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**The Effects of Parole on Recidivism:  
Juvenile Offenders Released From  
Washington State Institutions**

*Preliminary Findings*

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Robert Barnoski  
and  
Steve Aos

March 2001

 *Washington State  
Institute for  
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# WASHINGTON STATE INSTITUTE FOR PUBLIC POLICY

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The Washington Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the legislature, the governor, and public universities—governs the Institute, hires the director, and guides the development of all activities.

The Institute's mission is to carry out practical research, at legislative direction, on issues of importance to Washington State. The Institute conducts research activities using its own policy analysts, academic specialists from universities, and consultants. New activities grow out of requests from the Washington legislature and executive branch agencies, often directed through legislation. Institute staff work closely with legislators, as well as legislative, executive, and state agency staff to define and conduct research on appropriate state public policy topics.

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# TABLE OF CONTENTS

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Executive Summary.....	i
I. Introduction.....	1
II. Washington’s Juvenile Parole Program .....	3
Rare Opportunity to Study Outcomes .....	3
Using Risk Assessment to Identify a Comparable Group .....	4
The Parole and No-Parole Groups.....	4
12-Month Recidivism Rates .....	6
Analysis: Adding Confidence With Additional Statistical Tests .....	8
III. Estimated Costs and Benefits .....	11
IV. Conclusions .....	13
Exhibit 1: Comparison of the Parole and No-Parole Groups.....	5
Exhibit 2: Recidivism Rates by Most Serious Offense .....	6
Exhibit 3: Time to Commission of First Felony Offense .....	7
Exhibit 4: Average Recidivism Offenses During 12-Month Follow-up Period .....	8
Exhibit 5: Logistic Regression Results for Three Outcomes .....	9



## EXECUTIVE SUMMARY

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For a one-year period, the 1997 Legislature eliminated Juvenile Rehabilitation Administration (JRA) parole for all but sex offenders and the highest-risk offenders leaving JRA institutions. Subsequently, the 1999 Legislature reinstated parole for all offenders leaving those institutions. In order to determine whether parole services influenced subsequent criminal conduct, the Legislature directed the Washington State Institute for Public Policy (Institute) to compare outcomes of youth with and without parole. The Institute compared the recidivism rates of those juveniles released without parole in fiscal year 1999 to a similar group released with parole during the previous year.

After a 12-month follow-up, 32.7 percent of the parole group and 30.2 percent of the no-parole group had been reconvicted for new felonies. This difference was not statistically significant, thus indicating that parole had no influence on recidivism for these juvenile offenders. The study did not assess the influence of parole for released sex offenders, nor for those offenders identified in the high-risk category.





## I. INTRODUCTION

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**Legislative History.** In 1997, the Legislature funded intensive parole for sex offenders and up to 25 percent of the highest-risk youth committed to state Juvenile Rehabilitation Administration (JRA) custody,<sup>1</sup> eliminating parole for all remaining youth leaving JRA institutions. Parole was reinstated by the 1999 Legislature for all JRA youth. The effect was to create a one-year period—fiscal year 1999—when there was no parole for 57 percent of the offenders leaving JRA Institutions.

When parole for all JRA offenders was re-established, the Legislature directed the Washington State Institute for Public Policy (Institute) to measure how parole influenced recidivism. The 1999 biennial budget direction was as follows:<sup>2</sup>

*No later than January 1, 2001, the Washington state institute for public policy shall report to the legislature on the outcomes of low and moderate risk juvenile rehabilitation administration offenders who were released without supervision compared to those who were released with supervision. The study shall compare both the recidivism rates as well as the nature of any new criminal offenses each group commits. The legislature shall consider the results of this study in making any decision to continue or revise parole services for this group of offenders.*

This preliminary report relies on a 12-month follow-up period and compares recidivism rates. By the end of 2001, a final report will cover an 18-month follow-up period.

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<sup>1</sup> RCW 13.40.210

<sup>2</sup> ESSB 5180, Section 203 (1)(j).



## II. WASHINGTON'S JUVENILE PAROLE PROGRAM

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### Rare Opportunity to Study Outcomes

The ultimate test for any program evaluation is this: Did the program *cause* a change in outcome(s)? The key word in this question is “cause.” Particularly in the case of criminal justice and social programs, many factors other than the program that can influence outcomes (law changes, economic factors, changes in enforcement). Isolating the cause and effect of a program can be a daunting task.

Some research strategies are better than others at isolating the program effects from all other factors. The ideal design allows one to compare outcomes of two groups that are identical in every way except that one group receives the program, and one does not.

When the legislature eliminated parole for all but the highest risk offenders leaving JRA institutions, it created a rare opportunity to evaluate the effects of parole on recidivism. In effect, the legislature set up a “natural” experiment. Combined with JRA’s selection procedures, the state’s experience is comparable to a random assignment design. This design is the “gold standard” for social science research.<sup>3</sup>

The Institute uses a 5-point scale to judge the quality of an evaluation’s research design. The scale is based closely on the 5-point scale developed by researchers at the University of Maryland.<sup>4</sup> On this five-point scale, a rating of “5” reflects an evaluation in which the most confidence can be placed. As the evaluation ranking gets lower, less confidence can be placed in any reported differences (or lack of differences) between the program and comparison groups. The present study ranks as a level “5” evaluation and any differences in outcomes between the two groups can be reliably attributed to the treatment.

After reviewing the criminology literature in the United States, we were unable locate any studies comparing the recidivism rates of juveniles on a typical parole caseload with those offenders released without parole. Evaluations have compared the relative effectiveness of intensive parole or probation, but we could not find any other study comparing parole with no parole.

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<sup>3</sup> *Standards for Improving Research Effectiveness in Adult and Juvenile Justice*, Olympia: Washington State Institute for Public Policy, December 1997.

<sup>4</sup> L. Sherman, D. Gottfredson, D. MacKenzie, J. Eck, P. Reuter, and S. Bushway (1997), *Preventing Crime, What Works, What Doesn't, What's Promising*, Washington: U.S. Department of Justice, Chapter 2.

## Using Risk Assessment to Identify a Comparable Group

This evaluation compares the recidivism rates of two groups of juvenile offenders:

- JRA offenders **released without parole** during fiscal year 1999 when regular parole was not funded by the legislature, and
- A comparable group of JRA offenders **placed on regular JRA parole** during fiscal year 1998.

JRA administers a risk assessment instrument called the “Initial Security Classification Assessment” (ISCA).<sup>5</sup> Scores on this instrument were used by JRA to determine the parole status during fiscal year 1998. Those youth with an ISCA score below 32 points were not placed on parole upon exiting a JRA institution, while those with a score at or above this cutoff were placed on intensive parole. In addition, all juvenile sex offenders were placed on parole regardless of their ISCA scores. This selection process resulted in 43 percent of youth released from JRA institutions during fiscal year 1999 placed on intensive parole and 57 percent receiving no parole.

In conducting this evaluation, the Institute used the ISCA to identify the comparison group of non-sex offenders released in the fiscal year *prior* to the year when regular parole was eliminated. During fiscal year 1998, all non-sex offenders placed on regular parole with ISCA scores below 32 formed the comparison group.

As of January 2001, all youth in both the parole and no-parole groups had been released for at least 18 months. This preliminary study measures re-offending for a 12-month follow-up period (with a six-month period for the adjudication of any offenses committed during that time). By August 2001, we will be able to measure an 18-month recidivism rate with this same six-month adjudication period.

## The Parole and No-Parole Groups

The *parole group* consists of the 831 youth released to parole supervision between July 1, 1997, and June 30, 1998, who were not sex offenders and had an ISCA score below 32 points. The *no-parole group* consists of the 717 youth released without parole supervision between on July 1, 1998, and June 30, 1999, who had an ISCA score below 32 points and were not sex offenders.

The number of youth released without parole during fiscal year 1999 is smaller than the number released to parole in fiscal year 1998, because the juvenile courts in some counties were not willing to have these “JRA youth” in their communities unsupervised. In these

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<sup>5</sup> The Institute has conducted an analysis of the ISCA and found it is a valid assessment instrument for predicting recidivism. See R. Barnoski (1998) *Juvenile Rehabilitation Administration Assessments: Validity Review and Recommendations*, Olympia: Washington State Institute for Public Policy.

counties, JRA youth who were still under the local juvenile court’s supervision were placed on juvenile court probation caseloads. These youth were excluded from the no-parole group, because this action could have influenced the natural experiment if the courts made selective decisions. As the analysis indicates on Exhibit 1, however, this does not seem to be the case.

Exhibit 1 compares the two groups of youth in the evaluation; they did not differ statistically on any measured characteristic. This lack of difference further increases the confidence that can be placed in any observed recidivism outcomes. As an extra precaution, however, the Institute conducted multivariate statistical analyses of the recidivism outcomes to control for any systematic differences that might have existed between the two groups.

**Exhibit 1**  
**Comparison of the Parole and No-Parole Groups\***

	<b>NO PAROLE</b>	<b>PAROLE</b>
<b>Number of Youth</b>	717	831
<b>Male Gender</b>	90.0%	88.2%
<b>Ethnic Background</b>		
<i>African American</i>	20.6%	20.7%
<i>Asian American</i>	5.6%	6.3%
<i>European American</i>	51.9%	48.6%
<i>Native American</i>	6.4%	7.1%
<i>Other</i>	4.7%	2.0%
<i>Unknown</i>	10.7%	15.3%
<b>Age at Release</b>		
<i>Under 16</i>	24.5%	21.4%
<i>16</i>	21.2%	22.1%
<i>17</i>	25.0%	26.0%
<i>Over 17</i>	29.3%	30.4%
<b>ISCA Scores</b>		
<i>0 to 19</i>	28.3%	26.6%
<i>20 to 24</i>	22.0%	23.7%
<i>25 to 27</i>	20.6%	19.5%
<i>28 to 31</i>	29.0%	30.2%
<b>Average ISCA Score</b>	22.5	22.6
<b>Average Residential Stay (Days)</b>	287	270

*\*There are no statistically significance differences between the parole group and no-parole group on any of these variables.*

## 12-Month Recidivism Rates

The recidivism outcomes for the two groups were computed using conviction rates for new offenses as recorded by actions in the Superior Courts of Washington.<sup>6</sup> These conviction rates include any subsequent offenses in juvenile or adult court. In Washington, all convictions in juvenile or adult criminal court are recorded in databases maintained by the state's Office of the Administrator for the Courts. The data in this report include total reconviction rates as well as subcategories for different types of re-offenses. The follow-up "at-risk" period for each offender released or placed on parole was 12 months. In calculating rates, the Institute allowed a fixed six-month period for any offense to be adjudicated by the courts; this time period has been found sufficient for almost all offenses committed by JRA youth to be decided by the courts.

Exhibit 2 shows the 12-month reconviction rates for the two groups. The 12-month felony recidivism rate of the parole group is 32.7 percent, which slightly exceeds the no-parole group rate of 30.2 percent. This 2.5 percentage-point difference, however, is not statistically significant. Similarly, the 12-month misdemeanor recidivism rate (11.3 percent) of the parole group slightly exceeds the no-parole group rate (10.2 percent) but also is not statistically significant. There are no statistically significant differences between the parole and no-parole groups on any offense sub-category.

**Exhibit 2**  
**Recidivism Rates by Most Serious Offense**  
**Committed During the 12-Month Follow-up Period\***

MOST SERIOUS RECIDIVISM OFFENSE	PERCENT NO-PAROLE (N=717)	PERCENT PAROLE (N=831)
<b>None</b>	59.7	56.0
Felony Person	9.0	10.6
Felony Sex	0.4	0.5
Felony Property	16.7	15.9
Felony Drugs	2.8	4.7
Felony Other	1.3	1.1
<b>Total Felony</b>	<b>30.2</b>	<b>32.7</b>
Misdemeanor Person	2.7	4.3
Misdemeanor Property	3.8	4.6
Misdemeanor Drug	1.0	0.5
Misdemeanor Alcohol	2.2	1.0
Misdemeanor Other	0.4	1.0
<b>Total Misdemeanor</b>	<b>10.2</b>	<b>11.3</b>
<b>Total Recidivism</b>	<b>40.3</b>	<b>44.0</b>

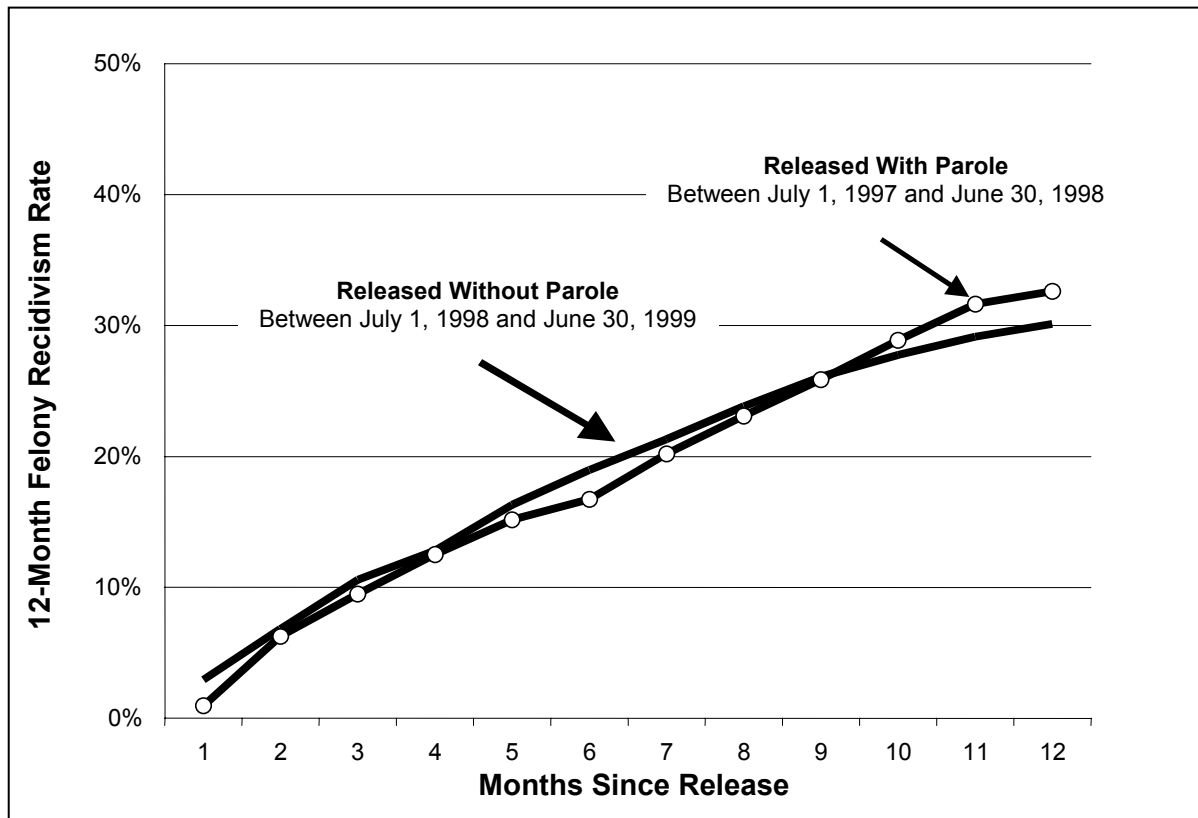
*\*There are no statistically significance differences between the parole group and no-parole group on any of these variables.*

<sup>6</sup> This report follows the common definition for recidivism that the 1997 legislature directed the Institute to establish. See: *Standards for Improving Research Effectiveness in Adult and Juvenile Justice*, Olympia: Washington State Institute for Public Policy, December 1997.

Exhibit 3 displays the timing to the first felony offense during the 12-month follow-up period for the two groups. The rate in the 12th month is the same as that shown on Exhibit 2. The chart shows changes in rates over the 12-month follow-up period.

It is sometimes assumed that official measures of recidivism (such as convictions or arrests) will be higher for those under parole supervision. Under this assumption, persons under supervision are more likely to come under suspicion by officials for criminal acts and therefore have more arrests and convictions than unsupervised persons engaging in similar crime rates. This assumption is not supported by this study. The average length of stay on parole is a little over three months. As the data on Exhibit 3 indicate, no difference emerged in recidivism rates between the groups during these first three months when the parole group was being supervised. The chart also shows that after the three-month parole period ended, there continued to be no significant differences in felony recidivism rates for the two groups.

**Exhibit 3**  
**Time to Commission of First Felony Offense**  
**By Parole and No-Parole Youth**



The analyses thus far have reported recidivism based on the most serious offense committed. Exhibit 4 covers the number of offenses during the follow-up period. As with the results presented in Exhibit 3, no statistically significant differences between the parole and no-parole groups were found regarding the total number of re-offenses.

**Exhibit 4**  
**Average Recidivism Offenses**  
**During 12-Month Follow-up Period**  
**by Type of Offense**

	PERCENTAGE OF YOUTH WITH AT LEAST ONE OFFENSE		AVERAGE NUMBER OF OFFENSES	
	No-Parole	Parole	No-Parole	Parole
Against Person Felony	9.5	11.1	0.14	0.15
Property Felony	18.8	17.4	0.31	0.28
Drug Felony	3.9	5.9	0.06	0.09
Other Felony	4.7	2.4	0.05	0.04
<b>Total Felony</b>	<b>30.3</b>	<b>32.7</b>	<b>0.56</b>	<b>0.56</b>
Against Person Misdemeanor	99.9	7.2	0.09	0.11
Property Misdemeanor	100.0	11.2	0.16	0.20
Drug Misdemeanor	99.7	1.3	0.03	0.02
<b>Total Misdemeanor</b>	<b>18.7</b>	<b>20.2</b>	<b>0.40</b>	<b>0.45</b>

### Adding Confidence With Additional Statistical Tests

To provide additional confidence in these results, we conducted additional statistical tests to control for whatever differences may have existed between the parole and no-parole groups in this study. The following explanatory variables were included in the multivariate analyses (these variables are the same as shown in Exhibit 1):

- Age
- Sex
- Race
- ISCA Score
- Length of Stay in JRA Institution
- Group (Parole or No Parole)



Using these variables, logistic regression models were constructed for three recidivism outcomes: felony and misdemeanor recidivism; felony recidivism; and violent felony recidivism. The results are displayed in Exhibit 5.

In each analysis, the “parameter estimate” for parole/no-parole variable is not significant. This means that being on parole had no significant impact on recidivism even after controlling for additional variables related to recidivism. This is the same finding in Exhibit 3.

**Exhibit 5**  
**Logistic Regression Results for Three Outcomes**

PARAMETER	ESTIMATE	STANDARD ERROR	CHI-SQUARE	PR > CHISQ	ODDS RATIO
<b>FELONY AND MISDEMEANOR 12-MONTH RECIDIVISM</b>					
<b>AREA UNDER THE RECEIVER OPERATOR CHARACTERISTIC = 0.706</b>					
<b>Intercept</b>	4.331	0.706	37.636	0.000	
<b>Parole</b>	0.175	0.111	2.484	0.115	1.191
<b>ISCA</b>	0.063	0.008	55.652	0.000	1.065
<b>White</b>	-0.433	0.111	15.143	0.000	0.649
<b>LOS</b>	-0.001	0.000	4.772	0.029	0.999
<b>Age at Release</b>	-0.381	0.042	81.035	0.000	0.683
<b>Male</b>	0.537	0.183	8.561	0.003	1.710
<b>FELONY 12-MONTH RECIDIVISM</b>					
<b>AREA UNDER THE RECEIVER OPERATOR CHARACTERISTIC = 0.646</b>					
<b>Intercept</b>	0.607	0.704	0.743	0.389	
<b>Parole</b>	0.135	0.114	1.410	0.235	1.145
<b>ISCA</b>	0.054	0.009	36.863	0.000	1.055
<b>White</b>	-0.383	0.114	11.301	0.001	0.682
<b>LOS</b>	0.000	0.000	2.830	0.093	1.000
<b>Age at Release</b>	-0.181	0.041	19.327	0.000	0.835
<b>Male</b>	0.653	0.201	10.548	0.001	1.921
<b>VIOLENT FELONY 12-MONTH RECIDIVISM</b>					
<b>AREA UNDER THE RECEIVER OPERATOR CHARACTERISTIC = 0.618</b>					
<b>Intercept</b>	-1.912	1.058	3.270	0.071	
<b>Parole</b>	0.200	0.172	1.352	0.245	1.221
<b>ISCA</b>	0.035	0.013	7.114	0.008	1.036
<b>White</b>	-0.539	0.174	9.633	0.002	0.583
<b>LOS</b>	0.000	0.000	0.003	0.955	1.000
<b>Age at Release</b>	-0.090	0.060	2.222	0.136	0.914
<b>Male</b>	0.581	0.327	3.147	0.076	1.787



### III. ESTIMATED COSTS AND BENEFITS

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The Institute has developed a model to estimate the costs and crime-related benefits of programs designed to reduce crime.<sup>7</sup> The model works this way: If a program can reduce crime, then taxpayers receive benefits because fewer dollars will be spent on the criminal justice system in the future. Additionally, citizens who would otherwise be crime victims receive a benefit because they are not forced to bear the victimization costs of the crime that the program avoids. Against these potential benefits, the costs of running a program must be subtracted. The Institute's model makes these calculations and produced an estimate of the economic "bottom line" for a program.

When 18-month recidivism data are available in the summer of 2001, this cost-benefit model will be used to estimate the economics for the Institute's evaluation of regular juvenile parole.

As noted in this report, at the 12-month follow-up no statistically significant differences appear in the recidivism rates between juvenile offenders placed on parole and those not placed on parole. If this result holds at the 18-month follow-up, then there will be no benefits of juvenile parole in terms of reductions in future crime rates. The economic question will then turn to the cost of running regular juvenile parole services.

The Institute has made a preliminary estimate of the program cost of regular parole. We found that the average cost of regular JRA parole (as distinguished from intensive parole or parole for sex offenders) is about \$14 per day.<sup>8</sup> The average length of stay on regular JRA parole is about 14 weeks.<sup>9</sup> Therefore, the average cost of supervising a JRA offender on regular parole is about \$1,370. In order to break even in costs, juvenile parole must therefore reduce recidivism rates at least enough to generate \$1,370 (per participant) in benefits. At the 12-month follow-up, regular juvenile parole has not been able to achieve this result. The 18-month finding will produce a more definitive estimate of costs and benefits.

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<sup>7</sup> S. Aos, P. Phipps, R. Barnoski, and R. Lieb (1999) *The Comparative Costs and Benefits of Programs to Reduce Crime*, Olympia: Washington State Institute for Public Policy.

<sup>8</sup> This estimate was calculated by the Institute and includes direct and indirect costs of regular parole.

<sup>9</sup> Testimony of Cheryl Stephani, Senate Ways and Means Committee, February 1, 2001.



## IV. CONCLUSIONS

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This outcome evaluation takes advantage of a natural experiment; the strong research design offers a high degree of confidence. The results indicate that parole services, as administered by JRA during fiscal year 1999, did not reduce 12-month recidivism rates (for non-sex offenders and all but the highest risk offenders) compared to similar juvenile offenders not receiving parole.

This study also showed that the recidivism rate of offenders leaving JRA institutions is high: roughly 30 percent were convicted for a new felony offense within the first 12 months following release. Because these recidivism rates are high, reasonably priced programs that can achieve even small reductions in recidivism are likely to be cost-effective.<sup>10</sup> The Institute has identified several programs that have been shown to achieve recidivism reductions. While many of these programs were designed for youthful offenders less serious than those at JRA institutions, the “MultiSystemic Therapy” program is an example of an intervention that has the potential for reducing recidivism with this population. Currently, a program based upon MultiSystemic Therapy is being implemented by JRA for offenders with both mental health and substance abuse problems. MultiSystemic Therapy is also being tested for some youth on JRA Intensive Parole and in the juvenile courts under the Community Juvenile Accountability Act.

It is still not certain that MultiSystemic Therapy is effective with JRA youth, but a well-designed evaluation will be able to determine if the potential cost savings are achievable.

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<sup>10</sup> Aos, et al. 1999.