



Iowa Department of Corrections  
**Return on Investment:  
Evidence-Based Options to Improve Outcomes**  
May 2012

## Introduction

The Iowa Department of Management requested the Iowa Department of Corrections to accept the Pew Center on the States' invitation to be trained in assessing the return on investment to taxpayers from criminal justice programs utilized by the State of Iowa. Using the Results First model, a nationally recognized, peer-reviewed tool developed by the Washington State Institute for Public Policy (WSIPP), the Department of Corrections has calculated the rate of return on investment for Iowa adult offender programs for each program area included in the model.

This report summarizes findings by three program areas: institutional programs, community programs for prison releasees, and community programs for higher risk probationers. Analyses show that a vast majority of the adult criminal justice programs employed by the State of Iowa yield positive rates of return on investment, meaning that the benefits outweigh the costs of operating the programs.

The Iowa Department of Corrections is committed to evidence-based practices, and in the past has ceased operating some programs that were not effective. This report replicates findings of the Washington State Institute for Public Policy, that batterers' education programs in the community are not effective in reducing recidivism for domestic abusers. In response, several district departments of correctional services are piloting a new program aimed at treating domestic abusers, and are participating in research to determine whether the new program is effective.

## Background

### **Cost-Benefit Analysis**

Cost-benefit analysis is an economic tool that allows policymakers to make informed decisions about the effectiveness of programs and policies. This form of analysis allows policymakers to compare the monetary benefits of a program or policy against costs over a period of time. If the benefits outweigh the costs, a program or policy is considered cost-effective.<sup>1</sup>

### **The Results First Model**

In 2010, the Pew Center on the States and the Washington State Institute for Public Policy partnered to develop a cost-benefit tool for states that was capable of identifying criminal justice programs that represent prudent taxpayer investments. The Results First model for states is based on the original WSIPP model, which is the culmination of over a decade of experience identifying evidence-based policy strategies using data to institute reforms. The Results First model is capable of examining the effect of reducing the average daily prison population and reinvesting the money saved into evidence-based criminal justice programming. The intent of the model is to allow policymakers to test different combinations of program and policy choices to make the best use of taxpayer dollars, while protecting or even improving public safety.<sup>2</sup>

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<sup>1</sup> Cost-Benefit Knowledge Bank for Criminal Justice. Accessed April 3, 2011 from <http://cbkb.org/basics/>.

<sup>2</sup> S. Aos & E. Drake (2010). *WSIPP's Benefit-Cost Tool for States: Examining Policy Options in Sentencing and Corrections*. Olympia: Washington State Institute for Public Policy, Document No. 10-08-1201.

## Summary of Findings

The following subsections summarize findings by three programs areas:

- Institutional Programs
- Community Programs for Prison Releasees
- Community Programs for Higher Risk Probationers

This summary ranks programs on two measures:

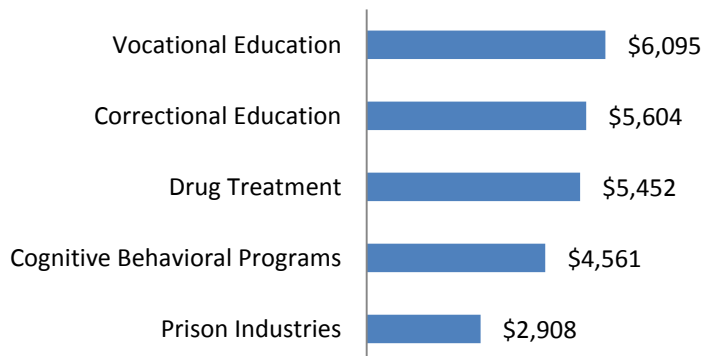
- **Benefits minus Costs.** Benefits include both taxpayer and crime victim benefits. Costs are as compared to “business as usual.”
- **Benefit to Cost Ratio.** The amount of dollars returned in benefits for every dollar spent on a program.

See p. 5 for a chart containing complete statistics and numbers of offenders served in each program during calendar year 2011.

### *Institutional Programs*

Five institutional program areas are included in the Results First model: vocational education, correctional education (basic or post-secondary), drug treatment, cognitive behavioral programs and prison industries. Benefits for all these programs exceed costs, ranging from \$6,095 for vocation education to \$2,908 for prison industries. The benefit-to-cost ratios indicate all represent good investments. Cognitive behavioral programs are very inexpensive to run, returning \$37.70 for every dollar spent.

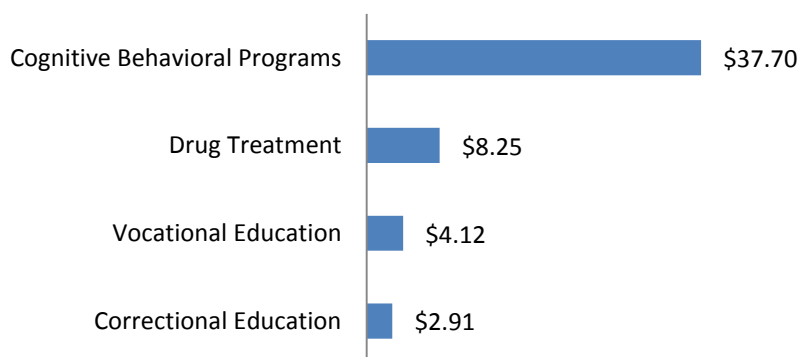
#### Prison-Based Programs Benefits minus Costs



Figures are per program participant.

#### Prison-Based Programs

For every dollar spent on these programs, the amount of benefit returned is:



Prison industries is excluded because no taxpayer dollars are spent on it.

## About this Report

This report represents the first product of the Iowa Results First Model being explored by the Iowa Public Safety Advisory Board. The report was prepared by Lettie Prell, Director of Research, Iowa Department of Corrections and Sarah Wittig Galgano, research assistant. They are solely responsible for its contents.

The authors would like to thank the following agencies for providing data and other information, and in some cases lending their expertise:

- Iowa Department of Management
- Iowa Department of Public Health
- Iowa Department of Public Safety
- Iowa Division of Criminal & Juvenile Justice Planning
- Judicial Branch
- Judicial District Departments of Correctional Services
- Legislative Services Agency, Iowa Legislature
- Substance abuse treatment agencies ADDS and SIEDA.

The authors would also like to thank the following agencies for providing training, technical assistance and advice during the development of the Iowa Results First Model:

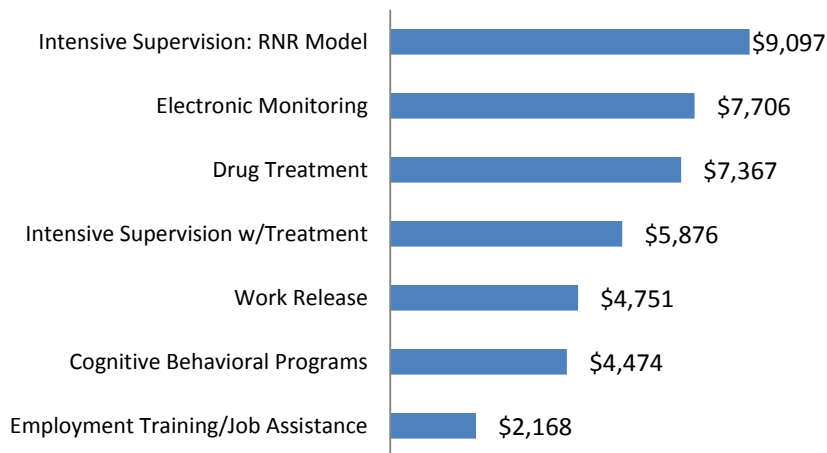
- Pew Center on the States, Results First
- Washington State Institute for Public Policy (WSIPP)

The Results First Model is based on the WSIPP Benefit-Cost Tool. More information on this tool may be found here:

<http://www.wsipp.wa.gov/>.

## Community Programs for Prison Releasees

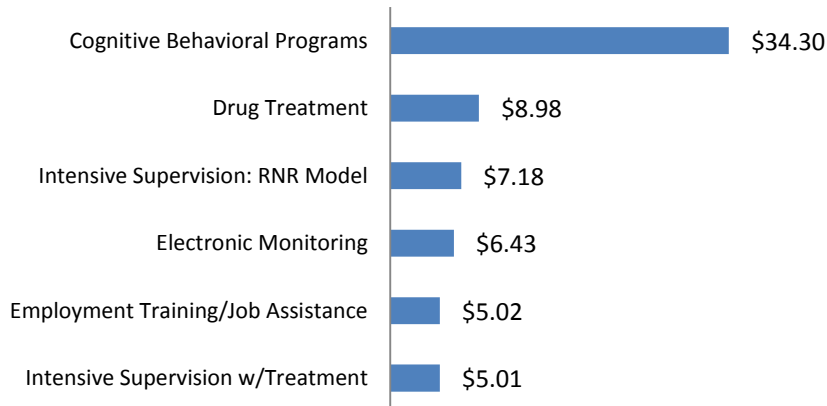
### Benefits minus Costs



Figures are per program participant.

## Community Programs for Prison Releasees

For every dollar spent on these programs, the amount of benefit returned is --



Work Release is excluded because benefit to cost ratio could not be computed.

### More About Costs & Benefits

- All cost data and benefit calculations are based on Iowa data.
- **Benefit Time Frame.** All statistics, such as benefits minus costs, are realized over a ten-year time period and are expressed in 2011 dollars (i.e., life-cycle, present values).
- **Taxpayer benefits** are the state and local resources avoided as a result of a program that reduces future crime to include arrest, prosecution/courts, jail, and corrections custody/supervision.
- **Crime victim benefits** are the monetized value of avoided victimizations as a result of the program, for example medical and mental health care expenses, property damage and losses, and reduction in future earnings incurred by crime victims.
- **Program costs** are those above "business as usual."

## Community Programs for Prison Releasees

Seven community-based program areas included in the Results First model are commonly targeted to prison releasees: intensive supervision using the Risk Need Responsivity (RNR) Model, electronic monitoring, drug treatment, intensive supervision with treatment, work release, cognitive behavioral programs, and employment training/job assistance. Benefits for all these programs exceed costs, ranging from \$9,097 for Intensive Supervision using the RNR model, to \$2,168 for employment training/job assistance. The benefit-to-cost ratios indicate all represent good investments. Cognitive behavioral programs are very inexpensive to run, returning \$34.30 for every dollar spent.

### Risk Need Responsivity Model & Evidence-Based Caseload Size

Andrews, Bonta, and Hodge (1990) developed the Risk Need Responsivity (RNR) model. It is based on three principles:

- **Risk Principle.** An offender's level of service should reflect their risk of recidivism.
- **Need Principle.** An offender's criminogenic needs should be assessed and targeted for treatment, with higher risk offenders receiving the most intensive treatment.
- **Responsivity Principle.** The type of intervention should correspond with the offender's strengths and motivations.

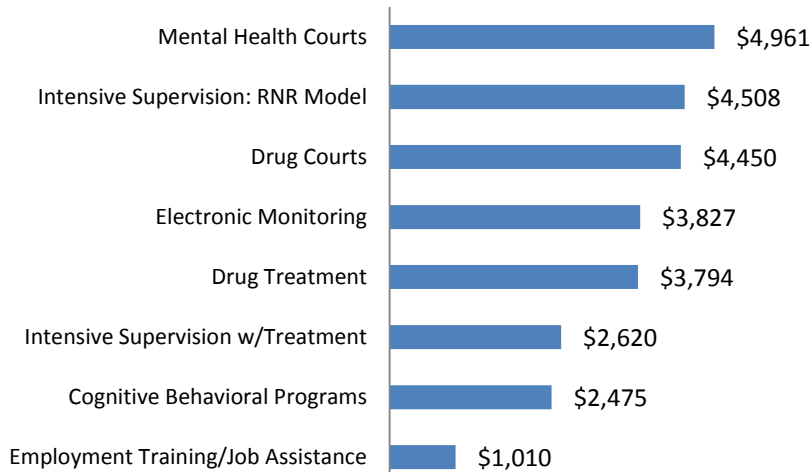
The RNR model typically supports cognitive behavioral or social learning treatments.

The effectiveness of the RNR model shown in this report is based in part on research of offenders supervised in Polk County by Abt Associates that also included findings of an optimal caseload size in order to effectively deliver RNR. The researchers found that an intensive supervision caseload size of 30 offenders per officer (compared with a caseload of 50 offenders) reduces overall recidivism by 25.5% for a new crime and reduces the rate of recidivism for new property and violent crimes by 45%.

Iowa's intensive supervision programs all incorporate treatment; however, not all programs may adhere to the RNR model nor be able to maintain the optimal caseload size.

### Community Programs for Higher Risk Probationers

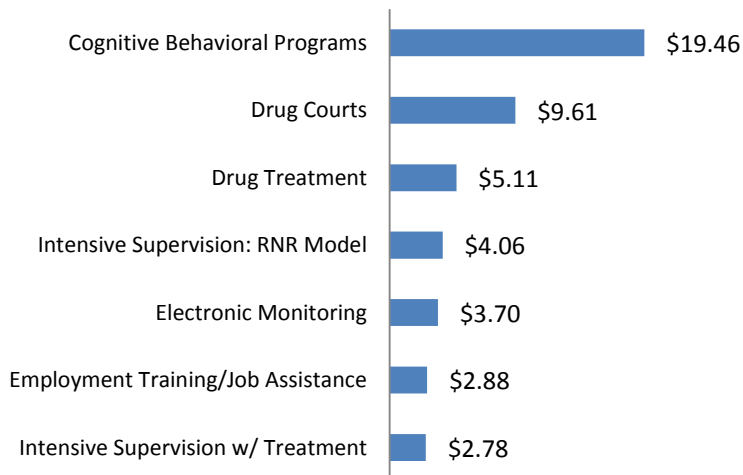
#### Benefits minus Costs



Figures are per program participant.

### Community Programs for Higher Risk Probationers

For every dollar spent on these programs, the amount of benefit returned is:



Mental Health Courts are excluded because benefit to cost ratio could not be computed.

### Program Fidelity

The results shown in this report are based on a summary of good, sound research evaluations including those conducted on Iowa offenders. Simply put, well-run programs will achieve these results or better. Poorly run programs will not.

The Iowa Department of Corrections has evaluated the degree to which institutional and community-based corrections programs adhere to evidence-based principles. Improvement plans are in place for a number of programs.

### Community Programs for Higher Risk Probationers

Eight community-based program areas included in the Results First model are commonly targeted to higher risk probationers: intensive supervision using the Risk Need Responsivity (RNR) Model, drug courts, mental health courts, electronic monitoring, drug treatment, intensive supervision with treatment, cognitive behavioral programs, and employment training/job assistance. Benefits for all these programs exceed costs, ranging from \$4,961 for mental health courts, to \$1,010 for employment training/job assistance. The benefit-to-cost ratios indicate all represent good investments. Cognitive behavioral programs are very inexpensive to run, returning \$19.46 for every dollar spent.

The lower numbers for many program areas here compared to the previous page does not mean these programs are less effective in treating probationers compared to prison releasees. Rather, prison releasees tend to have higher rates of reconviction compared to probationers, so treating prison releasees produces more benefits in terms of reduced crime. Similarly, to the extent these programs are delivered to probationers assessed as lower risk, less benefit to taxpayers – or no benefit at all – will result. For the Iowa Results First Model, higher risk probationers were defined as those offenders who were supervised at the high normal level of supervision or intensive supervision during at least a portion of their supervision period.

### Ineffective Programs

The Results First model includes analysis of Domestic Violence Perpetrator Treatment Programs of a type used in Iowa community-based corrections. As shown on the following page, this program area is a waste of taxpayer dollars. Several district departments of correctional services are currently piloting a new program for domestic abusers, and are participating in research to determine whether the new program is effective.

While not in the current model, past analysis by the Washington State Institute for Public Policy has found a number of programs for adult offenders to be ineffective. One class of programs called Life Skills Education is common in Iowa's prisons and community-based corrections. Life skills education includes classes in financial management, parenting, relationships, substance abuse education, and other topics. There may be sound objectives other than reducing recidivism to continue to operate at least some of these programs. However, a review should be conducted to identify those that are not worth running, and funnel those resources into the programs that are a better investment for Iowa's taxpayers.

### Further Analysis of Programs Needed

The Washington State Institute for Public Policy is currently reviewing the effectiveness of sex

offender treatment, and we anticipate being able to analyze the costs and benefits of this program in Iowa within the next year. Analysis of other programs for Iowa adult offenders is also needed, including mental health treatment (other than mental health court); dual diagnosis programs, mentoring and offender reentry programs.

### Conclusion

Using the Results First cost-benefit model, the Iowa Department of Corrections assessed the rate of return Iowa taxpayers receive from investment in the State's adult criminal justice programs. Findings indicate most of the State's programs yield positive returns on investment. Expansion of these programs to serve additional prison inmates, prison releasees and higher risk probationers would further reduce admissions to jails and prisons and keep Iowans safer.

Topic Area/Program	Monetary Benefits		Costs		Summary Statistics			
	Total Benefits	Taxpayer Benefits Only	(Above "Business as Usual")	Benefits Minus Costs	Benefit to Cost Ratio	Rate of Return on Investment	Measure of Risk (odds of a net present value)	Offenders Served in Calendar 2011
Benefits and costs are life-cycle, present values per participant in 2011 dollars.								
<b>Institutional Programs:</b>								
Vocational Education in Prison	\$ 8,052	\$ 2,317	\$ (1,957)	\$ 6,095	\$ 4.12	43%	100%	226
Correctional Education in Prison	\$ 8,540	\$ 2,462	\$ (2,936)	\$ 5,604	\$ 2.91	29%	100%	2,981
Drug Treatment in Prison	\$ 6,205	\$ 1,799	\$ (753)	\$ 5,452	\$ 8.25	93%	100%	1,454
Cognitive Behavioral Programs in Prison	\$ 4,686	\$ 1,349	\$ (124)	\$ 4,561	\$ 37.70	1731%	99%	1,577
Correctional Industries in Prison	\$ 2,906	\$ 839	--	\$ 2,908	--	--	100%	1,400
<b>Community Programs for Prison Releasees:</b>								
Intensive Supervision: with RNR Model	\$ 10,570	\$ 3,058	\$ (1,473)	\$ 9,097	\$ 7.18	79%	100%	1,431*
Electronic Monitoring <sup>1</sup>	\$ 9,126	\$ 2,637	\$ (1,420)	\$ 7,706	\$ 6.43	70%	100%	694
Drug Treatment in the community <sup>2</sup>	\$ 8,291	\$ 2,402	\$ (924)	\$ 7,367	\$ 8.98	106%	100%	942
Intensive Supervision: with Treatment	\$ 7,344	\$ 2,121	\$ (1,468)	\$ 5,876	\$ 5.01	53%	99%	1,431*
Work Release	\$ 2,848	\$ 825	\$ 1,903	\$ 4,751	n/e	n/e	100%	1,878
Cognitive Behavioral Programs in the community	\$ 4,608	\$ 1,334	\$ (135)	\$ 4,474	\$ 34.30	1726%	99%	1,543
Community Employment Training/Job Assistance	\$ 2,708	\$ 781	\$ (540)	\$ 2,168	\$ 5.02	55%	97%	unknown
<b>Community Programs for Higher Risk Probationers:</b>								
Mental Health Courts	\$ 4,472	\$ 1,211	\$ 490	\$ 4,961	n/e	n/e	100%	37
Intensive Supervision: with RNR Model	\$ 5,980	\$ 1,611	\$ (1,473)	\$ 4,508	\$ 4.06	51%	100%	1,818*
Drug Courts - Adult <sup>3</sup>	\$ 4,967	\$ 1,344	\$ (517)	\$ 4,450	\$ 9.61	225%	100%	653
Electronic Monitoring <sup>1</sup>	\$ 5,249	\$ 1,420	\$ (1,423)	\$ 3,827	\$ 3.70	46%	100%	761
Drug Treatment in the community <sup>2</sup>	\$ 4,719	\$ 1,275	\$ (925)	\$ 3,794	\$ 5.11	69%	100%	3,579
Intensive Supervision: with Treatment	\$ 4,093	\$ 1,108	\$ 1,473	\$ 2,620	\$ 2.78	32%	97%	1,818*
Cognitive Behavioral Programs in the community	\$ 2,609	\$ 709	\$ (134)	\$ 2,475	\$ 19.46	931%	99%	2,413
Community Employment Training/Job Assistance	\$ 1,549	\$ 418	\$ (539)	\$ 1,010	\$ 2.88	34%	92%	unknown
<b>Ineffective Programs:</b>								
Domestic Violence Perpetrator Treatment Programs*	\$ (977)	\$ (286)	\$ (328)	\$ (1,305)	\$ (2.99)	29%	21%	4,775

<sup>1</sup>GPS and radio frequency only.

<sup>2</sup>Inpatient/residential and outpatient treatment only. Treatment generally includes step-down and continuing care.

<sup>3</sup>Results shown are for Judge Model only and when used as an alternative to prison.

<sup>4</sup>This category includes a treatment model used in community batterers' education classes. A different model is used in the Iowa prison system that employs cognitive behavioral techniques.

\*The extent to which all locations adhere to the RNR model has not yet been determined, and will depend upon ability to operate at the optimum caseload size per officer. Those locations not meeting the RNR Model standard are operating Intensive Supervision with Treatment.