# Washington State Institute for Public Policy

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# INCREASING EARNED RELEASE FROM PRISON: IMPACTS OF 2003 LAW ON RECIDIVISM AND CRIMINAL JUSTICE COSTS

The 2003 Washington State Legislature passed a bill that increased "earned release time" for certain types of offenders.<sup>1</sup> The bill authorizes the Washington State Department of Corrections (DOC) to release eligible offenders earlier if they have demonstrated good behavior in prison.

The average eligible offender spends about 60 fewer days in prison as a result of the law. As of 2008, the aggregate effect of the law has been to reduce Washington's average daily prison population by about 160 beds.<sup>2</sup>

The increased earned release provision of the 2003 bill sunsets for offenders convicted after July 1, 2010.

The 2003 Legislature also directed the Washington State Institute for Public Policy (Institute) to evaluate whether the enacted changes in earned release have affected recidivism rates.<sup>3</sup> This report is divided into four sections: background information, evaluation design, recidivism findings, and cost-benefit analysis.

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http://www.wsipp.wa.gov/ReportFile/1039/Wsipp\_I ncreased-Earned-Release-From-Prison-Impactsof-a-2003-Law-on-Recidivism-and-Crime-Costs-Revised\_Full-Report.pdf

#### Summary

The legislature has established laws that enable certain offenders under the jurisdiction of the Washington State Department of Corrections (DOC) to leave prison prior to the end of their sentence. DOC is authorized to grant "earned release time" if an offender demonstrates good behavior and participates in treatment programs in prison.

The 2003 Legislature increased earned release time for eligible non-violent offenders from a maximum of 33 percent of the total sentence to a maximum of 50 percent. Since the passage of the law, approximately 20 percent of all offenders who released from prison were eligible for 50 percent earned release time. This section of the 2003 bill sunsets July 1, 2010.

The Institute was directed by the Legislature to evaluate the effect of the 2003 law. While the immediate effect of shorter stays in prison lowers costs, the relevant research question is whether the law affects criminal recidivism.

Our findings indicate that the law has been effective: criminal recidivism has not increased and taxpayer costs are lower.

We find that the law has no statistically significant effect on violent criminal recidivism, while we estimate a statistically significant *decrease* for nonviolent crimes. Overall, 39 percent of offenders released under the new law are convicted for a new felony within three years compared with 42 percent of offenders prior to the law's enactment.

Since the implementation of the new law, offenders spend an average of 63 fewer days in prison, resulting in an average cost savings of \$6,155 per person. Due to the estimated reduction in felony crime, we also calculate benefits of \$4,588 per person for future crimes avoided and taxpayer costs saved—a total savings of \$10,743 per offender.

<sup>&</sup>lt;sup>1</sup> ESSB 5990, Chapter 379, Laws of 2003.

<sup>&</sup>lt;sup>2</sup> This estimate is based on data from the Caseload Forecast Council. Correspondence, via email October, 2008.

<sup>&</sup>lt;sup>3</sup> ESSB 5990, Chapter 379, Laws of 2003.

# Section I: Background

## Sentencing

The Sentencing Reform Act (SRA), enacted in 1981, put in place a determinate sentencing structure in Washington State.<sup>4</sup> The tenets of the SRA are multi-faceted, but primarily focus on structuring sentences that the legislature has determined to be fair, consistent, and commensurate with the offense and criminal history.

Judges determine an offender's sentence using the legislatively adopted "sentencing grid."<sup>5</sup> The sentencing grid is based on the severity of the crime and the offender's criminal history. The offense seriousness level reflects the current offense of conviction and ranges from a low of Level I to a high of Level XVI. Criminal history is captured by an offender score that is primarily calculated from prior convictions. Offender scores range from a low of 0 to a high of 9 plus.

Once the offense seriousness level and the offender score are calculated, the "presumptive standard sentence range" can be ascertained. This provides a range within which a judge can sentence an offender.<sup>6</sup> For example, within the range of 13 to 17 months, a judge might impose a sentence of 14 months. This becomes the "maximum term" for which an offender can legally be confined within the DOC.

## **Earned Release Time**

Offenders may not leave confinement prior to the expiration of the maximum sentence unless the offender has acquired "earned release time."<sup>7</sup> Earned release time can be attained by eligible offenders if DOC has determined that an offender has exhibited good conduct and has participated in work, education, treatment, or other approved programs while incarcerated at DOC.<sup>®</sup> Earned release time can be lost as a disciplinary sanction.

Maximum amounts of earned release time are set in statute. In 2003, earned release time was modified by the passage of Engrossed Substitute Senate Bill 5990 (ESSB 5990).<sup>9</sup> Earned release time for some offenders increased from one-third to 50 percent of the total sentence.

# Eligibility Criteria for 50 Percent Earned Release Time

Not all offenders are eligible for the increased earned release time. The law specifies that it will <u>not</u> apply to offenders who have a current or prior conviction for the following:<sup>10</sup>

- Violent offense
- Sex offense
- Crime against a person
- Domestic violence offense
- Residential burglary
- Manufacture or delivery of methamphetamine
- Delivery of a controlled substance to a minor
- Additionally, offenders must be classified as one of the two lowest risk categories as defined by DOC's risk assessment tool.

The "minimum term," or Earned Release Date (ERD), is the maximum term imposed by the

<sup>&</sup>lt;sup>4</sup> RCW 9.94A; affects offenders who committed felonies on or after July 1, 1984.

<sup>&</sup>lt;sup>5</sup> The sentencing grid was modified by 2SHB 2338, Chapter 290, Laws of 2002. Drug offenses were removed from the original sentencing grid and a separate drug offense sentencing grid was created.

<sup>&</sup>lt;sup>6</sup> The court may impose an "exceptional sentence" outside the standard range if there are documented, compelling facts.

<sup>&</sup>lt;sup>7</sup> Earned release time begins when an offender is confined in jail prior to time served in prison.

<sup>&</sup>lt;sup>8</sup> Offenders are not penalized with a loss of earned time if programs are not available.

<sup>&</sup>lt;sup>b</sup> The passage of ESSB 5990 also changed earned release time for offenders convicted of serious violent or sex offenses who, previously, could not earn more than 15 percent of the total sentence in earned time. This was reduced under the new law to 10 percent of the sentence for offenses committed after July 1, 2003. We could not evaluate this portion of the law because only a small number of these offenders have been released from prison.

<sup>&</sup>lt;sup>10</sup> All remaining offenders who are not eligible for 50 or 10 percent earned release time can receive up to 33 percent of the total sentence in earned release time.

judge, minus any possible earned release time.<sup>11</sup> Continuing with our example of an offender sentenced to 14 months, the minimum term that must be served is seven months if the offender is determined to be eligible for 50 percent earned release time. It is important to note that the amount of earned release time actually received ranges from zero to 50 percent of the total sentence depending on the offender's behavior while incarcerated.

ESSB 5990 was applied retroactively to eligible offenders confined in DOC, as of July 1, 2003. It is also applied to eligible offenders sentenced on or after July 1, 2003. The section of the law pertaining to 50 percent earned release time is scheduled to expire (that is, to "sunset") and will not apply to offenders convicted after July 1, 2010.

# Section II: Evaluation Design

The 2003 Legislature asked the Institute to determine whether the changes to earned release affect recidivism. The best way to determine the effectiveness of a program or law is to compare the outcomes of offenders who were eligible with similar offenders who would have been eligible, but did not receive the program. In an ideal research setting, offenders would be randomly assigned to the study and comparison group.

We did not have that option for the evaluation of 50 percent earned release time; thus, we constructed an appropriate comparison group of offenders prior to implementation of the law.

#### **Selecting the Study Groups**

When an offender enters prison, criminal history data in DOC's operational database are automatically searched to determine eligibility for 50 percent earned release time. If an offender is not eligible, no further investigation is done and a flag in DOC's database indicates the offender is not eligible. If an offender is potentially eligible, however, staff further investigate an offender's criminal history using the "Triple I," a comprehensive interstate exchange of criminal history maintained by the Federal Bureau of Investigation. If criminal history obtained from the Triple I eliminates the offender from 50 percent earned release time, DOC flags the offender as not eligible.

In order to select a comparison group, the Institute developed an algorithm to determine who would have been eligible for 50 percent earned release time had the law existed for offenders released from prison prior to July 1, 2003. This algorithm was created using the Institute's criminal history database and the eligibility criteria described on the previous page.<sup>12</sup> Additionally, historical DOC risk assessment data were used to identify offenders assigned to the two lowest risk categories.

There were 8,188 offenders who released from a DOC facility from July 1, 2003, through August 1, 2004, after the implementation of ESSB 5990. **Exhibit 1** displays the Institute's eligibility algorithm compared with the eligibility flag in DOC's database for that cohort of offenders. Of the 2,068 offenders DOC identified as eligible, we correctly identified 1,951, or 94 percent of those offenders.

Exhibit 1
Validity of Institute's Algorithm:
Offenders Released From Prison Between
July 1, 2003 and August 1, 2004

	Institute Eligibility						
	No Yes Tot						
DOC Indicates Eligibility							
No	5,774	346	6,120				
Yes	117	1,951	2,068				
Total	5,891	2,297	8,188				

We then tested the Institute's algorithm statistically to determine if we could accurately predict DOC's eligibility flag by conducting logistic regression analysis on a cohort of offenders who released from prison since the implementation of ESSB 5990. A statistic

<sup>&</sup>lt;sup>11</sup> RCW 9.94A.540, however, states that some offense types require a mandatory minimum term.

<sup>&</sup>lt;sup>12</sup> The Institute's database does not include out-of-state criminal history, which is a limitation of this study.

called the area under the receiver operating characteristic (AUC) indicates that the Institute's algorithm could predict, with very high accuracy, who was eligible for 50 percent earned release time (AUC = .943).

Because this high AUC gives us confidence in the accuracy of the algorithm, we used it to identify the comparison and, what we called, "the 5990 group." There were 8,188 offenders who released from a DOC facility from July 1, 2003, through August 1, 2004, after the implementation of ESSB 5990.<sup>13</sup> Of those, 28 percent, or 2,297 offenders, were eligible for 50 percent earned release time.<sup>14</sup> This group of offenders was our 5990 study group for this evaluation. The remaining 6,007 offenders who released in that time period were not eligible for 50 percent earned release time and were excluded from our analysis.

For the comparison group, there were 16,756 offenders released from a DOC facility from January 1, 2001, through June 30, 2003.<sup>15</sup> Of these, 29 percent, or 4,840 offenders, would have been eligible for 50 percent earned release time had it existed during that time period. This group of offenders was our comparison study group for this evaluation.

#### **Differences Between the Study Groups**

We compared the 5990 and comparison groups to estimate the differences between the two groups on key characteristics and risk factors associated with recidivism such as criminal history, offense seriousness, sentence length, and demographics (See Technical Appendix for results). Our analyses show that the comparison group had some significantly higher risk factors for recidivism, such as the non-drug risk score, violent felony risk score, and SRA seriousness level. Since there were some systematic differences between the 5990 and comparison groups on factors related to recidivism, we selected additional comparison groups to ensure appropriate selection of the study groups. In addition to analyzing the overall 5990 and comparison groups, we performed a series of matching procedures and developed the following three comparison groups:

- Risk variable matched groups For this alternative comparison group, we only selected offenders that were closely matched on variables and demographics related to risk for recidivism.
- Risk variable matched groups where Institute and DOC eligibility agree – For this alternative comparison group, we used the same method as above, however, we only selected offenders in the 5990 period who were identified as eligible for 5990 by both DOC's and the Institute's eligibility algorithm.
- SRA matched groups Finally, we created a fourth comparison group by matching on SRA characteristics: offender score, offense severity level, and number of days at the mid-point of the sentencing grid.

Details of our matching procedures, comparison groups, and differences between the groups are found in the Technical Appendix.

After the four study groups were selected, we then performed multivariate analyses using the full set of control variables as seen in the Technical Appendix. Together, these procedures allowed four separate tests of the effect of ESSB 5990 on recidivism rates. As we show in the next section, all four methods produced similar results.

 <sup>&</sup>lt;sup>13</sup> The 5990 group was selected from those released from prison as recently as possible, while allowing sufficient time for a 36month recidivism follow-up period.
<sup>14</sup> From the data available to the Institute, we were only able to

<sup>&</sup>lt;sup>14</sup> From the data available to the Institute, we were only able to determine if an offender was eligible for early release not the percentage of earned release time awarded.

<sup>&</sup>lt;sup>15</sup> Offenders must meet offense and risk classification criteria to be eligible for 50 percent earned release. DOC's risk assessment tool, at that time, was implemented in 2001. Thus, we went back as early as possible to select the comparison group.

# Section III: Recidivism Findings

As with all studies conducted by the Institute, recidivism is defined as any offense committed after release to the community that results in a Washington State conviction.<sup>16</sup> Three types of recidivism are reported:

- Violent felony convictions;
- Felony convictions, including violent felonies:
- Total recidivism, including misdemeanors, felonies, and violent felony convictions.

We used regression analyses to adjust for observed differences that exist between the study groups.<sup>17</sup> Controlling for these differences enabled us to calculate adjusted recidivism rates within three years of release from prison, which gives a clearer picture whether 50 percent earned release time affects recidivism.

Exhibit 2 displays multivariate-adjusted recidivism rates for felony, violent felony, and total recidivism at the three-year follow-up. The exhibit shows the recidivism results for the 5990 group and the four matched comparison groups. As noted in the previous section, we employed four separate procedures to test the robustness of our estimates.18

Felony recidivism—offenders in the 5990 group had fewer felony convictions than the comparison group, regardless of the matching procedure utilized. Depending on the matching procedure, for example, we calculated that between 38 and 41 percent of offenders in the 5990 group had a new felony conviction within three years. The comparison group was reconvicted for a new felony between 41 and 45 percent depending on the matching procedure. All of these differences were statistically significant reductions for each of the matching procedures.

	Overall groups: all 5990 offenders and eligible offenders prior to 5990 law			variable ed groups	match where l	variable ed groups nstitute and gibility agree	SRA matched groups		
Type of Recidivism	5990 Group	Comparison Group	5990 Group	Comparison Group	5990 Group	Comparison Group	5990 Group	Comparison Group	
Number in Group	2,614	4,840	2,210	2,210	1,887	1,887	2,284	2,284	
Felony	39%**	42%**	38%**	41%**	38%*	41%*	41%**	45%**	
Violent	7%	8%	7%	6%	6%	6%	7%	8%	
Total	49%**	53%**	48%*	51%*	48%	51%	50%**	56%**	

Exhibit 2
3-Year Adjusted Recidivism Rates for 5990 and
Comparison Groups for Each Matching Procedure

Statistically significant difference at p <= .1

\*\* Statistically significant difference at p <= .05

<sup>&</sup>lt;sup>16</sup> R. Barnoski. (1997). Standards for improving research effectiveness in adult and juvenile justice. Olympia: Washington State Institute for Public Policy, Document No. 97-12-1201, pg. 2. Specifically, we used logistic regression and included the independent variables listed in the Exhibit 2. The recidivism rate for the 5990 group was adjusted using the odds ratio from the logistic regression. For example, using the actual recidivism rate of the full comparison group (.42 percent) and the effect size (-0.141), we do the following calculation to obtain a recidivism rate of 39 percent for the full 5990 group:

<sup>(.42/(1-.42))\*</sup>EXP(-.141)/(1+(.42/(1-.42))\*EXP(-.1413)).

<sup>&</sup>lt;sup>18</sup> The results of the logistic regression analyses for the types of recidivism are shown in the Technical Appendix.

**Violent felony recidivism**—there were no statistically significant differences between the study groups for violent felony recidivism for any of the matching procedures. That is, violent crime for these offenders has not changed as a result of the implementation of ESSB 5990.

**Total recidivism**—offenders in the 5990 group had fewer total convictions than the comparison group for each matching procedure. Most of these differences were statistically significant. Depending on the matching procedure, we calculated that offenders in the 5990 group recidivated between 48 and 50 percent within three years. Without 50 percent earned release, between 51 and 56 percent were reconvicted for any new offense within three years.

In summary, our estimates indicate that there has not been an increase in criminal recidivism due to the changes in earned release time. If anything, non-violent criminal recidivism has been reduced as a result of the law, while there has been no effect on violent criminal recidivism rates.

# Section IV: Cost-Benefit Analysis

In addition to estimating whether the changes in earned release time affected recidivism, we also conducted a cost-benefit analysis using our economic model.<sup>19</sup>

The first step in conducting a cost-benefit analysis is to determine the cost of the program or law versus the cost of non-participation. This figure was calculated by multiplying the total length of stay in prison by the average cost of prison per person.<sup>20</sup> As displayed in **Exhibit 3**, offenders in the 5990 group spent, on average, 63 fewer days in prison than the comparison group. Thus, the average total cost of the 5990 group was \$40,643 compared with \$46,798 for offenders who were eligible but not released under ESSB 5990, which is a difference of \$6,155.

			Exh	ibit 3	
Cost	of	5990	versus	Comparison Gro	oup

	5990 Group	Com- parison	Diff- erence
Average prison length of stay in days	416	479	-63
Average prison cost per person, per day <sup>a</sup>	\$98	\$98	NA
Total prison cost	\$40,643	\$46,798	\$ -6,155

<sup>a</sup> Estimate from DOC, November 2008, in 2008 dollars.

The second step in conducting a cost-benefit analysis is to calculate the benefits. Laws or programs that reduce crime produce benefits to both taxpayers and crime victims. **Exhibit 4** provides our cost-benefit analysis. We estimate that total felony recidivism is reduced by 2 percent as a result of the law. This reduction in crime produces benefits to crime victims of \$2,899 and benefits to taxpayers of \$1,688 for total benefits associated with reduced crime of \$4,588 per offender.

Based upon the cost analysis shown in Exhibit 3, we estimate a savings of \$6,155 per offender under ESSB 5990 due to a reduction in the length of stay in prison. Thus, the total savings to people in Washington of ESSB 5990 is estimated to be \$10,743 per offender.

#### *Exhibit 4* Cost-Benefit Analysis

(1)	Effect on Crime Outcomes	
	Percentage change in crime outcomes	-2%
(2)	Benefits of the Reduced Crime	
	Crime victim costs avoided	\$ 2,899
	Taxpayer costs avoided	\$ 1,688
	Total crime-related costs avoided	\$ 4,588
(3)	Costs (Savings) of ESSB 5990	
	Total cost per 5990 offender	\$ -6,155
(4)	Bottom Line	
	Total benefits per person	\$ 10,743

<sup>&</sup>lt;sup>19</sup> For details on the statistical procedures we used to estimate costs and benefits, see: S. Aos, M. Miller, & E. Drake (2006). *Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates.* Olympia: Washington State Institute for Public Policy, Document No. 06-10-1201.

<sup>&</sup>lt;sup>20</sup> For simplicity, we used a DOC reported average cost of incarceration for this calculation. Estimates of marginal costs, which we used to calculate the benefits of reduced crime are lower than average costs because some of DOC's costs are fixed. If a lower marginal cost figure were used in this calculation, there would still be taxpayer savings associated with the reduced length of stay.

# **Technical Appendix**

Four samples were created, and analyses conducted, to examine the impact of ESSB 5990 on recidivism using separate multivariate logistic regressions. The four approaches we tested include the following:

- Overall groups: Includes all 4,840 offenders who would have been eligible for 50 percent earned release prior to the implementation of the law and 2,614 offenders who were eligible and released under ESSB 5990. Analysis indicated some statistically significant differences between the two groups (See Exhibit A).
- 2) Risk variable matched groups: We matched eligible offenders after the implementation of ESSB 5990 to eligible comparison group offenders on variables and demographics related to risk for recidivism (see variables in Exhibit A). By conducting a "one-to-one" matched sample, we matched 86 percent of the offenders in the 5990 group resulting in 2,210 offenders in each of the study groups. Analysis of the matched groups indicated no statistically significant differences between the two groups on the characteristics displayed in Exhibit A (p<= .1).</p>
- 3) Risk variable matched groups (Institute and DOC eligibility algorithms agree): We used the same method as in selection process (2); however, we only selected offenders in the 5990 period who were identified as eligible for 5990 by both DOC's and the Institute's eligibility algorithm. The result was a sample of 1,887 offenders in each of the study groups. Analysis of the matched groups indicated no statistically significant differences between the two groups on the characteristics displayed in Exhibit A (p<= .1).</p>
- 4) SRA-matched groups: Comparison-group offenders were matched to 5990 offenders on SRA characteristics: offender score, offense severity level, and number of days at the mid-point of the sentencing grid. The result was a sample of 2,284 in each of the study groups. Analysis of the matched groups indicated some statistically significant differences between the two groups on the characteristics displayed in Exhibit A (p<= .1).</p>

Exhibit A displays the characteristics of 5990 groups versus the comparison groups for each matching procedure.

Exhibits B, C, and D display the logistic regression models for felony, violent felony, and total recidivism at the three-year follow-up for each of our sampling methodologies.

# *Exhibit A* Characteristics of 5990 Groups versus Comparison Groups

	Overall groups: All 5990 offenders and eligible offenders prior to 5990 law		Risk variable matched groups		Risk variable matched groups where Institute and DOC eligibility agree			SRA matched groups				
	Com- parison Group	5990 Group	p value	Com- parison Group	5990 Group	p value	Com- parison Group	5990 Group	p value	Com- parison Group	5990 Group	p value
Number in Study Group	4,840	2,614		2,210	2,210		1,887	1,887		2,284	2,284	
<b>Means</b> Felony risk score <sup>a</sup>	69.1	68.6	0.24	68.4	68.5	0.80	67.8	68.0	0.72	70.5	69.8	0.21
Non-drug risk score <sup>a</sup>	46.2	45.3	0.02	45.4	45.2	0.71	44.8	44.7	0.80	47.7	46.4	0.00
Violent risk score <sup>a</sup>	27.1	26.7	0.02	26.6	26.8	0.33	26.3	26.4	0.68	27.7	27.0	0.00
Total adult felony adjudications	3.9	3.8	0.57	3.7	3.7	0.84	3.6	3.7	0.60	4.1	4.0	0.17
SRA offender score <sup>b</sup>	4.8	4.9	0.64	4.6	4.6	0.70	4.5	4.6	0.64	5.1	5.1	1.00
SRA seriousness level <sup>b</sup>	4.7	4.4	0.00	4.5	4.4	0.17	4.6	4.4	0.16	4.2	4.2	1.00
Sentence grid mid-point days <sup>b</sup>	999	997	0.90	935.6	937.8	0.92	944.2	946.2	0.94	994.0	994.0	1.00
Age at release	34	34	0.73	33.7	33.7	0.96	33.5	33.6	0.92	34.7	34.6	0.79
Age at sentence	33	33	0.33	32.3	32.5	0.56	32.2	32.4	0.47	33.2	33.2	0.81
Percentages												
Male	80%	78%	0.05	81%	81%	1.00	79%	79%	1.00	80%	78%	0.13
Black	23%	19%	0.00	17%	17%	1.00	17%	17%	1.00	22%	19%	0.01
White	71%	74%	0.00	79%	79%	1.00	80%	80%	1.00	73%	75%	0.09
Hispanic	17%	19%	0.01	17%	17%	1.00	18%	18%	1.00	14%	16%	0.10

<sup>a</sup> The risk scores are calculated using DOC's static risk instrument. For more information, see:

R. Barnoski & E. Drake (2007). Washington's Offender Accountability Act: Department of Corrections' static risk instrument. Olympia: Washington State Institute for Public Policy, Document No. 07-03-1201.

<sup>b</sup> The Sentencing Reform Act (SRA) of 1984 established a "sentencing grid," which is based upon the offender score and offense seriousness level. The offender score is calculated primarily on prior convictions (0 to 9 plus) and the seriousness level is reflective of the current offense of conviction and ranges from a low of 1 to a high of 16.

## *Exhibit B* Logistic Regression Results for Three-Year Felony Recidivism for Each Matching Procedure

	Overall groups: all 5990 offenders and eligible offenders prior to 5990 law		Risk variable matched groups		Risk variable matched groups where Institute and DOC eligibility agree		SRA match	ed groups
Variable	Parameter Estimate	p value	Parameter Estimate	p value	Parameter Estimate	p value	Parameter Estimate	p value
5990 Group	-0.141	0.01	-0.140	0.04	-0.133	0.07	-0.155	0.02
Intercept	-2.156	0.00	-2.036	0.00	-2.123	0.00	-2.345	0.00
Felony risk score <sup>a</sup>	0.028	0.00	0.030	0.00	0.033	0.00	0.031	0.00
Non-drug risk score <sup>a</sup>	-0.002	0.55	-0.001	0.79	-0.002	0.75	-0.002	0.63
Violent risk score <sup>a</sup>	0.025	0.00	0.018	0.08	0.019	0.13	0.020	0.03
Total adult felony adjudications	0.044	0.02	0.022	0.41	0.030	0.30	0.022	0.36
SRA offender score <sup>b</sup>	0.026	0.07	0.030	0.24	0.023	0.42	0.052	0.02
SRA seriousness level <sup>b</sup>	-0.032	0.10	-0.048	0.11	-0.055	0.10	-0.013	0.65
Sentence grid mid-point days <sup>b</sup>	0.000	0.01	0.000	0.48	0.000	0.80	0.000	0.04
Current DOSA sentence <sup>c</sup>	0.129	0.03	0.083	0.28	0.097	0.25	0.062	0.41
Age at release	-0.019	0.00	-0.017	0.00	-0.017	0.00	-0.016	0.00
Male	0.207	0.00	0.249	0.01	0.257	0.02	0.235	0.01
Black	0.122	0.31	0.032	0.87	-0.119	0.59	-0.009	0.96
White	-0.290	0.01	-0.349	0.05	-0.467	0.02	-0.315	0.02
Hispanic	-0.875	0.00	-1.073	0.00	-1.066	0.00	-0.802	0.00
5990 Group Number	2,61	4	2,210		1,887		2,284	
Comparison Number	4,84	0	2,21	0	1,88	37	2,28	34

<sup>a</sup> The risk scores shown are calculated based upon the scoring methods of DOC's static risk instrument. For more information, see: R. Barnoski & E. Drake (2007). *Washington's Offender Accountability Act: Department of Corrections' static risk instrument.* Olympia: Washington State Institute for Public Policy, Document No. 07-03-1201.

<sup>b</sup> The Sentencing Reform Act (SRA) of 1984 established a "sentencing grid," which is based upon the offender score and offense seriousness level. The offender score is calculated primarily on prior convictions (0 to 9 plus) and the seriousness level is reflective of the current offense of conviction and ranges from a low of 1 to a high of 16.

<sup>c</sup> The Drug Offender Sentencing Alternative (DOSA) allows certain offenders to receive reduced prison terms in exchange for completing chemical dependency treatment while incarcerated. There was an increased use of DOSA sentences during Fiscal Years 2000 through 2002, but this number has decreased each year since that time. For more information, see: *Statistical summary of adult felony sentencing*. Fiscal Years 2000 through 2004. Olympia: Washington State Sentencing Guidelines Commission <a href="http://www.sgc.wa.gov/s">http://www.sgc.wa.gov/s</a>. Approximately 25 percent of all 5990 eligible offenders after the implementation of the law had a DOSA sentence compared with 37 percent of all offenders who were eligible prior to the implementation of ESSB 5990. Thus, we included this variable in our regression models to control for these statistically significant differences between the groups.

#### *Exhibit C* Logistic Regression Results for Three-Year Violent Felony Recidivism for Each Matching Procedure

	Overall groups: all 5990 offenders and eligible offenders prior to 5990 law		Risk variable matched groups		Risk variable matched groups where Institute and DOC eligibility agree		SRA matched groups	
Variable	Parameter Estimate	p value	Parameter Estimate	p value	Parameter Estimate	p value	Parameter Estimate	p value
5990 Group	-0.084	0.40	0.070	0.58	0.026	0.85	-0.092	0.44
Intercept	-3.243	0.00	-3.276	0.00	-3.171	0.00	-3.716	0.00
Felony risk score <sup>a</sup>	-0.011	0.09	0.006	0.54	0.006	0.59	-0.002	0.77
Non-drug risk score <sup>a</sup>	0.018	0.00	0.014	0.11	0.012	0.19	0.016	0.03
Violent risk score <sup>a</sup>	0.057	0.00	0.033	0.05	0.029	0.13	0.058	0.00
Total adult felony adjudications	0.034	0.28	-0.013	0.79	-0.010	0.85	-0.023	0.58
SRA offender score <sup>b</sup>	-0.025	0.37	-0.030	0.56	0.011	0.84	0.026	0.52
SRA seriousness level <sup>b</sup>	-0.020	0.58	-0.005	0.93	0.011	0.86	0.020	0.71
Sentence grid mid-point days <sup>b</sup>	0.000	0.93	0.000	0.87	0.000	0.73	0.000	0.45
Current DOSA sentence <sup>c</sup>	-0.077	0.47	-0.080	0.60	-0.047	0.77	-0.273	0.06
Age at release	-0.043	0.00	-0.056	0.00	-0.056	0.00	-0.041	0.00
Male	0.736	0.00	0.953	0.00	1.003	0.00	0.551	0.01
Black	0.221	0.28	-0.067	0.83	-0.091	0.79	0.191	0.48
White	-0.215	0.25	-0.345	0.22	-0.422	0.18	-0.198	0.42
Hispanic	-0.546	0.00	-1.047	0.00	-1.162	0.00	-0.526	0.02
5990 Group N	2,6	14	2,210		1,887		2,284	
Comparison N	4,8	40	2,2	10	1,88	37	2,28	34

<sup>a</sup> The risk scores shown are calculated based upon the scoring methods of DOC's static risk instrument. For more information, see: R. Barnoski & E. Drake (2007). *Washington's Offender Accountability Act: Department of Corrections' static risk instrument.* Olympia: Washington State Institute for Public Policy, Document No. 07-03-1201.

<sup>b</sup> The Sentencing Reform Act (SRA) of 1984 established a "sentencing grid," which is based upon the offender score and offense seriousness level. The offender score is calculated primarily on prior convictions (0 to 9 plus) and the seriousness level is reflective of the current offense of conviction and ranges from a low of 1 to a high of 16.

<sup>c</sup> The Drug Offender Sentencing Alternative (DOSA) allows certain offenders to receive reduced prison terms in exchange for completing chemical dependency treatment while incarcerated. There was an increased use of DOSA sentences during Fiscal Years 2000 through 2002, but this number has decreased each year since that time. For more information, see: *Statistical summary of adult felony sentencing. Fiscal Years 2000 through 2004.* Olympia: Washington State Sentencing Guidelines Commission. Approximately 25 percent of all 5990 eligible offenders after the implementation of the law had a DOSA sentence compared with 37 percent of all offenders who were eligible prior to the implementation of ESSB 5990. Thus, we included this variable in our regression models to control for these statistically significant differences between the groups.

## *Exhibit D* Logistic Regression Results for Three-Year Total Recidivism for Each Matching Procedure

	Overall gr 5990 offen eligible o prior to 5	ders and ffenders	Risk va matched		Risk variable matched groups where Institute and DOC eligibility agree		SRA matcl	ned groups
Variable	Parameter Estimate	p value	Parameter Estimate	p value	Parameter Estimate	p value	Parameter Estimate	p value
5990 Group	-0.178	0.00	-0.128	0.06	-0.117	0.12	-0.211	0.00
Intercept	-2.568	0.00	-2.682	0.00	-2.590	0.00	-2.512	0.00
Felony risk score <sup>a</sup>	0.037	0.00	0.037	0.00	0.040	0.00	0.037	0.00
Non-drug risk score <sup>a</sup>	0.002	0.51	0.005	0.27	0.007	0.20	0.001	0.86
Violent risk score <sup>a</sup>	0.030	0.00	0.023	0.04	0.016	0.24	0.028	0.00
Total adult felony adjudications	0.018	0.35	0.011	0.69	0.025	0.44	0.029	0.25
SRA offender score <sup>b</sup>	0.018	0.21	0.024	0.36	0.021	0.49	0.038	0.09
SRA seriousness level <sup>b</sup>	-0.018	0.36	-0.008	0.79	-0.010	0.76	0.000	0.99
Sentence grid mid-point days <sup>b</sup>	0.000	0.00	0.000	0.06	0.000	0.20	0.000	0.00
Current DOSA sentence <sup>c</sup>	0.172	0.00	0.135	0.09	0.151	0.08	0.074	0.34
Age at release	-0.008	0.02	-0.005	0.28	-0.005	0.35	-0.008	0.08
Male	0.049	0.50	0.102	0.31	0.140	0.19	0.124	0.18
Black	0.122	0.33	0.117	0.56	-0.212	0.37	-0.145	0.37
White	-0.385	0.00	-0.397	0.03	-0.664	0.00	-0.522	0.00
Hispanic	-1.017	0.00	-1.161	0.00	-1.199	0.00	-0.906	0.00
5990 Group N	2,6	14	2,210		1,887		2,284	
Comparison N	4,84	40	2,2	10	1,8	37	2,2	284

<sup>a</sup> The risk scores shown are calculated based upon the scoring methods of DOC's static risk instrument. For more information, see: R. Barnoski & E. Drake (2007). *Washington's Offender Accountability Act: Department of Corrections' static risk instrument.* Olympia: Washington State Institute for Public Policy, Document No. 07-03-1201.

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<sup>c</sup> The Drug Offender Sentencing Alternative (DOSA) allows certain offenders to receive reduced prison terms in exchange for completing chemical dependency treatment while incarcerated. There was an increased use of DOSA sentences during Fiscal Years 2000 through 2002, but this number has decreased each year since that time. For more information, see: *Statistical summary of adult felony sentencing*. *Fiscal Years 2000 through 2004*. Olympia: Washington State Sentencing Guidelines Commission. Approximately 25 percent of all 5990 eligible offenders after the implementation of the law had a DOSA sentence compared with 37 percent of all offenders who were eligible prior to the implementation of ESSB 5990. Thus, we included this variable in our regression models to control for these statistically significant differences between the groups.

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