Washington State Institute for Public Policy

Benefit-Cost Results

New Beginnings for children of divorce Public Health & Prevention: Home- or Family-based

Benefit-cost estimates updated December 2023. Literature review updated July 2018.

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 New Beginnings program aims to prevent adjustment problems for children whose parents have recently divorced. Parents attend group sessions in an outpatient setting to learn about problem-solving, discipline strategies, and other topics. Some programs also provide individual parent sessions, or both individual parent sessions and group therapy sessions for children. Programs served families with children who were nine-years-old, on average. Weekly group sessions were provided for 10 or 11 weeks. On average, families received 17 hours of therapist time.

Benefit-Cost Summary Statistics Per Participant							
Benefits to:							
Taxpayers	\$3	Benefit to cost ratio	(\$0.45)				
Participants	(\$1,187)	Benefits minus costs	(\$1,235)				
Others	\$994	Chance the program will produce					
Indirect	(\$192)	benefits greater than the costs	49%				
Total benefits	(\$382)						
Net program cost	(\$853)						
Benefits minus cost	(\$1,235)						

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 age	No. of effect sizes	Treatment N	Adjusted effect sizes and standard errors used in the benefit-cost analysis						Unadjusted effect size (random effects	
				First time ES is estimated			Second time ES is estimated			model)	
				ES	SE	Age	ES	SE	Age	ES	p-value
Crime	9	1	126	-0.059	0.248	24	-0.059	0.248	34	-0.155	0.531
Alcohol use	9	1	134	0.057	0.471	24	n/a	n/a	n/a	0.150	0.750
Cannabis use ^	9	1	134	-0.073	0.471	24	n/a	n/a	n/a	-0.192	0.683
Substance use ^	9	1	134	-0.126	0.471	24	n/a	n/a	n/a	-0.333	0.481
Externalizing behavior symptoms	9	3	321	-0.042	0.091	9	-0.023	0.056	12	-0.123	0.234
Internalizing symptoms	9	3	321	-0.025	0.091	9	-0.025	0.091	11	-0.066	0.472
Illicit drug use before end of high school	9	2	150	-0.041	0.168	15	-0.041	0.168	18	-0.107	0.524
Problem alcohol use	9	1	134	0.055	0.471	24	0.055	0.471	34	0.144	0.760

[^]WSIPP's benefit-cost model does not monetize this outcome.

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	Indirect ³	Total		
Crime	Criminal justice system	\$411	\$0	\$942	\$205	\$1,558		
Internalizing symptoms	K-12 grade repetition	\$1	\$0	\$0	\$0	\$1		
Externalizing behavior symptoms	K-12 special education	\$45	\$0	\$0	\$23	\$68		
Problem alcohol use	Labor market earnings associated with problem alcohol use	(\$510)	(\$1,200)	\$0	\$0	(\$1,710)		
Problem alcohol use	Property loss associated with problem alcohol use	\$0	(\$3)	(\$5)	\$0	(\$8)		
Problem alcohol use	Health care associated with problem alcohol use	(\$31)	(\$6)	(\$34)	(\$15)	(\$86)		
Externalizing behavior symptoms	Health care associated with externalizing behavior symptoms	\$88	\$25	\$91	\$44	\$248		
Problem alcohol use	Mortality associated with problem alcohol	(\$2)	(\$4)	\$0	(\$22)	(\$27)		
Program cost	Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$427)	(\$427)		
Totals		\$3	(\$1,187)	\$994	(\$192)	(\$382)		

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.

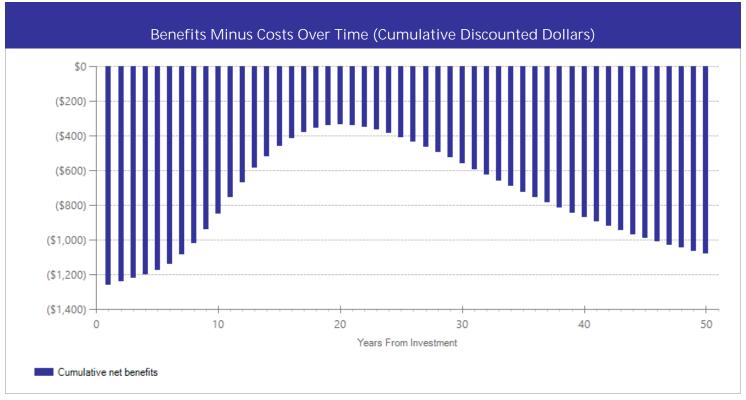
³"Indirect benefits" includes estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

Detailed Annual Cost Estimates Per Participant							
	Annual cost	Year dollars	Summary				
Program costs Comparison costs	\$817 \$101	2015 2015	Present value of net program costs (in 2022 dollars) Cost range (+ or -)	(\$853) 20%			

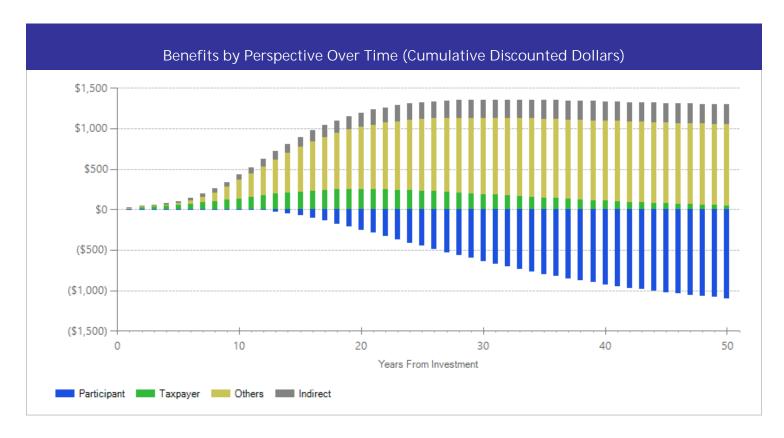
In studies included in this analysis, participants received an average of 17 hours of therapist time. Per-participant cost estimates are based on weighted average therapist time, as reported in the studies. Hourly therapist cost is based on the actuarial estimates of reimbursement by modality (Mercer. (2016). Mental health and substance use disorder services data book for the state of Washington). Comparison group costs are based on weighted average estimates reflecting the cost of materials or therapist time provided to participants, as described in the included studies.

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.

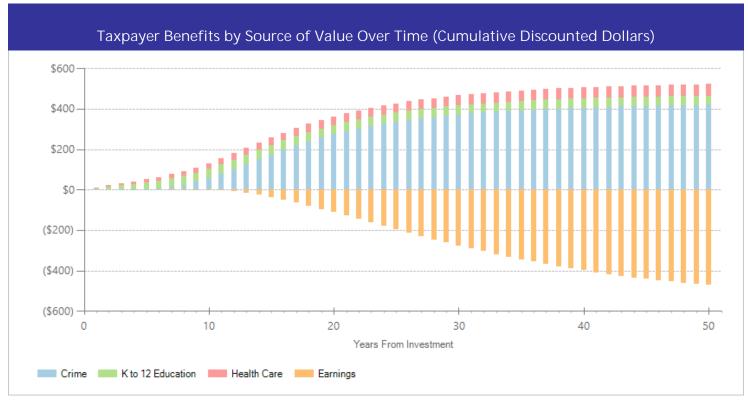
²"Others" includes benefits to people other than taxpayers and participants. Depending on the program, it could include reductions in crime victimization, the economic benefits from a more educated workforce, and the benefits from employer-paid health insurance.



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

- Herman, P.M., Mahrer, N.E., Wolchik, S.A., Porter, M.M., Jones, S., & Sandler, I.N. (2015). Cost-benefit analysis of a preventive intervention for divorced families: Reduction in mental health and justice system service use costs 15 years later. *Prevention Science*, 16(4), 586-596.
- Sandler, I., Gunn, H., Mazza, G., Tein, J.Y., Wolchik, S., Berkel, C., . . . Porter, M. (2018). Effects of a program to promote high quality parenting by divorced and separated fathers. *Prevention Science*, 19(4), 538-548.
- Wolchik, S.A., Sandler, I.N., Millsap, R.E., Plummer, B.A., Greene, S.M., Anderson, E.R., Weiss, L., (2002). Six-year follow-up of preventive interventions for children of divorce: a randomized controlled trial. *JAMA*, 288 (15), 1874-81.
- Wolchik, S.A., Sandler, I.N., Tein, J.-Y., Mahrer, N.E., Millsap, R.E., Winslow, . . . Reed, A. (2013). Fifteen-year follow-up of a randomized trial of a preventive intervention for divorced families: Effects on mental health and substance use outcomes in young adulthood. *Journal of Consulting and Clinical Psychology*, 81(4), 660-73.
- Wolchik, S.A., West, S.G., Sandler, I.N., Tein, J.Y., Coatsworth, D., Lengua, L., . . . Griffin, W.A. (2000). An experimental evaluation of theory-based mother and mother–child programs for children of divorce. *Journal of Consulting and Clinical Psychology*, 68(5), 843.

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Washington State Institute for Public Policy

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