

Benefit-Cost Analysis Report: Adult Criminal Justice

January 2017

Minnesota's Department of Corrections and county correction agencies provide a range of services designed to rehabilitate offenders and reduce their likelihood of future criminal activity. Minnesota Management & Budget conducted benefit-cost analyses of select corrections services in the state. This summary of our findings complements a longer, full report that includes a detailed explanation of the analyses and findings.

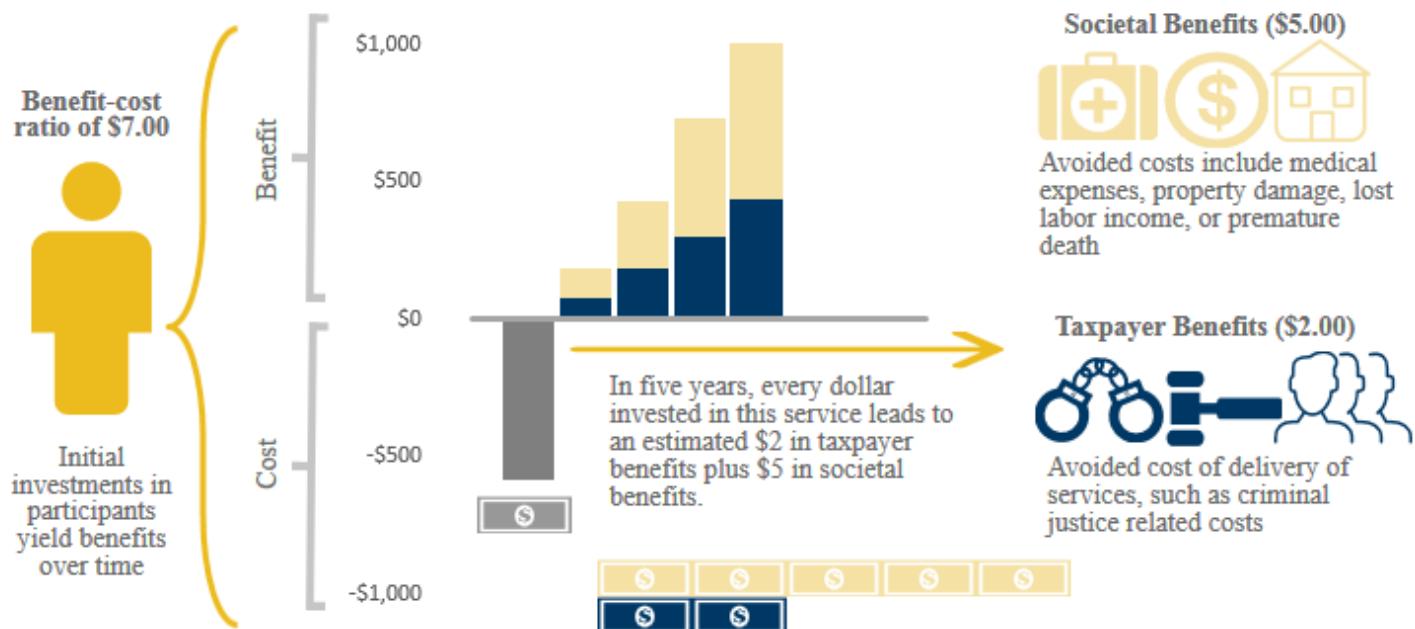
All of the supervision services analyzed have benefits that exceed their costs. Estimated 5-year benefits range from \$11.40 to \$1.80 for each dollar spent on the service. Ten of the eleven prison services analyzed have benefits that exceed their costs. For these services, estimated benefits range from \$15.90 to \$0.40 for each dollar spent.

These estimates are based on findings from a national clearinghouse of rigorous evaluations of criminal justice practices. We only analyzed services in Minnesota that matched those in the clearinghouse. The benefit-cost ratio reflects what Minnesota can expect based on those prior, national studies.

Findings on page 2 include services under local supervision in one or more of the counties represented in this initial analysis. Five counties, comprising three jurisdictions (Dakota County, Stearns County, and Dodge-Filmore-Olmsted), that administer all of their county's local supervision are included. In the other 54 counties, the state Department of Corrections supervises all or a portion of probationers and parolees. While the findings presented on page 2 are not representative of every county in the state, they may hold lessons on evidence-based policies that are applicable to all areas of the state.

Findings on page 3 include services administered by the Minnesota Department of Corrections in state prisons.

Figure 1: What is a benefit-cost ratio?



Findings – Supervision Services

For all supervision-associated services analyzed, the estimated benefits exceed costs for the five-year period of study. The benefit-cost ratios range from \$11.40 for employment & job training to \$1.80 for non-residential chemical dependency treatment. The most expensive service to administer, intensive supervision (net cost of \$4,740 per participant), generates the second highest per participant benefit minus cost (\$13,460). Electronic monitoring for probationers does not have a benefit-cost ratio because the net cost of service is negative (i.e., the use of electronic monitoring is less expensive than if the client remained in jail). To calculate a ratio, the net cost (denominator) must be positive. The report also differentiates the portion of benefits experienced by taxpayers versus society more broadly.

Table 1: Comparison of benefits and costs five years after supervision begins

For the first service below, a benefit-cost ratio is not applicable.

Service or practice*	Per participant benefit minus cost	Benefit-cost ratio		
Electronic monitoring (probation)	\$3,480	Service is less expensive than the alternative and generates benefits from reducing recidivism.		
Service or practice*	Per participant benefit minus cost	Benefit-cost ratio	Taxpayer benefits	Other societal benefits
Employment & job training assistance	\$6,740	\$11.40	\$3.60	\$7.80
Cognitive Behavioral Therapy	\$3,020	\$6.20	\$3.00	\$3.20
Electronic monitoring (supervised release)	\$2,170	\$6.60	\$2.60	\$4.00
Supervision with Risk-Need-Responsivity	\$4,610	\$5.50	\$2.60	\$2.90
Sex offender treatment	\$23,300	\$7.80	\$2.40	\$5.30
Intensive supervision - surveillance & treatment	\$13,460	\$3.80	\$1.20	\$2.60
Non-residential chemical dependency treatment	\$2,860	\$1.80	\$0.60	\$1.20

Source: Minnesota Management & Budget

*Evidence-based services and practices operating in Minnesota that aim to reduce recidivism

Figure 2: Understanding the results

Per participant benefit minus cost is the difference between the present value of cash inflows (anticipated benefits) from a given service and the present value of cash outflows (costs).

The benefit-cost ratio is the net present value of anticipated benefits to state residents for every dollar invested in the service, for a five-year period.

Taxpayer benefits (blue) accumulate to Minnesota taxpayers through avoided costs to the criminal justice system. These include resources used for police arrests, the cost of prosecutors, defenders, and courts, and the costs of jails, prisons, and supervision (supervised release and probation).

Other societal benefits (yellow) are victim costs avoided when crime is not committed. These vary depending on the crime avoided, but could include medical expenses, cash losses, property theft or damage, lost earnings from injury, and others.

Findings – Prison Services

For ten of the eleven prison-associated services analyzed, the estimated benefits exceed costs for the five-year period of study. The benefit-cost ratio ranges from \$15.90 for EMPLOY to \$0.40 for correctional adult basic education. The Challenge Incarceration Program, Affordable Homes Program, and Work Release do not have a benefit-cost ratio because the net cost of service is negative. In other words, inmate participation generates a benefit to the state because it is cheaper to provide than the alternative service. InnerChange Freedom Initiative uses outside grant dollars to administer the program. We did not estimate the cost for correctional industries, but anticipate it also has a net negative cost.

The report also highlights who accrues the various benefits, taxpayer, or society. The percentage of benefits accruing to taxpayers versus the broader society varies as each service has different impacts on the likelihood an offender will be reconvicted and, if so, of what type of offense.

Table 2: Comparison of estimated benefits and costs five years after release from prison

For the first five services below, a benefit-cost ratio is not applicable.

Service or Practice	Per participant benefit minus cost	Benefit-cost ratio		
Challenge Incarceration Program	\$20,870	Service is less expensive than the alternative and generates benefits from reducing recidivism.		
InnerChange Freedom Initiative	\$20,870	Service is costless to the state and generates benefits from reducing recidivism.		
Affordable Homes Program	\$7,570	Service is less expensive than the alternative and generates benefits from reducing recidivism.		
Work release	\$6,910	Service is less expensive than the alternative and generates benefits from reducing recidivism.		
Correctional industries	not applicable	We were unable to estimate the cost of this service, but it generates benefits from reducing recidivism.		
Service or Practice	Per participant benefit minus cost	Benefit-cost ratio	Taxpayer benefits	Other societal benefits
EMPLOY	\$18,010	\$15.90	\$5.10	\$10.80
Cognitive Behavioral Therapy	\$12,120	\$13.40	\$4.20	\$9.20
Chemical dependency treatment	\$8,630	\$2.80	\$0.90	\$1.90
Career and technical education	\$5,080	\$2.50	\$0.80	\$1.70
MnCOSA	\$17,440	\$1.80	\$0.60	\$1.20
Correctional adult basic education	(\$1,370)	\$0.40	\$0.10	\$0.30

Source: Minnesota Management & Budget

*Evidence-based services and practices operating in Minnesota prisons that aim to reduce recidivism.

Note: Definitions in “Figure 2: Understanding the results” also apply to “Table 2”.

Weighing costs and benefits

Corrections staff tailor effective programming to offender risk level and needs. This means services are not perfect substitutes for each other, and it is not always possible to switch an offender from a service with a low benefit-cost ratio to one with a higher benefit cost ratio. Some services have a large effect on recidivism for a difficult to impact population, and a relatively high cost per participant. For jurisdictions using this service, it may be the most cost-effective treatment option despite the high price tag. Policymakers should consider this context when comparing benefit-cost ratios.

Figure 3: Net costs & anticipated recidivism impact - Supervision



Note: Services with a negative net cost per participant save the state more dollars than the alternative.

Background

A bipartisan provision enacted during the 2015 legislative session instructs Minnesota Management & Budget to estimate the benefits and costs for corrections and human services practices, using the Pew-MacArthur Results First Initiative framework. Minnesota is one of 24 states using this approach.

By using rigorous evidence to inform decision-making, policymakers can achieve better results by funding and operating public services proven to work. This ability to make informed choices when employing scarce public resources maximizes the benefits to Minnesotans. Future iterations of this initiative will study child welfare, health care, juvenile justice, mental health, and substance abuse.

Figure 4: A Framework for Evidence-Based Decision Making

The nationally recognized Results First Initiative framework uses a three-step process:

1. **Use high quality research** from across the nation to identify what works and what does not
2. **Use this research and state-specific data** to project the anticipated effect
3. **Compare services' costs and projected benefits** to identify the best return on investment of public dollars

The Washington State Institute for Public Policy developed the benefit-cost analysis model. The Pew-MacArthur Results First Initiative collaborated with Washington State to encourage its use in other states.

To read more information about the Results First Initiative in Minnesota and access the adult criminal justice full report, please visit mn.gov/mmb/results-first

Contact:
ResultsFirstMN@state.mn.us