Cost-Benefit Analysis of Juvenile Justice Programs

Juvenile Justice Guide Book for Legislators
To reach the best decisions for their constituents, lawmakers constantly assess the advantages and disadvantages of various courses of action. Sometimes these choices are simple, and rigorous analysis is not necessary. Often, however, the various costs and outcomes of policy decisions are difficult to project. In response to these challenges, a growing number of states are turning to data-driven cost assessment techniques to inform their policies. One such device, cost-benefit analysis (CBA), is gaining national attention due to its success providing valuable information to government leaders.

The Vera Institute of Justice (Vera) identifies the five basic steps of cost-benefit analysis as:

1. Determine the effects of the initiative,
2. Determine whose perspectives matter,
   (e.g. Who will be affected by each policy alternative?)
3. Measure costs in dollars and cents,
4. Measure benefits in dollars and cents, and
5. Compare the costs and benefits.
According to Vera, cost-benefit analysis is a systemic tool for evaluating public policy. It allows lawmakers to weigh multiple options and determine which will achieve the greatest results for the lowest cost.

Because cost-benefit analysis turns all outcomes into monetary values, it allows evaluators to compare programs that have different goals—for example, program A aims to reduce crime, while program B aims to curb substance abuse—in order to find the option with the greatest net societal benefit. It must be noted, however, that CBA determines only a program’s cost-effectiveness, not its overall success. To understand the value of each option, CBA data must be assessed together with separately conducted program success evaluations. Reliable program assessments, combined with CBA analysis can help leaders identify the best policy options.
Development of Cost-Benefit Analysis

Cost-benefit analysis of public programs is gaining national attention thanks in large part to the work of Steve Aos and his colleagues at the Washington State Institute for Public Policy (WSIPP). WSIPP has advised the Washington Legislature on research-based approaches to public policy for the last 15 years on issues ranging from public health and education to housing and criminal justice. One such WSIPP cost-benefit analysis addressed Washington’s problem with crime and overcrowded prisons.

In 2005, Washington was faced with a growing prison population that would necessitate the construction of three new prisons by 2030 at a cost of $750 million. In response, the Legislature appropriated funds through its capital budget bill for WSIPP to study evidence-based programs so investments could be made to reduce crime and save Washington money over the long-term.

WSIPP’s study reviewed and analyzed 571 comparison group evaluations of adult corrections, juvenile corrections and prevention programs. Each study included met a strict set of criteria—such as only using programs currently being used in the field, not models, and having someone other than the program’s developer conduct the assessment—to avoid conflicts of interest. WSIPP established these standards before their financial assessment began to ensure that they were relying on the best possible program data. The report, released in 2006, found that the state could save $2 billion and reduce crime by using evidence-based alternatives to incarceration.

A follow-up study from WSIPP, reported on in 2009, found that Washington is having success implementing the cost saving recommendations. The state invested $48 million in evidence-based programs in 2007 and has reduced its forecasted expenditures in prison construction.

Cost-Benefit Analysis Applied to Juvenile Justice

In January 2004, WSIPP released a report assessing the Community Juvenile Accountability Act, a 1997 Washington law that focused on reducing the state’s juvenile crime by implementing evidence-based programs in the juvenile court system.

In this study, WSIPP found that programs such as functional family therapy (FFT is a family-based intervention program that focuses on improving protective factors and reducing risk factors for juvenile delinquent behavior) and aggression replacement training (ART is an intervention program that helps youths develop skills to control anger and use appropriate behavior) reduced recidivism and saved taxpayer dollars. In the case of aggression replacement training, $11.66 was saved for each $1 spent, and the rate of participants committing another felony within 18 months dropped by 24 percent.

In addition to Washington, other states—including Florida, Pennsylvania and Wisconsin—have used cost-benefit analysis to evaluate programs within their juvenile justice systems. A few of these states, including Pennsylvania, have borrowed elements of Washington’s cost-benefit model to apply to their own state’s data.
Florida
In Florida, legislators were searching for ways to reduce the amount of money spent housing juveniles in detention facilities. According to Florida’s Office of Program Policy Analysis and Government Accountability (OPPAGA), 76 percent of juveniles in state detention centers were in need of mental health, substance abuse or psychiatric treatment, and 42 percent of those in detention were charged with misdemeanors or parole violations. OPPAGA found that these treatments and problems could be more effectively handled in diversion programs, and, between 2005 and 2008, 2,033 juveniles successfully completed such programs. To house these juveniles in detention centers would have cost $50.8 million. With the redirection program, however, the cost was $14.4 million. By using these programs, Florida gained a cost benefit of $36.4 million.

OPPAGA emphasized that, to realize benefits through diversion programs, cost-benefit analysis of evidence-based programs must be rigorous so projections match the realities. Separate assessments of program effectiveness must have been previously conducted. In this example, the juveniles who completed the diversion program were 46 percent less likely to be convicted of a felony in the future than those placed in detention facilities.

Pennsylvania
In 2008, the Prevention Research Center of Human Development, with funding from Pennsylvania’s Commission on Crime and Delinquency (PCCD), issued a report detailing their study of Pennsylvania’s return on investment for seven juvenile programs used throughout the state. The study found that these programs saved Pennsylvania $317 million in reduced criminal justice costs and salaries. The benefits per $1 invested ranged from $1 to $25 depending upon the program. The “LifeSkills Training” program, for example, benefitted $25.72 per $1 spent, saving Pennsylvanians $16.160 million over the course of its operation.

Wisconsin
What Works, Wisconsin!, a study requested by the Wisconsin Governor’s Juvenile Justice Commission to examine evidence-based programs with growing delinquency prevention evidence, provides another example of cost-benefit analysis. What Works, Wisconsin! found that, in 2004, it cost $68,255 to house a juvenile offender in a corrections facility in Wisconsin for 12 months. The study analyzed many potentially beneficial programs, including Wraparound Milwaukee. This program coordinates treatment and services for delinquent and non-delinquent youth with mental health disorders, with the goal of keeping youth in the community and with their families when possible. Wraparound Milwaukee allows families to select from an array of services and provides “care coordination” to ensure the best use of resources. Although rigorous evidence-based studies have not been conducted for Wraparound Milwaukee, it reported in 2000 that 650 youth were served in the community at

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Report authors concluded that, given the significant cost benefits realized by these programs, other agencies should take a more active role in comparing, assessing and using cost-effectiveness data.
a monthly cost of about $3,300 per participant; traditional incarceration would have cost $5,000.

The findings in *What Works, Wisconsin!* claim that the two biggest barriers to appropriately funding effective evidence-based programs are a lack of information available to policymakers and prohibitive start-up costs. If these obstacles can be overcome, the authors believe the benefits of using evidence-based programs will be substantial.

Cost-benefit analysis is not the only cost assessment tool used by the states. Cost-effectiveness analysis also compares the relative costs and outcomes of two or more courses of action, but is different from cost-benefit analysis in that it does not turn all results into monetary values. Due to this limitation, cost-effectiveness analyses are generally only used to compare programs with similar goals.

Illinois’ use of a cost-effective assessment helped the state save money and reduce crime rates by implementing evidence-based programs. The Redeploy Illinois initiative, passed by the Illinois legislature in 2004, is predicated on the belief that non-violent youth offenders are less likely to be involved in future delinquent behavior if they remain in their home communities to receive treatment instead of being sent to a detention facility. The programs also are less expensive than housing a juvenile in a detention center. The annual cost of housing one juvenile in a detention center was $70,827 in 2005.

The Redeploy Illinois initiative gives counties financial support to provide comprehensive services to delinquent youth in their home communities who might otherwise be sent to the Illinois Department of Juvenile Justice (IDJJ). In the first two years of implementation, the Redeploy Illinois pilot sites, on average, reduced their commitments to IDJJ by 44 percent. As of January 2010, Redeploy Illinois has nine programs serving juveniles in 20 counties. So far, for every $1 million spent by Redeploy Illinois pilot sites, IDJJ has had a cost avoidance of $3.55 million on juvenile incarceration.

The success of Redeploy Illinois has prompted its oversight board to recommend an increased financial investment to expand services to the entire state. The board also recommended that a cost-benefit analysis of Redeploy Illinois be conducted in addition to the program assessments to help understand its true value. As of January 2010, some of the program assessments had begun.
Conclusion

Although cost-benefit analysis may appear complicated, it is important to remember that the goal is simply to weigh the advantages and disadvantages of one course of action over another.

For legislators interested in learning how cost-benefit analysis can be applied in their state, there are many developing resources to turn to. With this educational assistance, state leaders will be better able to decide how to value information derived from cost analyses.

Moving Forward

The success of these examples has increased national interest in replicating cost-benefit analysis and similar program assessments. To inform practitioners, Vera initiated a project to centralize information on the topic in the National Knowledge Bank for Cost-Benefit Analysis in Criminal Justice (CBKB.org). The website serves as a clearinghouse for resources and research and is also a center for active practitioners. It includes podcasts, videos and a cost-benefit toolkit developed specifically to provide general education and training on criminal justice cost-benefit analysis to various audiences.

Another project designed to increase the accessibility of cost-benefit analysis is the Results First Initiative. WSIPP partnered with the Pew Charitable Trusts and the MacArthur Foundation to develop a cost-benefit tool that can be applied to data collected from programs in other states. The project will include a software designed to help states identify evidence-based policies that maximize the return on investment for taxpayers.

For references and additional resources, please see the References, Glossary & Resources section.