

Washington State Institute for Public Policy

Benefit-Cost Results

Adolescent Diversion Project (ADP) (vs. traditional juvenile court processing) Juvenile Justice

Benefit-cost estimates updated December 2023. Literature review updated June 2019.

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: The Adolescent Diversion Project (ADP) is a diversion program developed by researchers at Michigan State University. Diversion programs provide an alternative to formal sanctions in the juvenile justice system, aim to mitigate potential negative consequences associated with the juvenile justice system (e.g., stigmatizing youth as deviant), and maintain a youth's pro-social ties in the community. In ADP, diverted youth are matched with a volunteer caseworker who provides tailored community-based services that focus on skill building (e.g., strengthening family relationships, improving school involvement, garnering employment, or enrolling in extracurricular activities). Caseworkers spend an average of seven hours a week with their youth over 18 weeks.

This analysis includes youth diverted following arrest. This analysis compares the outcomes of ADP diverted youth to youth who are traditionally processed in juvenile court. In the studies included that report demographic information, 49% of participants were youth of color and 18% were female.

Studies that compare ADP youth to youth released upon arrest (i.e., youth not formally processed by the juvenile court system) are excluded from this analysis and analyzed separately.

Benefit-Cost Summary Statistics Per Participant							
Benefits to:							
Taxpayers	\$6,540	Benefit to cost ratio	n/a				
Participants	\$2,082	Benefits minus costs	\$25,854				
Others	\$13,884	Chance the program will produce					
Indirect	\$2,953	benefits greater than the costs	100%				
Total benefits	\$25,459						
Net program cost	\$395						
Benefits minus cost	\$25,854						

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	Treatment No. of effect sizes		Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis First time ES is estimated Second time ES is				Unadjusted effect size (random effects model)			
				ES	SE SE	Age		stimated SE	Age	e ES p-value	
Crime	14	9	405	-0.441	0.108	15	-0.441	0.108	23	-0.441	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:1	Benefits accrue to:						
		Taxpayers	Participants	Others ²	Indirect3	Total		
Crime	Criminal justice system	\$5,736	\$0	\$12,649	\$2,868	\$21,253		
Crime	Labor market earnings associated with high school graduation	\$1,028	\$2,421	\$1,336	\$0	\$4,785		
Crime	Costs of higher education	(\$224)	(\$339)	(\$102)	(\$112)	(\$777)		
Program cost	Adjustment for deadweight cost of program	\$0	\$0	\$0	\$198	\$198		
Totals		\$6,540	\$2,082	\$13,884	\$2,953	\$25,459		

¹In 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.

²"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.

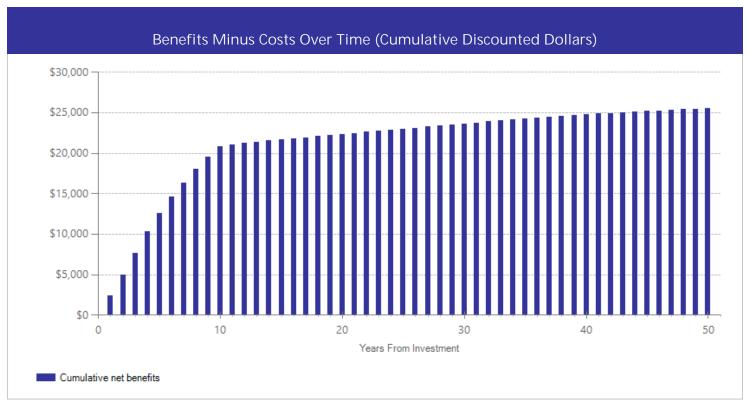
³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Annual Cost Estimates Per Participant

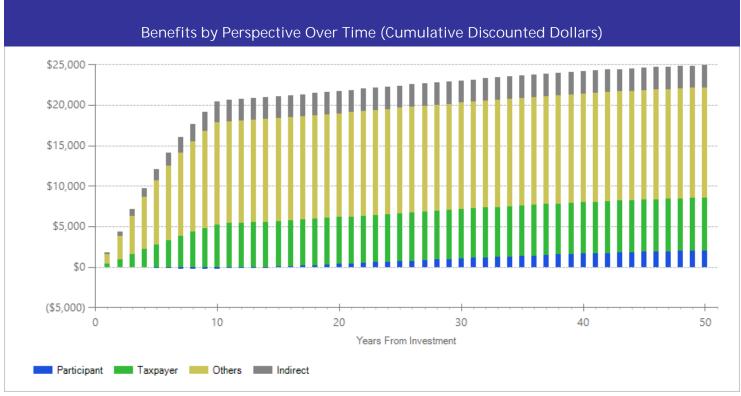
Annual cost	Year dollars	Summary	
Program costs \$1,021	2006	Present value of net program costs (in 2022 dollars)	\$395
Comparison costs \$1,510	2015	Cost range (+ or -)	20%

The estimated per-participant cost for the Adolescent Diversion Project reflects 18 weeks of program delivery and includes overhead and administrative costs (Sturza, M.L., & Davison II, W.S. (2006). Issues facing the dissemination: Three decades of research on the Adolescent Diversion Project. Journal of Prevention & Intervention in the Community, 32(1), 5-24). We calculate the comparison group cost, traditional juvenile court processing, using the cost of court processing for misdemeanor offenses and the average length of stay for youth on juvenile local supervision, multiplied by the annual marginal cost of juvenile local supervision from Section 4.2 of Washington State Institute for Public Policy. (December 2018). Benefit-cost technical documentation. Olympia, WA: Author.

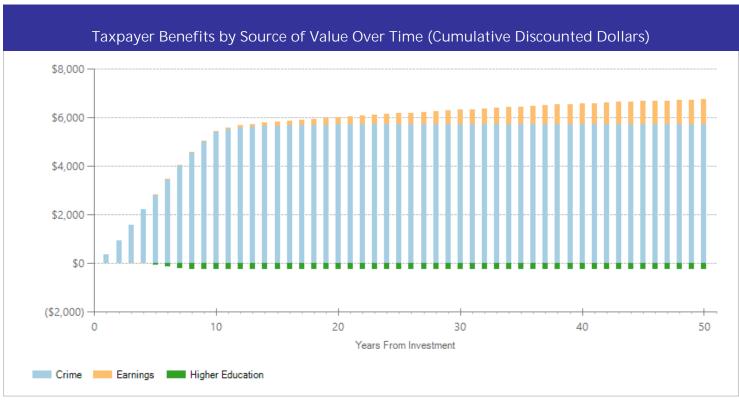
The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty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



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

- Blakely, C.H. (1981). The diversion of juvenile delinquents: a first step toward the dissemination of a successful innovation. Doctoral dissertation, Michigan State University.
- Davidson, W.S., & Basta, J. (1989). Diversion from the juvenile justice system: research evidence and a discussion of issues. *Advances in clinical child psychology*, *12*, 85-111.
- Davidson, W.S., II, Redner, R., Blakely, C.H., Mitchell, C.M., & Emshoff, J.G. (1987). Diversion of juvenile offenders: an experimental comparison. *Journal of Consulting and Clinical Psychology*, 55(1), 68-75.
- Emshoff, J. G., & Blakely, C. H. (1983). The diversion of delinquent youth: Family-focused intervention. Children and Youth Services Review, 5(4), 343-356.

For further information, contact: (360) 664-9800, institute@wsipp.wa.gov

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Washington State Institute for Public Policy

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