

Familias Unidas

Public Health & Prevention: Home- or Family-based

Benefit-cost estimates updated December 2019. Literature review updated February 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: Familias Unidas is a family-based prevention program for Hispanic and Latino adolescents, designed to prevent substance abuse, risky sexual behavior, and behavior problems. The program typically involves eight parent group meetings and four family visits, either in homes or schools. Group sessions are facilitated by two therapists or counselors. The sessions focus on positive parenting, family communication, parental monitoring, and adolescent risk (substance use, HIV) behaviors. Studies in this analysis included both a general population as well as adolescents with behavior or delinquency problems. One study tested an online version of the program. Program duration ranges from six weeks to six months, with most included studies evaluating the three-month version.

Benefit-Cost Summary Statistics Per Participant

Benefits to:

Taxpayers	\$1,925	Benefit to cost ratio	\$3.50
Participants	\$3,833	Benefits minus costs	\$3,930
Others	\$330	Chance the program will produce	
Indirect	(\$589)	benefits greater than the costs	68 %
Total benefits	\$5,500		
Net program cost	(\$1,570)		
Benefits minus cost	\$3,930		

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2018). 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 model)	
				First time ES is estimated			Second time ES is estimated			ES	p-value
				ES	SE	Age	ES	SE	Age		
Alcohol use disorder	14	1	113	-0.116	0.144	14	-0.116	0.144	24	-0.305	0.035
Substance use [^]	14	1	109	-0.093	0.149	16	n/a	n/a	n/a	-0.246	0.100
Alcohol use before end of high school	14	4	668	-0.001	0.058	15	-0.001	0.058	18	0.002	0.977
Smoking before end of high school	14	2	179	-0.045	0.108	14	-0.045	0.108	18	-0.113	0.288
Cannabis use before end of high school	14	1	113	-0.037	0.129	14	-0.037	0.129	18	-0.098	0.456
Externalizing behavior symptoms	14	2	238	-0.107	0.123	14	-0.059	0.078	17	-0.320	0.008
Internalizing symptoms	14	2	222	-0.079	0.103	15	-0.079	0.103	18	-0.207	0.090
Suicide attempts [^]	14	1	376	-0.009	0.073	16	n/a	n/a	n/a	-0.024	0.744
Suicidal ideation [^]	14	1	376	-0.042	0.073	16	n/a	n/a	n/a	-0.111	0.131
Initiation of sexual activity [^]	14	2	192	-0.065	0.145	14	n/a	n/a	n/a	-0.173	0.237
Illicit drug use before end of high school	14	4	668	-0.073	0.058	15	-0.073	0.058	18	-0.197	0.001
Cannabis use disorder	14	1	113	-0.057	0.144	14	-0.057	0.144	24	-0.150	0.297
STD risky behavior [^]	14	2	186	-0.002	0.149	14	n/a	n/a	n/a	-0.065	0.823

[^]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
Cannabis use before end of high school	Criminal justice system	\$48	\$0	\$125	\$24	\$197
Internalizing symptoms	K-12 grade repetition	\$2	\$0	\$0	\$1	\$3
Externalizing behavior symptoms	K-12 special education	\$80	\$0	\$0	\$40	\$119
Alcohol use disorder	Labor market earnings associated with alcohol abuse or dependence	\$1,605	\$3,769	\$0	\$0	\$5,374
Alcohol use disorder	Property loss associated with alcohol abuse or dependence	\$0	\$6	\$11	\$0	\$16
Externalizing behavior symptoms	Health care associated with externalizing behavior symptoms	\$189	\$53	\$195	\$95	\$532
Alcohol use disorder	Mortality associated with alcohol	\$2	\$5	\$0	\$37	\$43
Program cost	Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$785)	(\$785)
Totals		\$1,925	\$3,833	\$330	(\$589)	\$5,500

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.

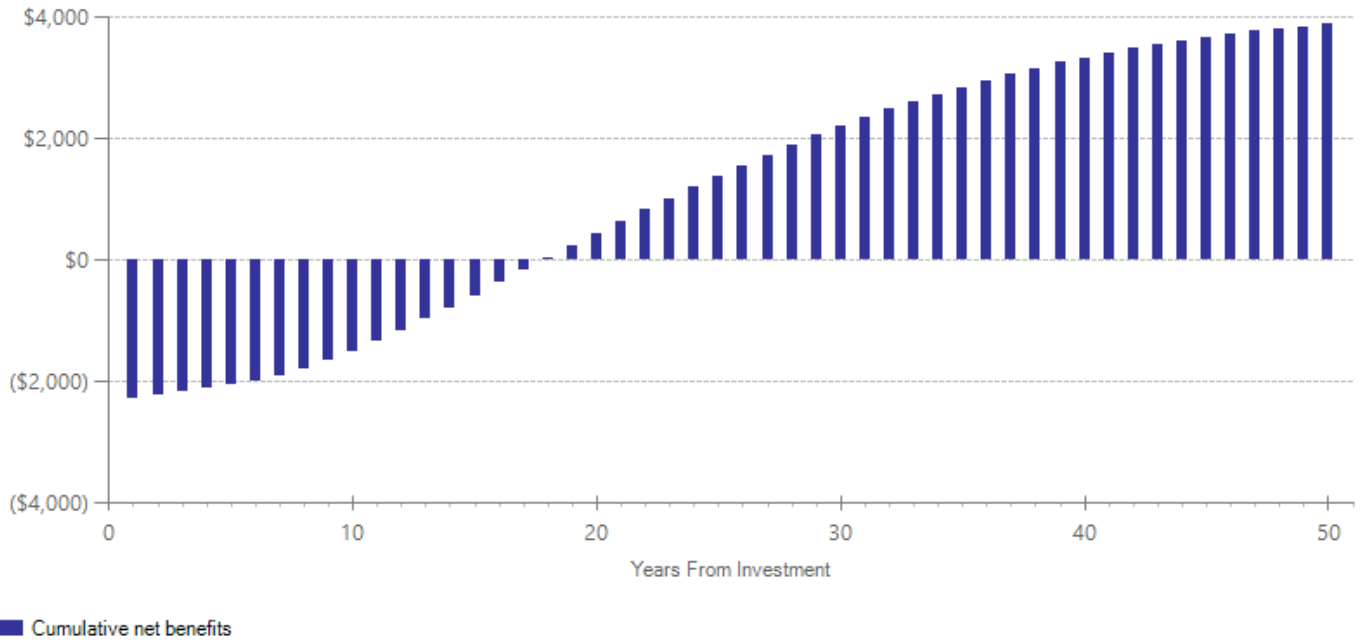
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	\$1,548	2018	Present value of net program costs (in 2018 dollars)	(\$1,570)
Comparison costs	\$0	2018	Cost range (+ or -)	20 %

We estimate the per-participant cost for the three-month program by multiplying the hours of group and family sessions by the hourly rate for a facilitator (school counselor). We assume that there are ten families and two facilitators per group therapy session. We also include the cost to train facilitators, assuming ten facilitators are trained in a 48-hour session that costs \$50,000. We include the cost of three hours per week of supervision. Information on training and supervision was provided by Yannine Estrada of Familias Unidas on May 17, 2016. We estimate the value of counselor time using average Washington State compensation costs (including benefits) for the 2017-18 school year as reported by the Office of the Superintendent of Public Instruction (<http://www.k12.wa.us/safs/PUB/PER/1718/ps.asp>).

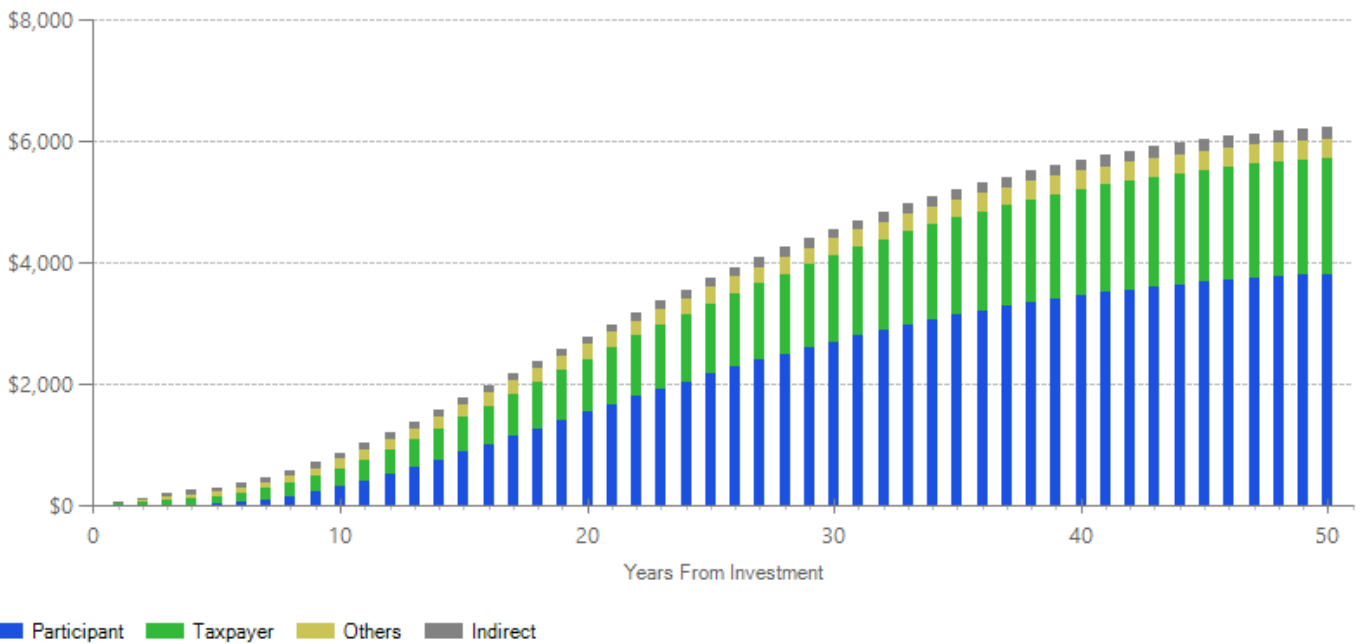
The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The cost range reported above reflects potential variation or uncertainty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

Benefits Minus Costs Over Time (Cumulative Discounted Dollars)

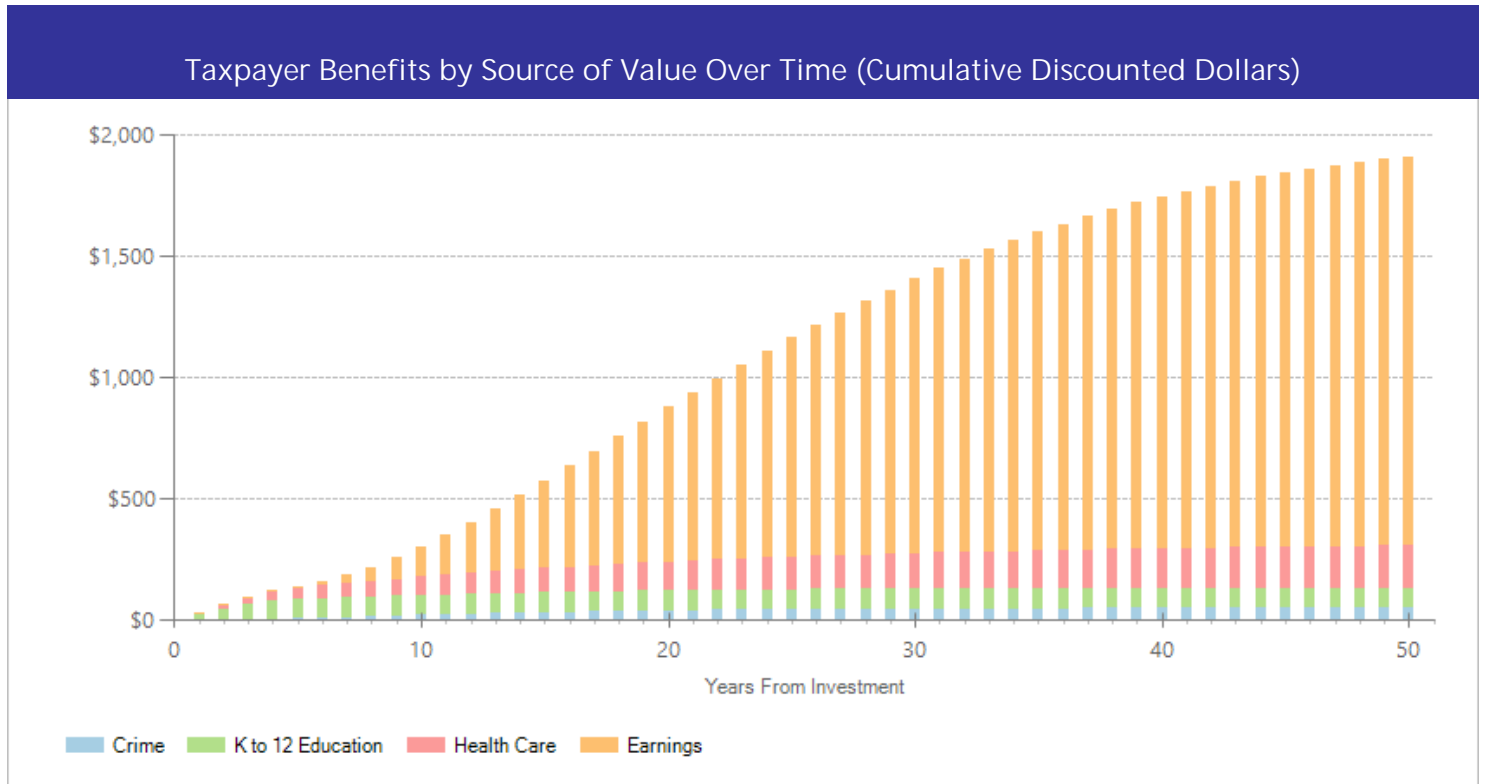


The graph above illustrates the estimated cumulative net benefits per-participant for the first fifty years beyond the initial investment in the program. We present these cash flows in discounted dollars. If the dollars are negative (bars below \$0 line), the cumulative benefits do not outweigh the cost 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.

Benefits by Perspective Over Time (Cumulative Discounted Dollars)



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

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