Washington State Institute for Public Policy Benefit-Cost Results

## Drug courts Adult Criminal Justice

Benefit-cost estimates updated December 2023. Literature review updated August 2016.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For

more detail on our methods, see our Technical Documentation.

Program Description: Drug courts are an alternative to traditional criminal justice system processing for the sentencing and supervision of eligible drug-addicted persons. Drug courts share the primary goals of reducing criminal recidivism and substance abuse among its participants. Each drug court is unique in operations, method, and length of treatment. Drug courts typically use a combination of judicial oversight, supervision, drug testing, substance abuse treatment, and sanctions and incentives in an attempt to modify the behavior of drug-involved defendants. Length of drug court participation varied from 12 to 26 months in these studies.

Through a meta-regression analysis, we analyzed the impact of follow-up period, pre/post adjudication court condition, and length of treatment, but we found no statistically significant differences in recidivism due to these variables.

Benefit-Cost Summary Statistics Per Participant							
Benefits to:							
Taxpayers	\$5,746	Benefit to cost ratio	\$2.82				
Participants	\$0	Benefits minus costs	\$10,567				
Others	\$10,654	Chance the program will produce					
Indirect	(\$29)	benefits greater than the costs	100%				
Total benefits	\$16,371						
Net program cost	(\$5,803)						
Benefits minus cost	\$10,567						

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2022). The chance the benefits exceed the costs are derived from a Monte Carlo risk analysis. The details on this, as well as the economic discount rates and other relevant parameters are described in our Technical Documentation.

Meta-Analysis of Program Effects											
Outcomes measured	age e	No. of effect	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis					Unadjusted effect size (random effects		
		sizes		First time	ES is estimation	ated	ated Second time ES is estimated	S	model)		
				ES	SE	Age	ES	SE	Age	ES	p-value
Crime	32	72	29452	-0.255	0.025	34	-0.255	0.025	44	-0.281	0.001

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our Technical Documentation.

Detailed Monetary Benefit Estimates Per Participant									
Affected outcome:	Resulting benefits: <sup>1</sup>	Benefits accrue to:							
		Taxpayers	Participants	Others <sup>2</sup>	Indirect <sup>3</sup>	Total			
Crime	Criminal justice system	\$5,746	\$0	\$10,654	\$2,873	\$19,272			
Program cost	Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$2,902)	(\$2,902)			
Totals		\$5,746	\$0	\$10,654	(\$29)	\$16,371			

<sup>1</sup>In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced crime. These associated measures provide a more complete picture of the detailed costs and benefits of the program.

<sup>2</sup>"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.

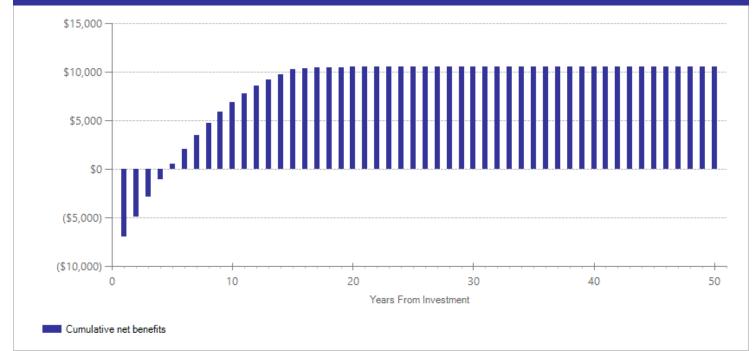
<sup>3</sup>"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Annual Cost Estimates Per Participant								
	Annual cost	Year dollars	Summary					
Program costs Comparison costs	\$11,227 \$7,335	2003 2003	Present value of net program costs (in 2022 dollars) Cost range (+ or -)	(\$5,803) 30%				

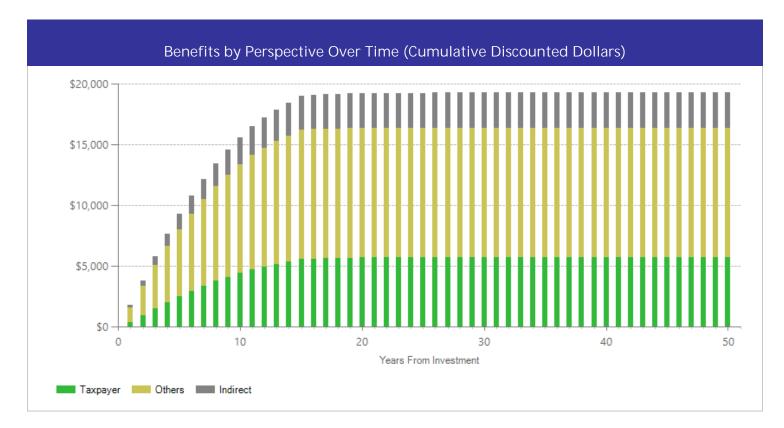
Per-participant cost estimate from Barnoski, R., & Aos, S. (2003). Washington State's drug courts for adult defendants: Outcome evaluation and cost-benefit analysis (Doc. No. 03-03-1201). Olympia: Washington State Institute for Public Policy

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty in the cost estimate; more detail can be found in our Technical Documentation.

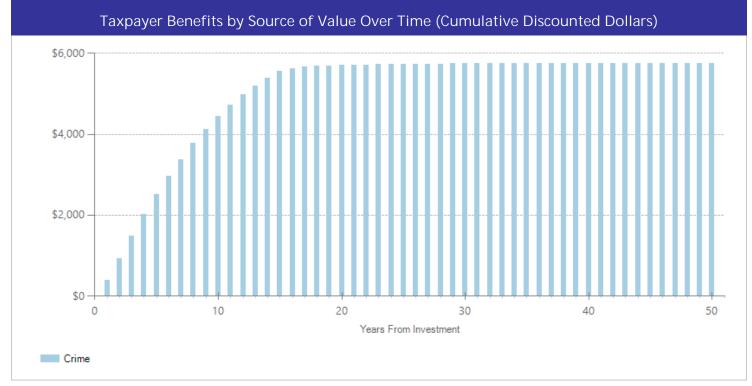
## Benefits Minus Costs Over Time (Cumulative Discounted Dollars)



The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in discounted dollars. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost of the program up to that point in time. The program breaks even when the dollars reach \$0. At this point, the total benefits to participants, taxpayers, and others, are equal to the cost of the program. If the dollars are above \$0, the benefits of the program exceed the initial investment.



The graph above illustrates the breakdown of the estimated cumulative benefits (not including program costs) per-participant for the first fifty years beyond the initial investment in the program. These cash flows provide a breakdown of the classification of dollars over time into four perspectives: taxpayer, participant, others, and indirect. "Taxpayers" includes expected savings to government and expected increases in tax revenue. "Participants" includes expected increases in earnings and expenditures for items such as health care and college tuition. "Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance. "Indirect benefits" includes estimates of the changes in the value of a statistical life and changes in the deadweight costs of taxation. If a section of the bar is below the \$0 line, the program is creating a negative benefit, meaning a loss of value from that perspective.



The graph above focuses on the subset of estimated cumulative benefits that accrue to taxpayers. The cash flows are divided into the source of the value.

## Citations Used in the Meta-Analysis

- Barnoski, R., & Aos, S. (2003). Washington State's drug courts for adult defendants: Outcome evaluation and cost-benefit analysis (Document No. 03-03-1201). Olympia: Washington State Institute for Public Policy.
- Bavon, A. (2001). The effect of the Tarrant County drug court project on recidivism. Evaluation and Program Planning, 24(1), 13-24.
- Bell, M.M. (1998). King County Drug Court evaluation: Final report. Seattle, WA: Author.
- Brewster, M.P. (2001). An evaluation of the Chester County (PA) Drug Court Program. Journal of Drug Issues, 31(1), 177-206.
- Brown, R. (2011). Drug Court effectiveness: A matched cohort study in the Dane County Drug Treatment Court. Journal of Offender Rehabilitation, 50(4), 191-201.
- Carey, S.M., & Finigan, M.W. (2007). Indiana drug courts: Monroe County drug treatment court: Process, outcome, and cost evaluation. Portland, OR: NPC Research
- Carey, S.M., Lucas, L.M., Waller, M.S., Lambarth, C.H., Linhares, R., Weller, J.M., & Finigan, M.W. (2009). Vermont drug courts: Rutland County adult drug court process, outcome, and cost evaluation (Final Report). Portland, OR: NPC Research.
- Cheesman, F.L.II., Graves, S.E., Holt, K., Kunkel, T.L., Lee, C.G., & White, M.T. (2016). Drug court effectiveness and efficiency: Findings for Virginia. Alcoholism Treatment Quarterly, 34(2), 143-169.
- Crumpton, D., Brekhus, J., Weller, J., & Finigan, M. (2003). Cost analysis of Baltimore City, Maryland Drug Treatment Court. Portland, OR: NPC Research.
- Deschenes, E.P., Cresswell, L., Emami, V., Moreno, K., Klein, Z., & Condon, C. (2001). Success of drug courts: Process and outcome evaluations in Orange County, California (Final Report). Long Beach: California State University Long Beach.
- Einspruch, E.L., Jarvis, K.L, Waller, M.S., Mackin, J.R., Carey, S.M., Prins, C., & Officer, K. (2015). Randomized controlled trial of measure 57 intensive drug court for medium- to high-risk property offenders: process, interviews, costs, and outcomes. Portland, OR: NPC Research.
- Ericson, R., Welter, S., & Johnson, T. L. (1999). Evaluation of the Hennepin County Drug Court. Minneapolis: Minnesota Citizens Council on Crime & Justice.
- Fielding, J.E., Tye, G., Ogawa, P.L., Imam, I.J., & Long, A.M. (2002). Los Angeles County drug court programs: Initial results. *Journal of Substance Abuse Treatment, 23*(3), 217-224.
- Finigan, M.W., Carey, S.M., & Cox, A. (2007). The impact of a mature drug court over 10 years of operation: Recidivism and costs (Final Report). Portland, OR: NPC Research.

- Goldkamp, J.S., & Weiland, D. (1993). Assessing the impact of Dade County's Felony Drug Court: Final report. Philadelphia: Crime and Justice Research Institute.
- Goldkamp, J.S., Weiland, D., & Moore, J. (2001). The Philadelphia treatment court, its development and impact: The second phase (1998-2000). Philadelphia: Crime and Justice Research Institute.
- Goldkamp, J.S., White, M D., & Robinson, J.B. (2001). Do drug courts work? Getting inside the drug court black box. Journal of Drug Issues, 31(1), 27-72.
- Gottfredson, D.C., Coblentz, K., & Harmon, M.A. (1997). A short-term outcome evaluation of the Baltimore City Drug Treatment Court Program. Perspectives, Winter, 33-38.
- Gottfredson, D.C., Najaka, S.S., Kearley, B.W., & Rocha, C.M. (2006). Long-term effects of participation in the Baltimore City Drug Treatment Court: Results from an experimental study. *Journal of Experimental Criminology*, *2*(1), 67-98.
- Granfield, R., Eby, C., & Brewster, T. (1998). An examination of the Denver Drug Court: The impact of a treatment-oriented drug-offender system. Law & Policy, 20(2), 183-202.
- Harrell, A., Roman, J., & Sack, E. (2001). Drug court services for female offenders, 1996–1999: Evaluation of the Brooklyn Treatment Court. Washington, DC: The Urban Institute.
- Johnson, G.D., Formichella, C.M., & Bowers, D.A., Jr. (1998). Do drug courts work? An outcome evaluation of a promising program. *Journal of Applied Sociology*, *15*(1), 44-62.
- Kobus, K. (2009). Examining the impact of drug court participation for moderate and high risk offenders. Digital Scholarship@UNLV.
- Krebs, C.P., Lindquist, C.H., Koetse, W., Lattimore, P.K. (2007). Assessing the long-term impact of drug court participation with generalized estimating equations. *Drug and Alcohol Dependence*, *91*(1), 57-68.
- Latessa, E.J., Shaffer, D.K., & Lowenkamp C. (2002). Outcome evaluation of Ohio's drug court efforts: Final report. Cincinnati, OH: University of Cincinnati, Center for Criminal Justice Research, Division of Criminal Justice.
- Listwan, S.J., Borowiak, J., Latessa, E.J. (2008). An examination of Idaho's felony drug courts: Findings and recommendations. Kent, OH: Kent State University, Department of Justice Studies, Institute for the Study and Prevention of Violence.
- Listwan, S.J., & Latessa, E.J. (2003). The Kootenai and Ada County drug courts: Outcome evaluation findings (Final Report). Cincinnati: Center for Criminal Justice Research, University of Cincinnati.
- Listwan, S.J., Shaffer, D.K., & Latessa, E.J. (2001). The Erie County drug court: Outcome evaluation findings. Cincinnati, OH: University of Cincinnati, Center for Criminal Justice Research.
- Listwan, S.J., Shaffer, D.K., & Latessa, E.J. (2001). The Akron municipal drug court: Outcome evaluation findings. Cincinnati, OH: University of Cincinnati, Center for Criminal Justice Research.
- Listwan, S.J., Sundt, J.L., Holsinger, A.M., & Latessa, E.J. (2003). The effect of drug court programming on recidivism: The Cincinnati experience. Crime & Delinquency, 49(3), 389-411.
- Logan, T., Hoyt, W., & Leukefeld, C. (2001). Kentucky drug court outcome evaluation: Behaviors, costs, and avoided costs to society. Lexington: University of Kentucky, Center on Drug and Alcohol Research.
- Mackin, J.R., Carey, S.M., Finigan, M.W., Lucas, L.M., Strong, S.E., & Waller, M.S. (2008). Prince George's County Circuit Court Adult Drug Court Outcome and Cost Evaluation. NPC Research: Portland, OR.
- Mackin, J.R., Lucas, L.M., Lambarth, C.H., Waller, M.S., Herrera Allen, T., Carey, S.M., & Finigan, M.W. (2009). Wicomico County Circuit Court Adult Drug Treatment Court Program Outcome and Cost Evaluation. NPC Research: Portland, OR.
- Mackin, J.R., Carey, S.M., Finigan, M.W., Lucas, L.M., Strong, S.E., & Waller, M.S. (2008). Harford County District Court Adult Drug Court outcome and cost evaluation. Portland, OR: NPC Research.
- Mackin, J.R., Lucas, L.M., Lambarth, C.H., Waller, M.S., Carey, S.M., & Finigan, M.W. (2009). Baltimore City Circuit Court Adult Drug Treatment Court and Felony Diversion Initiative: Outcome and cost evaluation final report. NPC Research: Portland, OR.
- Mackin, J.R., Lucas, L.M., Lambarth, C.H., Waller, M.S., Herrera Allen, T., Carey, S.M., & Finigan, M.W. (2010). Howard County District Court Drug Treatment Court Program Outcome and Cost Evaluation. NPC Research: Portland, OR.
- Mackin, J.R., Lucas, L.M., Lambarth, C.H., Waller, M.S., Herrera Allen, T., Carey, S M., & Finigan, M.W. (2010). Montgomery County Adult Drug Court Outcome and Cost Evaluation. NPC Research: Portland, OR.
- Mahaffy, K.A. (2006). Lancaster County Court of Common Pleas adult drug court: Outcome evaluation. Millersville, PA: Millersville University, Department of Sociology/Anthropology.
- Marchand, G., Waller, M.S., & Carey, S.M. (2006). Barry County Adult Drug Court outcome and cost evaluation (Final Report). Portland, OR: NPC Research.
- Marchand, G., Waller, M., & Carey, S.M. (2006). Kalamazoo County Adult Drug Treatment Court outcome and cost evaluation (Final Report). Portland, OR: NPC Research.
- Martin, T.J., Spohn, C.C., Piper, R.K., & Frenzel-Davis, E. (2001). Phase III Douglas County Drug Court evaluation: Final report. Omaha, NE: Institute for Social and Economic Development.
- Martinez, A.I., & Eisenberg, M. (2003). Initial process and outcome evaluation of drug courts in Texas. Austin, TX: Criminal Justice Policy Council.
- Mayfield, J., Estee, S., Black, C., & Felver, B. (2013). Drug court outcomes: Outcomes of adult defendants admitted to drug courts funded by the Washington State Criminal Justice Treatment account. Olympia, WA: Washington State Dept. of Social & Health Services, Research & Data Analysis Division.
- McNeece, C.A., & Byers, J.B. (1995). Hillsborough County Drug Court: Two-year (1995) follow-up study. Tallahassee: Florida State University, School of Social Work, Institute for Health and Human Services Research.
- Miethe, T.D., Lu, H., & Reese, E. (2000). Reintegrative shaming and recidivism risks in drug court: Explanations for some unexpected findings. Crime & Delinquency, 46(4), 522-541.
- Rempel, M., Green, M., & Kralstein, D. (2012). The impact of adult drug courts on crime and incarceration: Findings from a multi-site quasi-experimental design. *Journal of Experimental Criminology. Advance online publication. DOI: 10.1007/s11292-012-9143-2.*
- Shanahan, M., Lancsar, E., Haas, M., Lind, B., Weatherburn, D., & Chen, S. (2004). Cost-effectiveness analysis of the New South Wales Adult Drug Court program. *Evaluation Review*, 28(1), 3-27.
- Somers, J.M., Currie, L., Moniruzzaman, A., Eiboff, F., & Patterson, M. (2012). Drug treatment court of Vancouver: An empirical evaluation of recidivism. International Journal of Drug Policy, 230(5), 393-400.

- Spohn, C., Piper, R.K., Martin, T., & Frenzel, E.D. (2001). Drug courts and recidivism: The results of an evaluation using two comparison groups and multiple indicators of recidivism. *Journal of Drug Issues*, *31*(1), 149-176.
- Stageberg, P., Wilson, B., & Moore, R.G. (2001). Final report on the Polk County Adult Drug Court. Des Moines: Iowa Department of Human Rights, Division of Criminal and Juvenile Justice Planning.
- Truitt, L., Rhodes, W.M., Hoffman, N.G., Seeherman, A.M., Jalbert, S. K., Kane, M., . . . Finn, P. (2000). *Phase I: Case studies and impact evaluations of Escambia County (Pensacola), Florida and Jackson County (Kansas City), Missouri drug courts.* Cambridge, MA: Abt Associates.
- Turner, S., Greenwood, P., Fain, T., & Deschenes, E. (1999). Perceptions of drug court: How offenders view ease of program completion, strengths and weaknesses, and the impact on their lives. *National Drug Court Institute Review, 2*(1), 61-86.

Utah Substance Abuse and Anti-Violence Coordinating Council. (2001). Salt Lake County Drug Court outcome evaluation. Salt Lake City, UT: Author.

Vito, G.F., & Tewksbury, R.A. (1998). The impact of treatment: The Jefferson County (Kentucky) Drug Court Program. Federal Probation, 62(2), 46-51.

- Weatherburn, D., Jones, C., Snowball, L., & Hua, J. (2008). *The NSW drug court: A re-evaluation of its effectiveness (Crime and Justice Bulletin No. 121).* Sydney, Australia: New South Wales Bureau of Crime Statistics and Research.
- Wolfe, E., Guydish, J., & Termondt, J. (2002). A drug court outcome evaluation comparing arrests in a two year follow-up period. *Journal of Drug Issues, 32*(4), 1155-1171.

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## Washington State Institute for Public Policy

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