married; 77.9% (169) were not.	1. What are findings from other drug court studies of impact of maintaining/forming stable relationships?	1. Policy of DCDC is to discourage participants from entering relationships for 5 years during recovery.	1. What proportion formed or ended stable relationships during program? 0 valid/253 missing
2. Custody of Dependent Children	2. 47 clients (54%) had dependent children; 40 (46%) did not (87 valid cases).	2. Over 3,500 dc participants regained custody of minor children (with relatives or in foster care) as a result of attending drug court. Buffalo dc showed returning 30 children to parents resulted in $488,010 in foster-care payment savings to taxpayers in 1999.	2. DCDC estimates 60% of participants might be in jeopardy of a child custody investigation by child protective services. About 5% might be in process of losing custody; about 2% actually do.	2. How many parents regained or lost custody during drug court? How many regained custody from foster care and what are savings to taxpayers? 0 valid/253 missing
3. Child support and other income	3. 0 valid/253 missing	3. Over 4,500 participants in arrears in child support payments became current. In Buffalo, participants' arrearage payments for 16 children totaled $96,000.	3. Payments by participants not investigated; increase in child support payments covered as "other" income.	3. 3 valid/250 missing

Education 1. Status	1. 43.6% had a high-school diploma/GED; 33.1% had no diploma/GED; 21.1 % had some college/vocational school; 2.1% had college degree. (236 valid cases)	1. What are national figures for average income based on educational level?	1. DCDC policy is that all participants must have GED upon graduation. Also participants must be working, going to school or some combination to reach educational goals.	1. What changes in educational status occurred during drug court? (9 valid [6 no change]) What are corresponding changes in income and taxes paid by participants?
Medical and Mental Health 1. Medical Treatment	1. 26.5% (22) were treated for an infectious disease or other medical problem during the program. (83 valid cases)	1. Data just beginning to be compiled regarding frequency of referral for treatment of infectious disease/other problems identified during screening. Public health savings are expected to be substantial.	1. DCDC estimates that a large proportion (perhaps 70%) of participants have serious medical conditions that are identified during screening, including: Hepatitis, STD's, asthma, tooth decay, liver/brain dysfunctions.	1. What are estimates of total public health costs for participants over a lifetime, if medical treatment needs were not addressed?
2. Drug-Free Births	2. 0 valid cases/253 missing	2. Over 2000 drug-free babies have been born to participants. Estimated care and treatment costs for drug addicted babies are $250,000 for first year, with an additional $750,000 for each child by age 18.	2. DCDC reports 46 drug-free births since program inception in April, 1997.	2. Estimate public health and other savings to taxpayers.
3. Mental Health Treatment	3. 56 (67.5%) of participants had mental health treatment prior to drug court (83 valid cases) 27 (32.9%) received mental health treatment during drug court (82 valid cases)	3. What are national estimates of public health and other related social costs due to untreated mental health problems?	3. DCDC estimates less than 2% of clients who need additional mental health treatment (beyond addiction treatment) receive that treatment during the program. What is addiction syndrome vs. other problem?	3. What are local estimates of public health and other related social costs due to untreated mental health problems?

During our review of the computerized MIS prior to the initiation of data collection, we noted that the system has the capacity to collect necessary data in the most important areas of participant change. Our recommendations for future collection and use of participant data are that baseline data for the variables in Table 9-C. be collected for each drug court participant, at a minimum, during the initial screening process and collected again at the time of exit from the program.

As it is well understood that the constraints of time, personnel and resources to accomplish these tasks are limited, the list of variables should be reviewed again (if these changes in day-to-day participant data collection procedures have not already been implemented) and priorities should be established to insure that the most important information is collected for all program participants. Ongoing reviews of drug court cost/benefit analyses in other jurisdictions should guide the DCDC in cost/benefit data collection and future reporting efforts.[26]

[26] See "Evaluating Recovery Services: The California Drug and Alcohol Treatment Assessment (CALDATA)," by Dean R. Gerstein et al, National Opinion Research Center, University of Chicago (1994); "Societal Outcomes and Cost Savings of Drug and Alcohol Treatment in the State of Oregon," by Michael Finigan, Oregon Department of Human Resources (2001); "Kentucky Drug Court Outcome Evaluation; Behavior, Costs and Avoided Costs to Society," by T.K. Logan et al, Center on Drug and Alcohol Research, University of Kentucky (2001); "Assessing the Costs and Benefits Accruing to the Public from a Graduated Sanctions Program for Drug-Using Defendants," by John Roman and Adele Harrell, Law and Policy, Volume 23, Issue 2 (2001).