

Jail diversion for individuals with mental illness (post-arrest)

Adult Criminal Justice

Benefit-cost estimates updated December 2019. Literature review updated March 2017.

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: Diversion programs for individuals with mental illness redirect these individuals from the traditional criminal justice system into mental health treatment programs. This review focuses on post-arrest diversion programs, which are jail- or court-based programs. These programs typically offer probation, deferred prosecution, or withdrawal of charges in lieu of incarceration. The level of treatment provided to individuals varies widely. Some programs consist only of referrals to treatment options. Other more-substantial programs integrate aspects of the criminal justice system to monitor participants and require treatment attendance, or involve community-based treatment providers. Mental health courts and pre-arrest diversion programs were reviewed separately from this meta-analysis.

Benefit-Cost Summary Statistics Per Participant

Benefits to:

Taxpayers	(\$23)	Benefit to cost ratio	n/a
Participants	(\$474)	Benefits minus costs	\$1,143
Others	\$294	Chance the program will produce	
Indirect	\$629	benefits greater than the costs	51 %
Total benefits	\$427		
Net program cost	\$716		
Benefits minus cost	\$1,143		

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	\$258	\$456	\$129	\$844
Labor market earnings associated with alcohol abuse or dependence	(\$482)	(\$205)	\$0	\$0	(\$687)
Property loss associated with alcohol abuse or dependence	(\$2)	\$0	(\$3)	\$0	(\$5)
Labor market earnings associated with illicit drug abuse or dependence	\$34	\$15	\$0	\$0	\$49
Health care associated with illicit drug abuse or dependence	\$8	\$49	\$50	\$24	\$130
Health care associated with emergency department visits	(\$38)	(\$142)	(\$209)	(\$71)	(\$460)
Mortality associated with illicit drugs	\$12	\$5	\$0	\$373	\$390
Mortality associated with alcohol	(\$6)	(\$3)	\$0	(\$185)	(\$193)
Adjustment for deadweight cost of program	\$0	\$0	\$0	\$358	\$358
Totals	(\$474)	(\$23)	\$294	\$629	\$427

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.

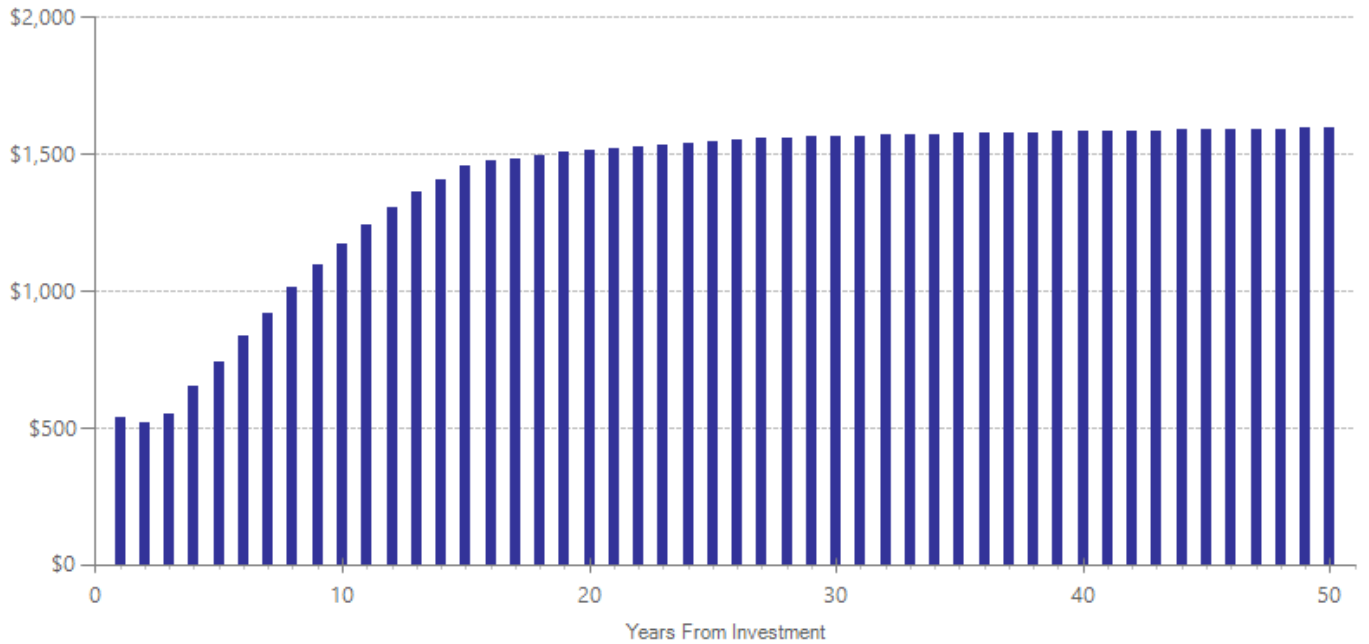
Detailed Annual Cost Estimates Per Participant

	Annual cost	Year dollars	Summary	
Program costs	(\$683)	2015	Present value of net program costs (in 2018 dollars)	\$716
Comparison costs	\$0	2015	Cost range (+ or -)	10 %

Diversion costs are estimated from WSIPP's analysis of Washington State daily jail costs assuming diverted offenders spend 30 days in jail on average compared to about 77 days for the non-diverted comparison group. This estimate is based on Washington average jail sentence based on Sentencing Guidelines Commission data for misdemeanor crimes with our estimated reductions for behavior. We also estimated supervision costs for the diverted offenders for 47 days using WSIPP's estimates of community supervision costs. We estimated mental health treatment costs from Cowell et al. (2004). Cowell, A.J., Broner, N., & Dupont, R. (2004). The Cost-effectiveness of criminal justice diversion programs for people with serious mental illness co-occurring with substance abuse four case studies. *Journal of Contemporary Criminal Justice*, 20(3), 292-314.

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	p-value
				ES	SE	Age	ES	SE	Age		
Alcohol use disorder	38	5	386	0.159	0.242	38	0.000	0.187	41	0.159	0.509
Crime	38	6	556	-0.020	0.062	40	-0.020	0.062	50	-0.030	0.627
Emergency department visits	38	5	388	0.495	0.122	38	0.000	0.118	39	0.495	0.001
Homelessness [^]	38	5	388	0.000	0.120	38	n/a	n/a	n/a	0.000	0.999
Illicit drug use disorder	38	5	386	-0.029	0.133	38	0.000	0.187	41	-0.029	0.826
Psychiatric symptoms [^]	38	5	388	-0.004	0.073	38	n/a	n/a	n/a	-0.004	0.961

[^]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

- Broner, N., Lattimore, P.K., Cowell, A.J., & Schlenger, W.E. (2004). Effects of diversion on adults with co-occurring mental illness and substance use: Outcomes from a national multi-site study. *Behavior Sciences and the Law*, 22(4), 519-541.
- Rivera, S.C. (2013). *Jail diversion and recidivism: Impact on community integration and treatment utilization*. Gainesville, Fla.: University of Florida.

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