

## Washington State Institute for Public Policy

Benefit-Cost Results

## Youth Villages LifeSet Child Welfare

Benefit-cost estimates updated December 2017. Literature review updated June 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: Youth Villages LifeSet (YVLS) is a transitional living program for youth aging out of state custody. Each youth is assigned to a YVLS Specialist. YVLS Specialists have caseload of 8 to 10 youth. The YVLS Specialist meets with individuals weekly to help youth establish goals in the areas of education, employment, housing, and life skills. YVLS Specialists may also refer youth to program-provided, evidence-informed practices for mental health or substance abuse treatment. The program is designed to provide services for 9 months although duration can range from a few months to over a year. More information can be found on the Youth Villages website. http://www.youthvillages.org/what-we-do/yvlifeset/about-yvlifeset.aspx#sthash.rmWjTfZN.dpbs.

Benefit-Cost Summary Statistics Per Participant								
Benefits to:								
Taxpayers	\$678	Benefit to cost ratio	(\$0.35)					
Participants	\$3,255	Benefits minus costs	(\$13,225)					
Others	(\$2,070)	Chance the program will produce						
Indirect	(\$5,287)	benefits greater than the costs	20 %					
Total benefits	(\$3,423)							
Net program cost	(\$9,802)							
Benefits minus cost	(\$13,225)							

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2016). 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.

Detailed Monetary Benefit Estimates Per Participant										
Benefits from changes to:1		Ве	enefits to:							
	Participants	Taxpayers	Others <sup>2</sup>	Indirect <sup>3</sup>	Total					
Crime	\$0	(\$779)	(\$2,046)	(\$387)	(\$3,212)					
Labor market earnings associated with employment	\$3,260	\$1,481	\$0	\$0	\$4,741					
Property loss associated with problem alcohol use	(\$1)	\$0	(\$2)	\$0	(\$3)					
Health care associated with problem alcohol use	(\$4)	(\$23)	(\$22)	(\$12)	(\$60)					
Adjustment for deadweight cost of program	\$0	\$0	\$0	(\$4,888)	(\$4,888)					
Totals	\$3,255	\$678	(\$2,070)	(\$5,287)	(\$3,423)					

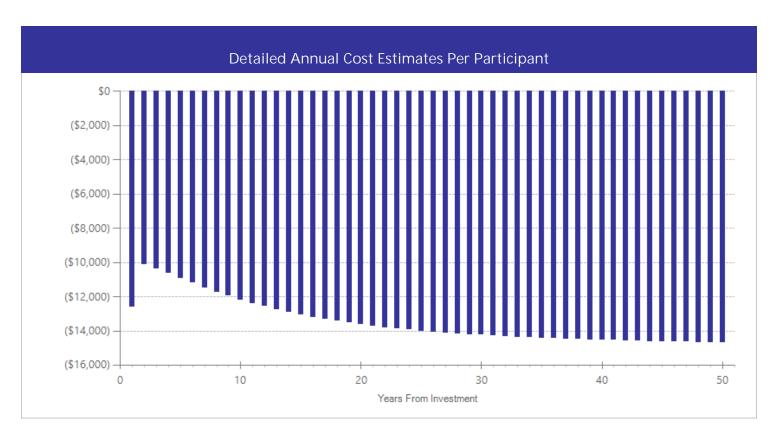
<sup>&</sup>lt;sup>1</sup>In addition to the outcomes measured in the meta-analysis table, WSIPP measures benefits and costs estimated from other outcomes associated with those reported in the evaluation literature. For example, empirical research demonstrates that high school graduation leads to reduced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

<sup>&</sup>lt;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	\$9,690 \$0	2015 2015	Present value of net program costs (in 2016 dollars) Cost range (+ or -)	(\$9,802) 11 %				

Per participant cost based on information provided by Youth Villages (June 2016). Cost per day enrolled in the program ranges from \$40 to \$50 per day. In the evaluation, the average youth was enrolled for 215 days. We multiply the mid-range daily rate of \$45 by the average number of days enrolled.

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.



<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.

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 non-discounted dollars to simplify the "break-even" point from a budgeting perspective. 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.

Meta-Analysis of Program Effects											
Outcomes measured	age et	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 estimated		Second time ES is estimated			model)		
				ES	SE	Age	ES	SE	Age	ES	p-value
Crime	19	1	659	0.104	0.102	20	0.104	0.102	30	0.104	0.306
Earnings	19	1	659	0.175	0.086	20	0.000	0.014	21	0.175	0.043
Employment	19	1	659	0.133	0.079	20	0.000	0.014	21	0.133	0.091
High school graduation	19	1	659	0.056	0.081	20	0.056	0.081	20	0.056	0.493
Homelessness <sup>^</sup>	19	1	659	-0.199	0.086	20	n/a	n/a	n/a	-0.199	0.021
Problem alcohol use	19	1	659	0.079	0.061	20	0.011	0.091	22	0.079	0.197

<sup>^</sup>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.

## Citations Used in the Meta-Analysis

Valentine, E.J., Skemer, M., Courtney, M.E., & MDRC. (2015). Becoming adults: One-year impact findings from the Youth Villages Transitional Living Evaluation. MDRC. New York, NY.

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## Washington State Institute for Public Policy

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