# Washington State Institute for Public Policy

July 2006

## RECIDIVISM FINDINGS FOR THE JUVENILE REHABILITATION ADMINISTRATION'S MENTORING PROGRAM: FINAL REPORT

The Washington State Institute for Public Policy (Institute) was asked to evaluate the mentoring program as part of our legislatively directed role to consult with the Juvenile Rehabilitation Administration (JRA) on ways to implement research-proven programs.<sup>1</sup> In 2002, the Institute conducted a preliminary analysis and found reduced recidivism rates for mentor participants.<sup>2</sup> This report updates the recidivism analysis by using a longer follow-up period.

About the Mentor Program. In 1996, JRA's Seattle office established a mentoring program as part of a federal initiative aimed at creating community partnerships to prevent and reduce youth violence. The program recruits and trains adults from diverse cultural backgrounds to serve as mentors for Seattle youth returning from a JRA facility. A mentor is a trusted adult who volunteers to assist a youth in setting and fulfilling educational and vocational goals, and to help the youth live a drug- and crime-free life.

Mentors are required to:

Make a one year commitment to the youth;

- Complete an application screening process, including a questionnaire and personal interview to determine interests and personality;
- Consent to a Washington State Patrol background check;
- Complete a one-day eight-hour mentor training program;

## SUMMARY

The Washington State Legislature directed the Institute to evaluate the Juvenile Rehabilitation Administration's mentoring program.

The Institute conducted a preliminary analysis of the program in 2002 using a 12-month follow-up period and found reduced recidivism for mentor participants. This report updates the preliminary findings by using a longer follow-up period to measure recidivism.

## Findings

- During the preliminary follow-up, the mentor group recidivated at a lower rate than the comparison group. However, the gap converges by the 36-month follow-up. None of the differences between the two groups is statistically significant for any type of recidivism at the 24- or 36-month follow-up periods.
- This study is limited by having a relatively small number of youth in the mentor and comparison groups. As a result, large differences between the groups are necessary to show statistical significance.
- Meet with the youth monthly during the last five to six months of the youth's confinement, and write or call weekly;
- Attend monthly meetings to enhance mentoring skills; and
- Meet with the youth weekly after the youth returns to the community.

Shortly after youth are committed to JRA, they are asked if they would like to participate in the mentoring program. These youth must have five to six months of their confinement remaining. Sex offenders are excluded from the program. Most youth asked to participate are chosen for

<sup>&</sup>lt;sup>1</sup> ESSB 6387(203)(20), Chapter 371, Laws of 2002.

<sup>&</sup>lt;sup>2</sup> Barnoski, R. (2002). *Preliminary findings for the Juvenile Rehabilitation Administration's mentoring program.* (Document No. 02-07-1202). Olympia: Washington State Institute for Public Policy.

the program. Each youth completes an application and has a personal interview with the JRA mentor program manager to determine interests and personality. When mentors become available, the JRA mentor program manager matches the mentor to a youth on gender, ethnicity, personality, and interests.

**Evaluation Design.** JRA provided the Institute with a database that identified youth who completed an application to join the mentoring program. Youth in the mentor group released to King and Pierce Counties between February 1997 and September 2000. There are 78 youth in the mentor group.

The best way to determine a program's effectiveness is to compare recidivism rates of youth who participate in the program with the rates of a similar group of youth who do not participate. Thus, a comparison group is constructed in addition to the mentor study group. Ideally, the comparison group would have been constructed by randomly assigning youth to the mentoring program or a comparison group; however, this design was not possible. Therefore, we developed an alternative approach to identify a comparison group.

The comparison group was selected from youth released from a JRA facility to King, Pierce, or Snohomish Counties between February 1997 and September 2000. Because random assignment was not possible, youth in the comparison group were matched on gender, ethnicity, and number of prior admissions to JRA. In addition, youth were matched within 5 points on the JRA risk score.<sup>3</sup> Comparison youth were found for all the 78 youth in the mentor group.

**Exhibit 1** compares the demographics of the study groups. The exhibit includes the demographics that were used to match the study groups, in addition to other key characteristics strongly associated with recidivism. There are no differences between the two groups. Thus, the comparison group is the same as the mentor group on these factors except for the fact that they did not go through the mentoring program.

Exhibit 1	
Demographics of the Study Groups	*

	Comparison	Mentor
	Group	Group
Number of Youth	78	78
Male	31	31
African American	31	31
Native American	7	7
Means		
Criminal History Score	9.8	10.6
Age at Admission to JRA	15.4	15.1
Age at Release from JRA	16.3	16.1
ISCA Score	30.9	30.9
Number of JRA Admissions	1	1

\* No significant differences between the groups on any of the variables.

**Exhibit 2** shows the distribution of the mentor and comparison groups by location. Eightyeight percent of the mentor group released from JRA to King County compared to 44 percent of the comparison group. About half of the mentor group was residing in Seattle during the program. We control for these differences in location later using multivariate regression.

*Exhibit 2* Distribution of the Study Groups by Location

Residence	Comparison Group	Mentor Group
King	44%	88%
Seattle	5%	49%
Pierce	33%	4%
Tacoma	5%	3%
Snohomish	23%	0%
Other	0%	8%

**Recidivism Findings.** Recidivism is defined as any offense committed after release to the community that results in a Washington State conviction.<sup>4</sup> This includes convictions in juvenile and adult court. Three types of recidivism are reported:

- Violent felony convictions;
- Felony convictions, including violent felonies; and
- Total recidivism, including felonies and violent felonies, in addition to misdemeanor convictions.

<sup>&</sup>lt;sup>3</sup> JRA's Initial Security Assessment is a validated predictor of risk for re-offense. See, R. Barnoski. (1998). *Juvenile Rehabilitation Administration assessments: Validity review and recommendations*. Olympia: Washington State Institute for Public Policy, Document No. 98-09-1201.

<sup>&</sup>lt;sup>4</sup> Barnoski, R. (1997). *Standards for improving research effectiveness in adult and juvenile justice* (Document No. 97-12-1201). Olympia: Washington State Institute for Public Policy, pg. 2.

**Exhibit 3** shows that recidivism rates are higher for King County and Seattle residents. There was a statistically significant difference in felony recidivism by location.

#### Exhibit 3 Actual Recidivism Rates by Residence Indicate a Difference in Risk for Re-offense

	Type of Recidivism				
Residence	Total	Felony	Violent		
King	73%	59%	21%		
Seattle	84%	77%	28%		
Pierce	62%	41%	14%		
Tacoma	67%	50%	17%		
Snohomish	67%	28%	11%		
Total	69%	52%*	19%		

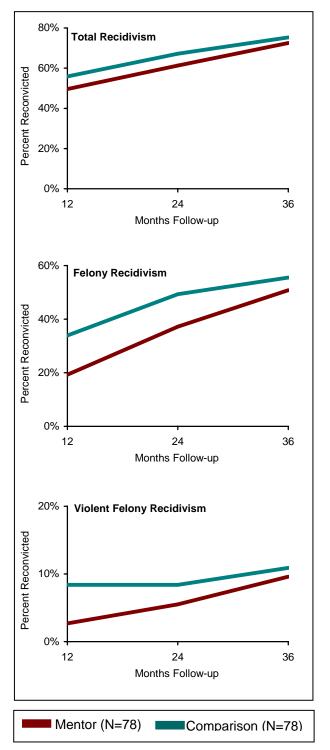
\* Significant at p <= .05

Multivariate regression analysis is used to account for differences that may be inherent between the two groups.<sup>5</sup> This enables the calculation of recidivism rates adjusted for these differences to get a clearer picture of whether mentoring affects this outcome.<sup>6</sup> For example, differences in the youth's residence, as previously shown in Exhibits 2 and 3, are controlled for using multivariate regression.

**Exhibit 4** displays adjusted recidivism rates up to 36 months post-release, for all types of recidivism—felony, violent felony, and total. Adjusted recidivism rates are calculated for each follow-up period. Point estimates are cumulative, but are calculated independently for individual follow-up periods.

During the initial 12-month follow-up, the mentor group recidivated at a lower rate than the comparison group. As shown in the technical appendix on page 4, the difference at 12 months was close to being statistically significant, but unfortunately, the gap converges by the 36-month follow-up. None of the differences between the two groups is statistically significant for any type of recidivism or at the 24 or 36 month follow-up periods. It is possible that recidivism rates were lower at the 12-month follow-up period because that is when youth had a mentor. However, this was not possible to determine with the data available.

### *Exhibit 4* Adjusted Recidivism Rates: 12- to 36-Month Follow-up for Mentor and Comparison Groups



<sup>&</sup>lt;sup>5</sup> Specifically, we use logistic regression and include the following independent variables: male, African American, Native American, age at release, criminal history score, and residence (Pierce, Snohomish, Tacoma, and Seattle).
<sup>6</sup> The regression results are shown in the Technical Appendix on page 4. The coefficient from the logistic regression and the mean values of the control variables are used to calculate mean-adjusted recidivism rates. It should be noted that criminal history score was not included in the logistic models for the preliminary analysis. We believe the inclusion of this variable has strengthened the analysis.

This study is limited by having a relatively small number of youth in the mentor and comparison groups. As a result, large differences between the groups are necessary to show statistical significance.

**Cost Analysis.** The taxpayer cost of the mentoring program includes the JRA program manager's salary and the cost of recruiting, training, and communicating with the mentors. The average taxpayer cost per youth is approximately \$3,200.<sup>7</sup> Since no significant difference was found for felony or violent felony recidivism, there are no estimated benefits related to recidivism.

**Next Steps.** Since the preliminary study was published in 2002, the mentoring program has been implemented statewide. Due to necessary waiting periods for program implementation and recidivism follow-up, it is too early to evaluate the expanded program.

#### Technical Appendix Logistic Regression Results for Follow-up Periods by Type of Recidivism

This technical appendix summarizes the results of the logistic regression analyses. Regression analyses are performed—one for each type of recidivism, for each follow-up period. The odds ratios show how strongly mentoring is associated with recidivism. Odds ratios of less than 1 indicate mentoring is associated with a reduced likelihood of recidivism, while odds ratios above 1 indicate an increased likelihood. A probability level less than .05 is used to indicate a statistically significant reduction in recidivism. All models include the following independent variables: male, African American, Native American, age at release, criminal history score, and residence (Pierce, Snohomish, Tacoma, and Seattle).

Type of Recidivism								
	Total		Felony Violent Felony				у	
Parameter Estimate	Odds Ratio	Prob. Level	Parameter Estimate	Odds Ratio	Prob. Level	Parameter Estimate	Odds Ratio	Prob. Level
-0.256	0.77	0.601	-0.763	0.47	0.145	-1.191	0.30	0.187
-0.372	0.69	0.450	-0.571	0.57	0.252	-0.388	0.68	0.613
-0.255	0.78	0.609	-0.495	0.61	0.348	-0.451	0.64	0.544
-0.274	0.76	0.573	-0.500	0.61	0.324	0.008	1.01	0.991
-0.145	0.87	0.768	-0.192	0.83	0.699	-0.142	0.87	0.837
	Estimate -0.256 -0.372 -0.255 -0.274	Parameter Estimate         Odds Ratio           -0.256         0.77           -0.372         0.69           -0.255         0.78           -0.274         0.76	Parameter Estimate         Odds Ratio         Prob. Level           -0.256         0.77         0.601           -0.372         0.69         0.450           -0.255         0.78         0.609           -0.274         0.76         0.573	Total           Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate           -0.256         0.77         0.601         -0.763           -0.372         0.69         0.450         -0.571           -0.255         0.78         0.609         -0.495           -0.274         0.76         0.573         -0.500	Total         Felony           Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate         Odds Ratio           -0.256         0.77         0.601         -0.763         0.47           -0.372         0.69         0.450         -0.571         0.57           -0.255         0.78         0.609         -0.495         0.61           -0.274         0.76         0.573         -0.500         0.61	Total         Felony           Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate         Odds Ratio         Prob. Level           -0.256         0.77         0.601         -0.763         0.47         0.145           -0.372         0.69         0.450         -0.571         0.57         0.252           -0.255         0.78         0.609         -0.495         0.61         0.348           -0.274         0.76         0.573         -0.500         0.61         0.324	Total         Felony         Viola           Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate           -0.256         0.77         0.601         -0.763         0.47         0.145         -1.191           -0.372         0.69         0.450         -0.571         0.57         0.252         -0.388           -0.255         0.78         0.609         -0.495         0.61         0.348         -0.451           -0.274         0.76         0.573         -0.500         0.61         0.324         0.008	Total         Felony         Violent Felon           Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate         Odds Ratio         Prob. Level         Parameter Estimate         Odds Ratio           -0.256         0.77         0.601         -0.763         0.47         0.145         -1.191         0.30           -0.372         0.69         0.450         -0.571         0.57         0.252         -0.388         0.68           -0.255         0.78         0.609         -0.495         0.61         0.348         -0.451         0.64           -0.274         0.76         0.573         -0.500         0.61         0.324         0.008         1.01

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Washington State Institute for Public Policy

The Washington State 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 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.

<sup>&</sup>lt;sup>7</sup> Per conversation with Juvenile Rehabilitation Administration staff, July 2006. For Fiscal Year 2005, the mentor program budget was \$380,000 and 118 youth were served. Thus, the program cost per youth was \$3,200.