Intensive supervision for youth post-release (vs. traditional post-release supervision)

Juvenile Justice

Benefit-cost estimates updated December 2019. Literature review updated July 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: Intensive supervision or intensive aftercare is a model of supervision that emphasizes a higher degree of surveillance than traditional supervision in the community. Intensive supervision often involves case management with caseloads of 25 or fewer youth. Case management starts when youth are first confined and continues upon their release into the community. The conditions of supervision vary but typically may include urinalysis testing, increased face-to-face or collateral contacts, and required participation in programming. Programming may include mentoring, tutoring, counseling, job training, or other community-based services. Youth typically have daily exposure to their juvenile probation counselor or (in some cases) members of their aftercare team.

This analysis compares youth released from confinement and assigned to intensive supervision to youth released and assigned to supervision-as-usual. In the included studies, participants were youth at higher risk of recidivism per a validated risk assessment tool; the evaluations in the analysis often excluded youth adjudicated with sex offenses or highly violent felonies. Intensive supervision and aftercare last three to nine months, with most youth under supervision for seven months. In the studies in our analysis that report demographic information, 70% of participants were youth of color and 7% were female.

Evaluations of intensive supervision for court-involved youth (i.e., youth placed directly on supervision without a period of confinement) compared to traditional probation or confined youth are excluded from this analysis and analyzed separately.

Benefit-Cost Summary Statistics Per Participant

Benefits to:

Taxpayers	($2,036)	Benefit to cost ratio	($2.37)
Participants	($250)	Benefits minus costs	($16,463)
Others	($5,898)	Chance the program will produce benefits greater than the costs	5 %
Indirect	($3,397)		
Total benefits	($11,581)		
Net program cost	($4,881)		
Benefits minus cost	($16,463)		

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.

Detailed Monetary Benefit Estimates Per Participant

Benefits from changes to:[1]	Benefits to:				
	Participants	Taxpayers	Others[2]	Indirect[3]	Total
Crime	$0	($1,940)	($5,749)	($970)	($8,659)
Labor market earnings associated with high school graduation	($292)	($124)	($162)	$0	($579)
Costs of higher education	$43	$28	$13	$14	$97
Adjustment for deadweight cost of program	$0	$0	$0	($2,441)	($2,441)
Totals	($250)	($2,036)	($5,898)	($3,397)	($11,581)

[1]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.

[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.

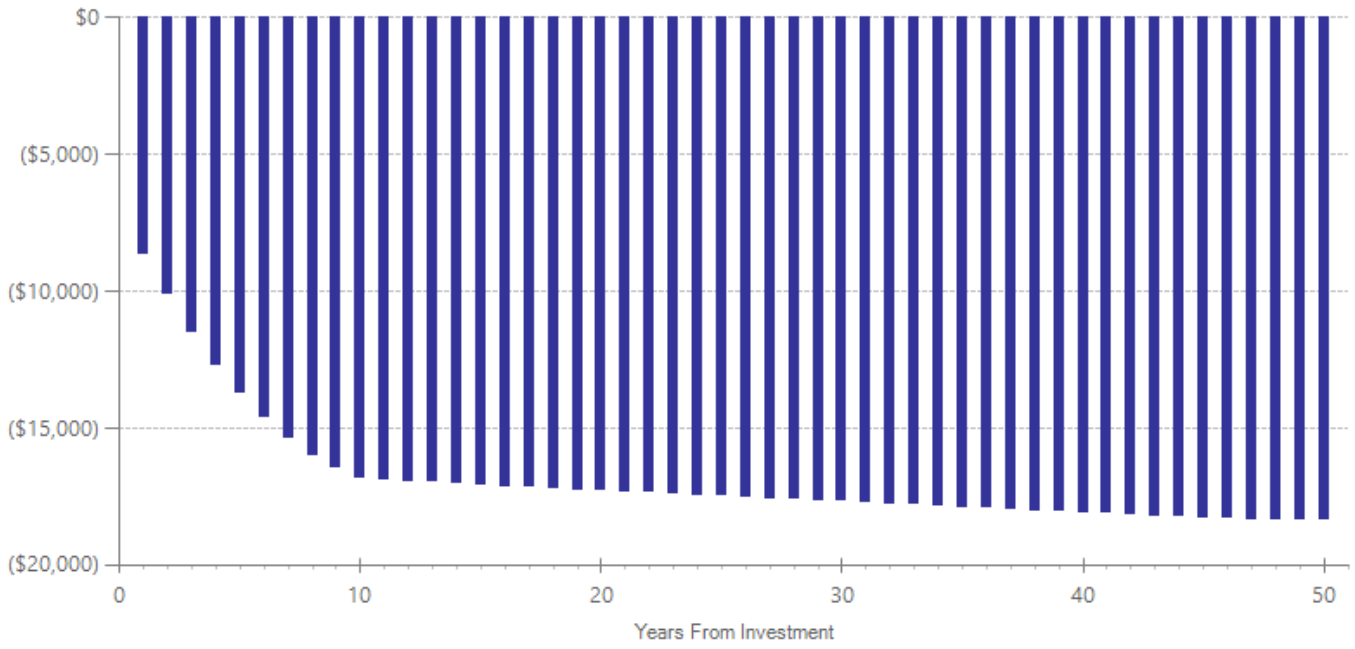
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	$10,102	2015	Present value of net program costs (in 2018 dollars)	($4,881)
Comparison costs	$5,515	2015	Cost range (+ or -)	50 %

We estimate per-participant program costs using WSIPP's annual marginal cost estimate for juvenile state parole to compute a monthly cost estimate (Washington State Institute for Public Policy. (December 2018). Benefit-cost technical documentation. Olympia, WA: Author). We apply the ratio of the intensive supervision caseload (23), as reported in the studies, to the traditional probation caseload (43)—as reported in Burley, M. & Barnoski, R. (1997). Washington State Juvenile Courts: Workloads and costs. Olympia: Washington State Institute for Public Policy—to the monthly marginal average cost estimate for juvenile parole. We multiply this monthly cost by the weighted average time on supervision (6.9 months) in the studies included in the analysis. The comparison cost uses the marginal cost estimate for juvenile state parole, multiplied by the weighted average time on supervision, 6.9 months.

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.

Detailed Annual Cost Estimates Per Participant



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	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	SE	Age	ES	SE	Age	ES	p-value
Alcohol use^	17	1	38	-0.434	0.237	17	n/a	n/a	n/a	-0.434	0.067
Cannabis use^	17	1	38	0.601	0.239	17	n/a	n/a	n/a	0.601	0.012
Crime	17	18	2106	0.069	0.075	18	0.069	0.075	26	0.069	0.361
Employment^^	17	1	38	0.149	0.285	17	n/a	n/a	n/a	0.149	0.600
Homelessness^	17	1	152	-0.100	0.513	17	n/a	n/a	n/a	-0.100	0.845
Illicit drug use^	17	2	190	0.243	0.212	17	n/a	n/a	n/a	0.243	0.253
Technical violations^	17	4	425	0.403	0.168	18	n/a	n/a	n/a	0.403	0.016

^WSIPP's benefit-cost model does not monetize this outcome.
^^WSIPP does not include this outcome when conducting benefit-cost analysis for this program.

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

Barnoski, R. (2002). *Evaluating how Juvenile Rehabilitation Administration's intensive parole program affects recidivism.* Olympia: Washington State Institute for Public Policy.

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Washington State Institute for Public Policy

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