

# Short-Term Transitional Leave Program in Oregon

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## Executive Summary

Inmates who participate in the STTL program show lower 1-year and 2-year recidivism rates than inmates who were statutorily eligible and did not participate. The 1-year conviction and arrest rates are significantly lower for those who participated in the program. The 2-year conviction and incarceration rates are significantly lower for those who participated in the program.

This report does not attempt to analyze the reason(s) why a lower recidivism rate is observed among those inmates who are eligible and receive STTL. Although it is possible that there are aspects of the STTL program itself that reduce recidivism, (e.g., the existence of the STTL program being an incentive for offenders to engage in better behavior and programming inside DOC institutions, or assuring that offenders transitioning back into the community have acceptable housing) it would be premature to arrive at that conclusion. However, it is certainly an area that may warrant studying further as the difference in recidivism rates is statistically significant two years into the program. The analysis in this report doesn't account for all the differences in comparing those who participated in the STTL program and those who did not participate. It should only be concluded from this report that inmates who meet the eligibility and qualification criteria to receive STTL have a lower recidivism rate than those who do not.

This report includes a literature review summary that summarizes research in other states and countries on programs similar to the Oregon STTL program. However, no other program studied included support that STTL offenders receive during the transitional time period.

In the context of the passage of HB 3194, where the STTL program was expanded in order to curb increases in the DOC population, but to do so in a way that was responsible and in keeping with the goals of protecting the public and holding offenders accountable while decreasing recidivism rates among released offenders, it can be concluded that the STTL program has been a success.

## Background

In July 2013 the Oregon Legislature passed House Bill 3194, known as the Justice Reinvestment Act. Changes to short-term transitional leave (STTL) are described in Section 13 and 14 of the bill. The bill increases the amount of short-term transitional leave that an inmate may receive from 30 days to 90 days. This change is applicable to sentences imposed on or after August 1, 2013. The bill also changes language that describes how an inmate may apply for short-term transitional leave. Prior to HB 3194, the inmate had to submit a transition plan, and instigate the process of applying for short-term transitional leave. HB 3194 includes language that the Department of Corrections (DOC) shall identify inmates who are eligible for the program and assist in preparing a transition plan. This change has allowed DOC to increase the number of inmates who receive a maximum of 30 or 90 days leave.

In December 2013 DOC started to implement the new STTL program, and offenders were released under the new 90 day rule. The HB 3194 enrolled bill estimate from July 2013 estimated that 100 inmates per month would receive STTL and that by January 1, 2017 the program would account for 266 fewer prison beds. The number of offenders participating in the program has been approximately 100 inmates per month, and the associated prison bed savings on January 1, 2017 was 262 prison beds. DOC has tracked successful completions of STTL, as well as program failures. The program failure rate has been relatively low, at approximately 6%. These performance indicators show that the program has been working as estimated.

The performance measures and recidivism analysis in this report update the analysis in the Short Term Transitional Leave Program in Oregon report the CJC released in January 2016<sup>1</sup>. The recidivism analysis that includes releases from December 2013 to October 2014 has been updated to show 2 year recidivism rates. A more recent cohort has been compiled of releases from November 2014 to October 2015, and 1 year recidivism rates for this cohort are included in the report. In addition, a literature review summary is included to show results of similar research in other states and countries.

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<sup>1</sup> [http://www.oregon.gov/cjc/justicereinvestment/Documents/STTL\\_Analysis\\_2016.pdf](http://www.oregon.gov/cjc/justicereinvestment/Documents/STTL_Analysis_2016.pdf)

## Literature Review Summary

Previous research can be useful in determining whether programs like STTL are likely to be effective and safe. The Washington State Institute for Public Policy<sup>2</sup> (WSIPP), a highly respected agency and a leader in policy analysis, did a meta-analysis of the impact of prison on recidivism and crime rates<sup>3</sup>. Meta analyses take the results of several individual studies and combine them to provide a definitive answer on the impact of a particular program. Since research conclusions are based on probability, well-done meta analyses that combine the results of several studies are the best source for determining if an intervention is likely to be effective.

The drawback of meta-analysis is that details of the programs studied may differ across the research studies. We examined the individual research studies that comprised the meta-analysis to consider how relevant the findings are to Oregon's STTL program. WSIPP's meta-analysis found overall that prison is associated with reduced crime. The meta-analysis has two categories: articles that look at the macro level impact of the imprisonment rate on the crime rate, and articles that look at how prison impacts individuals' likelihood of recidivism.

We are interested in the impact of STTL on the offenders who receive it so we focused on the eight articles in the latter category. Two of them found no impact, one of them found that longer lengths of stay increase recidivism, and the other five found that longer lengths of stay decreased recidivism; see appendix for details. In each study, the specific program had substantive differences compared to Oregon's STTL. No other program studied included support that STTL offenders receive during the transitional time period. Another key difference is that many of the studies were looking at parole release programs, typically a percentage of the sentence much longer than three months. Because there is some evidence that reducing the time in prison may increase recidivism, it is important we continue to closely monitor the outcomes of STTL from a public safety perspective.

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<sup>2</sup> <http://www.wsipp.wa.gov/>

<sup>3</sup> <http://www.wsipp.wa.gov/BenefitCost/Program/233>

## STTL Performance Measures

The following figures show utilization measures for the STTL program from January 2014 to February 2017. Figure 1 shows the number of inmates released to STTL each month. Initial projected bed savings for the various components of HB 3194 predicted that DOC would release 100 inmates per month to STTL.

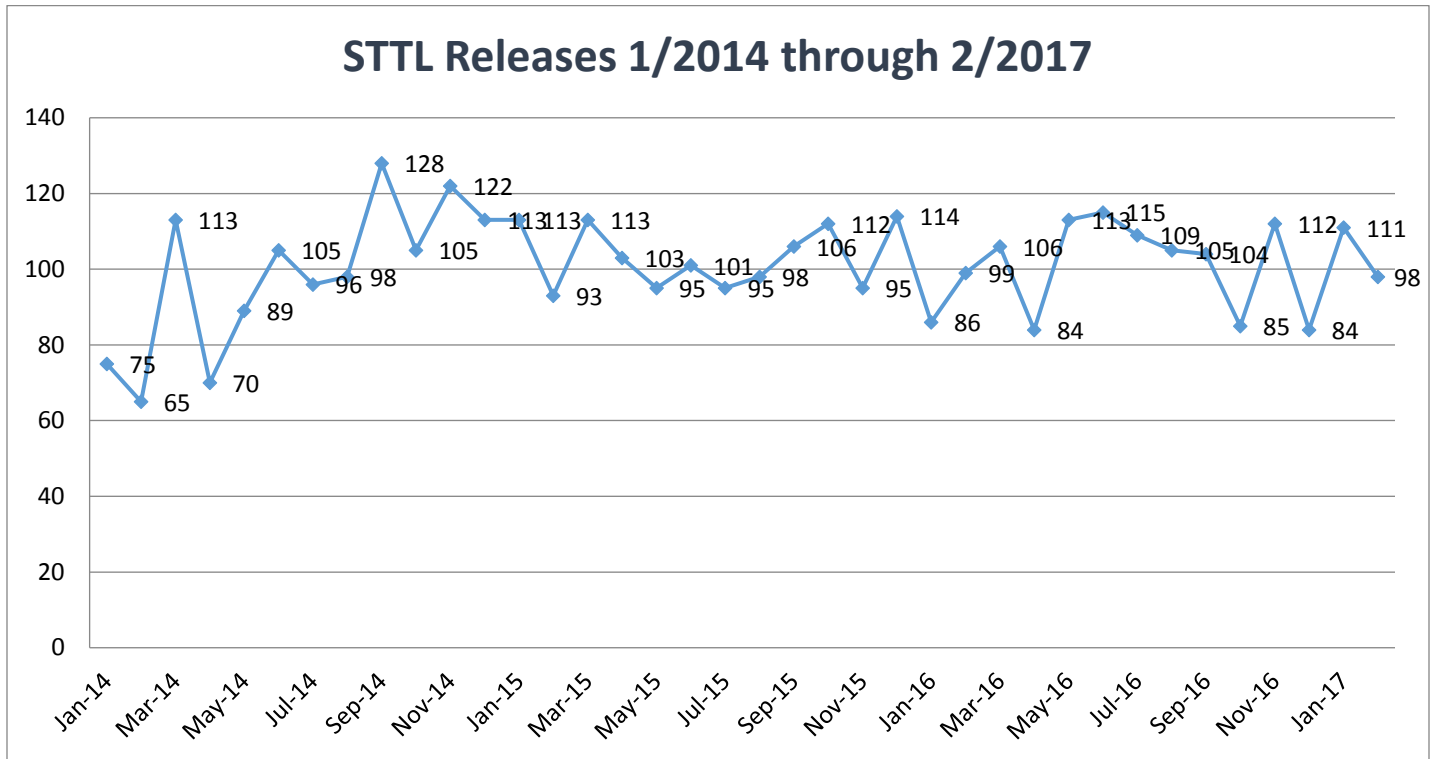


Figure 1: STTL Releases: January 2014 to February 2017

Figure 2 displays the number of STTL releases under the 30 day and 90 day rule. Those sentenced on or after August 1, 2013 are eligible for a maximum of 90 days of STTL. The number of releases under the 90-day rule has gradually increased, and now accounts for roughly 90% of the STTL release population.

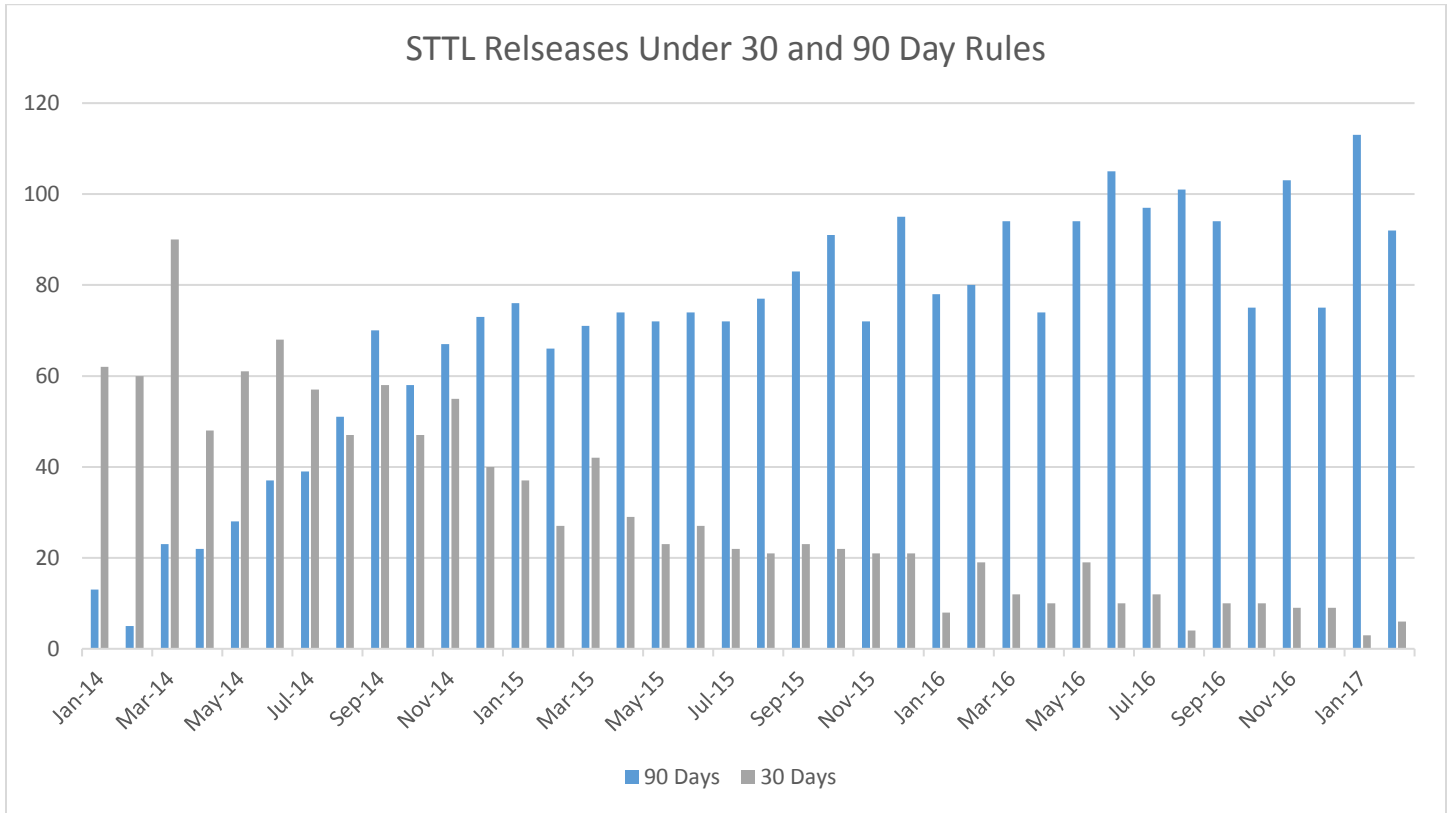


Figure 2: STTL Releases under 30 and 90 Day Rules

Figures 3 and 4 show the STTL releases by gender and crime type. Male inmates account for 83% of STTL releases, while female inmates account for the other 17%. Females make up roughly 9% of the total DOC inmate population, so they are over represented in the total STTL population likely due to a higher percentage of female inmates being statutorily eligible for STTL.

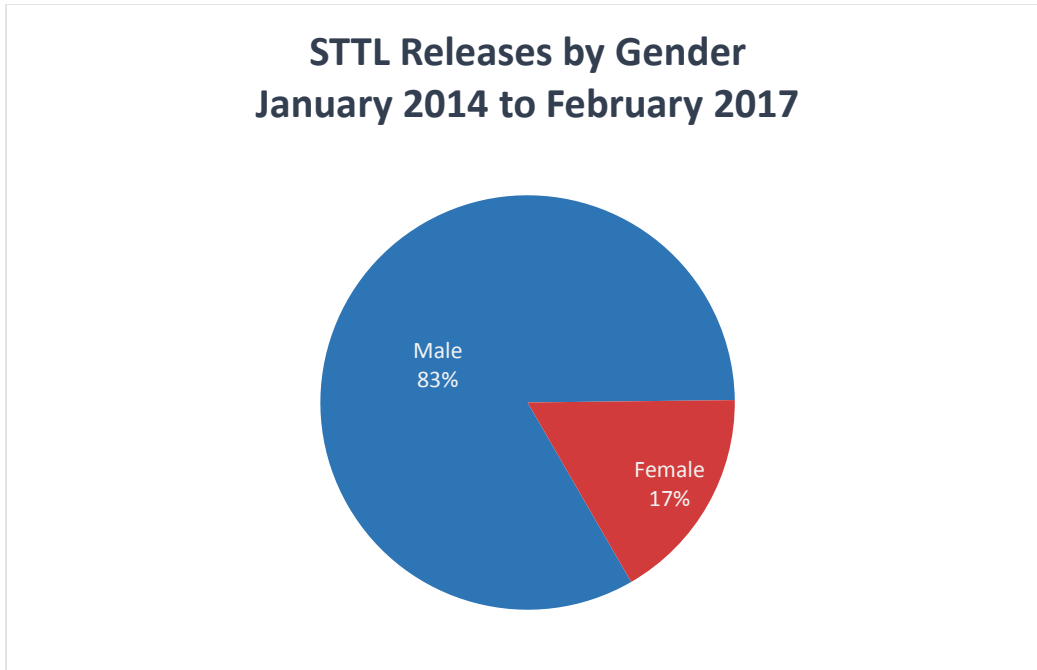


Figure 3: STTL Releases by Gender

Releases by crime type are nearly equal, with each crime type accounting for approximately one third of the STTL releases.

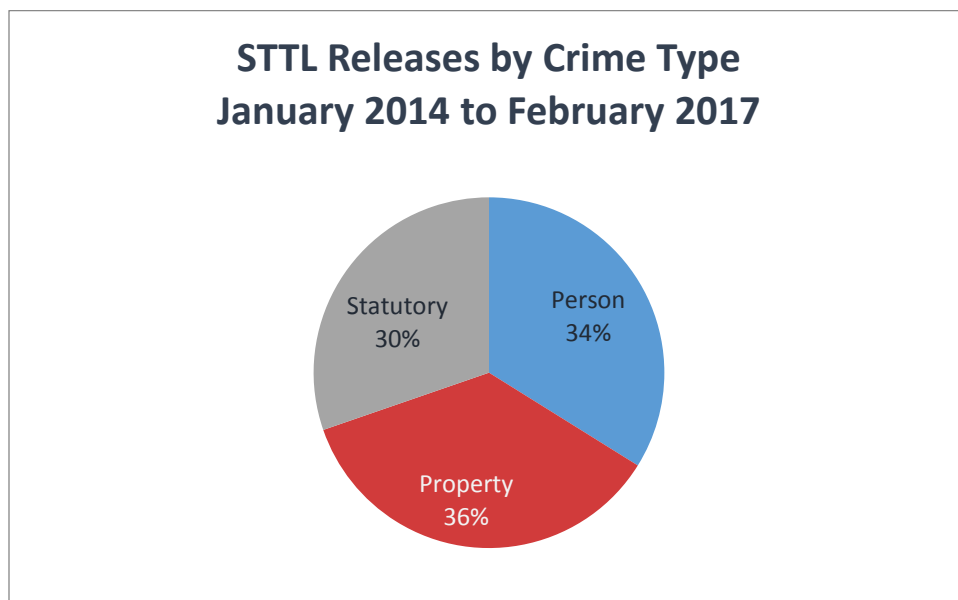


Figure 4: STTL Releases by Crime Type



Figure 5 shows that 94% of STTL releases have successfully completed the program. Those that failed the program returned to DOC, and account for 6% of STTL releases, or 209 inmates released. The data for STTL completions is current through November 2016, since 90 days must pass before it can be determined if the individual successfully completed the program.

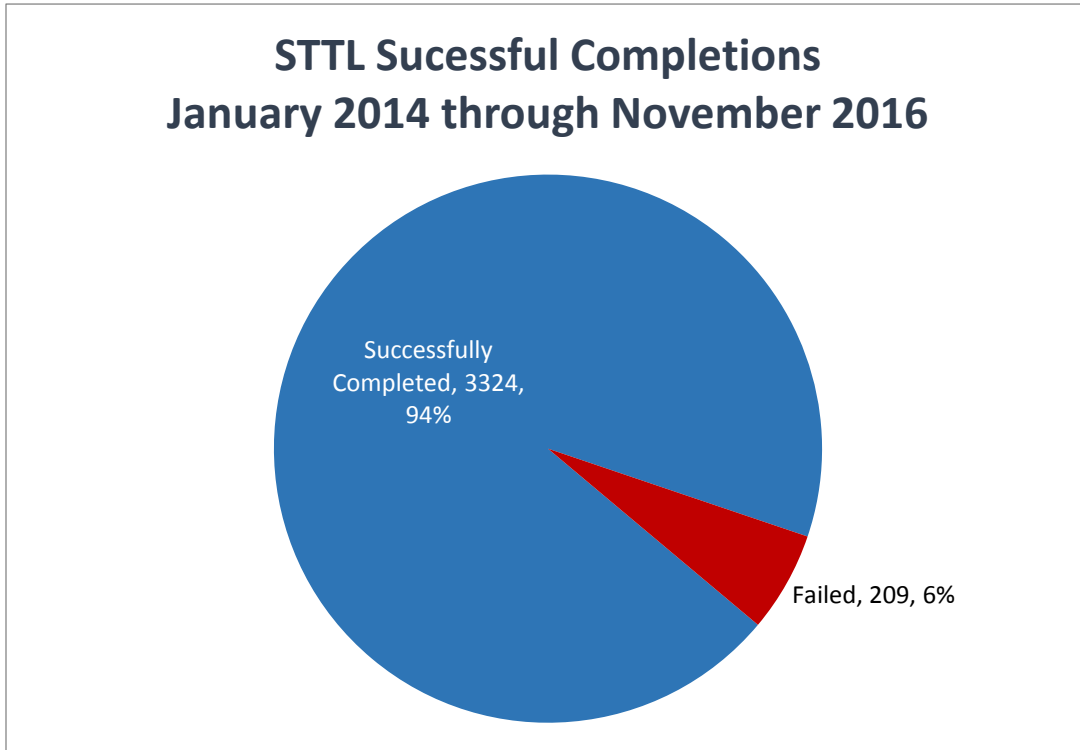


Figure 5: STTL Successful Completions

Figure 6 shows that 91% of STTL releases completed the program without receiving a jail sanction. 319 participants did receive a jail sanction which accounts for 9% of offenders released on STTL.

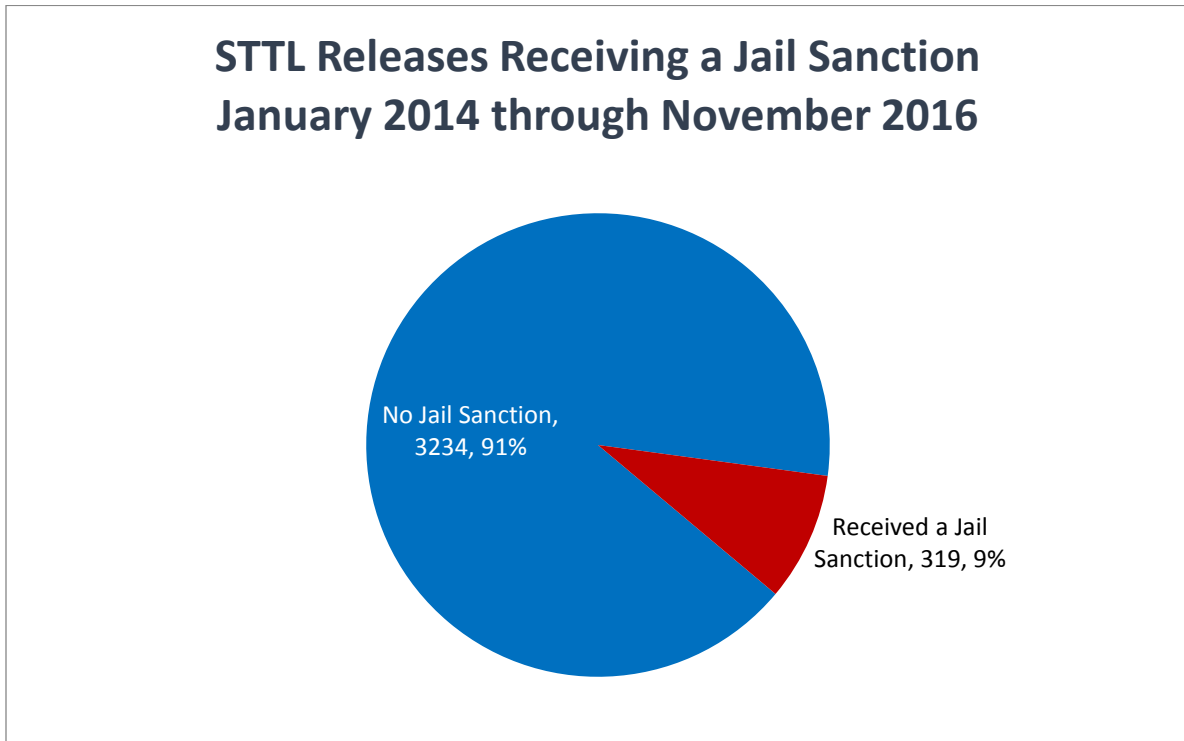


Figure 6: STTL Releases Receiving a Jail Sanction

Figure 7 shows the number of jail bed days used as sanctions for those on STTL, compared to the number of prison bed days saved for those participating in the program. From January 2014 to November 2016 there were 319 jail sanctions, with an average length of 16 days, resulting in 5,146 jail bed days used. The 3,533 STTL releases account for 213,913 prison bed days saved from January 2014 to November 2016.

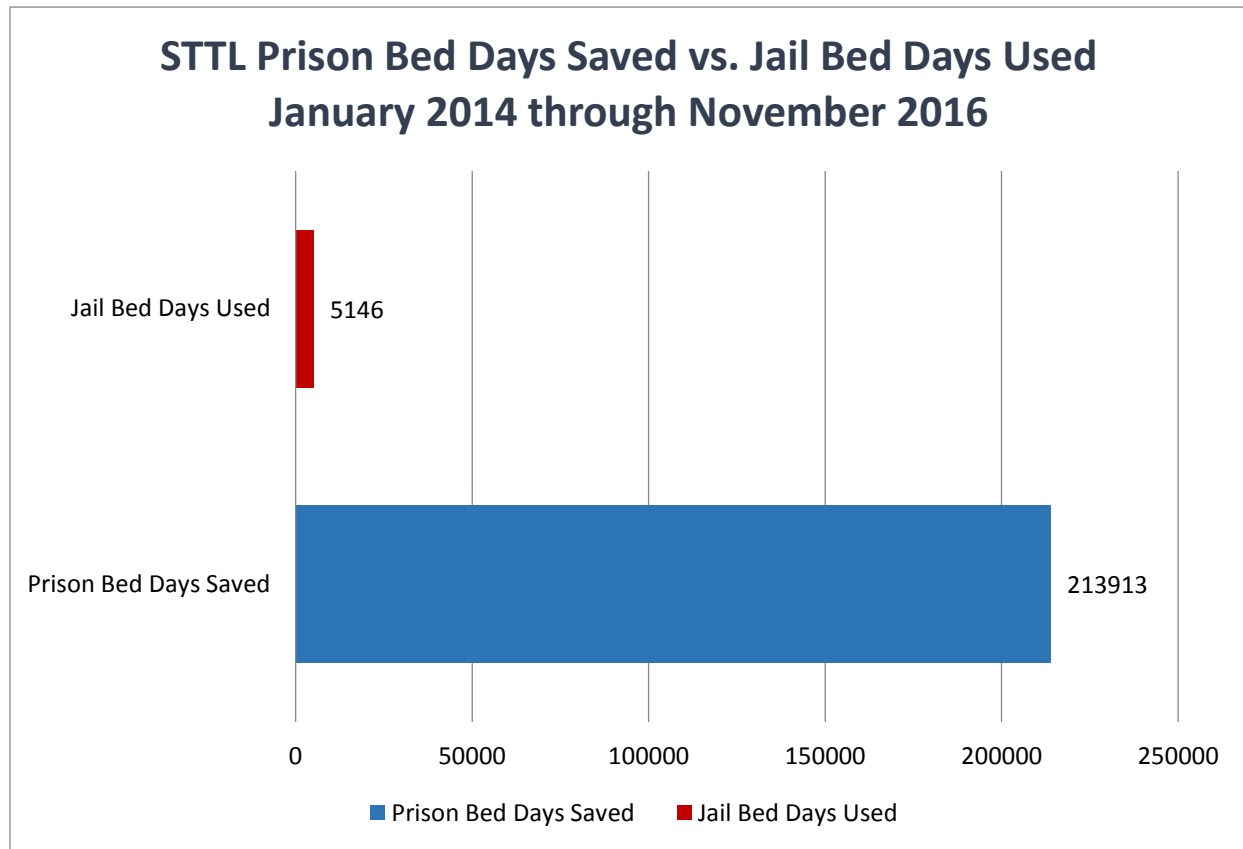


Figure 7: STTL Prison Bed Days Saved and Jail Bed Days Used

## STTL Recidivism Analysis

Although HB 3194 went into effect in August of 2013, the first offenders eligible to benefit from the changes to the STTL program were not eligible for release until December of 2013. By aggregating all offenders who received STTL starting from that first month of eligible offenders and going out until October of 2014 we are able to evaluate a significant cohort of offenders in the community in order to determine if they are more, less or similarly likely to commit new crimes as compared to those that do not receive STTL. The recidivism analysis for this cohort of offenders has been updated to show the 2 year recidivism rates.

### Group Summary Statistics

The results in Table 1 compare summary statistics for those who participated in the STTL program to those who did not participate. STTL releases from December 2013 to October 2014 are included, and account for 1,033 inmates released to STTL. This group combines releases for the 30 and 90 day rules. A comparison group was comprised of inmates statutorily eligible for STTL who did not participate in the program. This includes releases from December 2013 to October 2014 and accounts for 2,312 releases. Inmates who are released after a mandatory minimum sentence are not eligible for STTL, and were not included in the comparison group. Additionally inmates who participated in the AIP (Alternative to Incarceration) program were not included in the comparison group. There are a wide range of factors that can result in an inmate not participating in STTL when they are statutorily eligible. Examples include discipline and behavior issues within the institution, treatment or other program failure in the institution, detainers, inadequate housing upon release, victim safety concerns, and inmate refusal to participate. DOC is in the process of updating their data system to capture the specific reasons of why an inmate does not participate in the STTL program. Currently this capability is not available, and there is not a way to determine the specific reasons of why an inmate was not able to participate.

The two groups displayed in Table 1 are the STTL releases, and the non-STTL releases who were statutorily eligible. These two groups are expected to be different, since there are specific reasons or circumstances as to why those in the statutorily eligible group did not participate in the program.

The summary statistics displayed in Table 1 include gender, ethnicity, average age, average PSC score, and crime type. The PSC (Public Safety Checklist)<sup>4</sup> score is a risk to recidivate score. The PSC is a static, automated risk assessment tool that was developed to predict the likelihood of a new felony conviction within three years of release from incarceration or imposition of probation. The PSC uses criminal history and demographic data to calculate a risk to recidivate score. Community Corrections Departments in Oregon started using the PSC in 2012 as an initial triage tool to define low, medium, and high risk to recidivate populations. Low risk to recidivate is defined as a score less than 25. Medium risk to recidivate is defined as a score greater than or equal to 25 and less than 42. High risk to recidivate is defined as a score greater than or equal to 42. The crime type variable identifies the crime type of the most serious conviction associated with the prison admissions. Crimes included in the other crime type include weapon use, felony DUII, and failure to appear.

This report displays statistical significance results based on statistical modeling and hypothesis testing. Statistical significance is determined by a probability threshold called a p-value. A p-value indicates the probability that an observed difference would have occurred due to chance. A low p-value indicates a low probability that an observed difference occurred by chance. A low p-value also results in the conclusion of a statistically significant difference. In this report the statistical significance threshold is a p-value less than 5%, and the marginal significance threshold is a p-value less than 10%.

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<sup>4</sup> <https://risktool.ocjc.state.or.us/psc/>

The results displayed in Table 1 show that the two groups are significantly different on the specific summary measures. The non-STTL releases group has a higher proportion of males, a higher proportion of minority groups, a lower average age of about two years, and a higher average PSC score of almost two points. The non-STTL group also has a higher proportion of sex offenders, and to a lesser extent a higher proportion of property offenders. The difference between all of the measures is statistically significant, meaning that the difference observed is highly unlikely to have happened by chance.

Releases from December 2013 to October 2014	Non-STTL Releases, Statutorily Eligible (n=2312)	STTL Releases (n=1033)	Statistical Significance
<b>Gender: Male</b>	89.9%	81.4%	**
<b>Ethnicity: Native American</b>	2.6%	1.7%	**
<b>Ethnicity: Asian</b>	1.7%	1.2%	
<b>Ethnicity: Hispanic</b>	13.9%	5.3%	
<b>Ethnicity: African-American</b>	9.0%	11.2%	
<b>Ethnicity: Caucasian</b>	72.8%	80.5%	
<b>Average Age</b>	36.0	37.9	**
<b>Average PSC Score</b>	31.7	29.9	**
<b>Crime Type: Drug</b>	15.2%	16.7%	**
<b>Crime Type: Other</b>	19.9%	21.4%	
<b>Crime Type: Person</b>	18.5%	19.6%	
<b>Crime Type: Property</b>	36.5%	35.7%	
<b>Crime Type: Sex</b>	10.0%	6.5%	

\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

Table 1: Group Summary Statistics

The ethnicity category with the largest disparity across the STTL program is the Hispanic population. In order to better understand this disparity, detainer information was provided by the Department of Corrections. The most common detainers or holds that disqualify participation in the STTL program are out of state and immigration detainers. Table 2 below shows immigration holds by the ethnicity category. The immigration holds have the largest impact on the Hispanic population. Of the 322 Hispanic inmates that were statutorily eligible for the program, but did not participate, 186 had an immigration hold that prevented program participation. This accounts for the majority of the disparity in the Hispanic program across STTL program participation.

Releases from December 2013 to October 2014	Non-STTL Releases, Statutorily Eligible (n=2312)		STTL Releases (n=1033)	
	Immigration Hold	No Immigration Hold	Immigration Hold	No Immigration Hold
<b>Ethnicity: Native American</b>	0	59	0	18
<b>Ethnicity: Asian</b>	11	29	0	12
<b>Ethnicity: Hispanic</b>	186	136	0	55
<b>Ethnicity: African-American</b>	4	203	0	116
<b>Ethnicity: Caucasian</b>	20	1663	0	832

Table 2: STTL Program Participation and Immigration Holds

The results in Table 3 compare the ethnicity populations with the immigration holds removed for those who participated in the STTL program to those who did not participate. The difference across ethnicity is not statistically significant when those with an immigration hold are removed from the Non-STTL release group, meaning that differences observed are more likely to be by chance in our sample size.

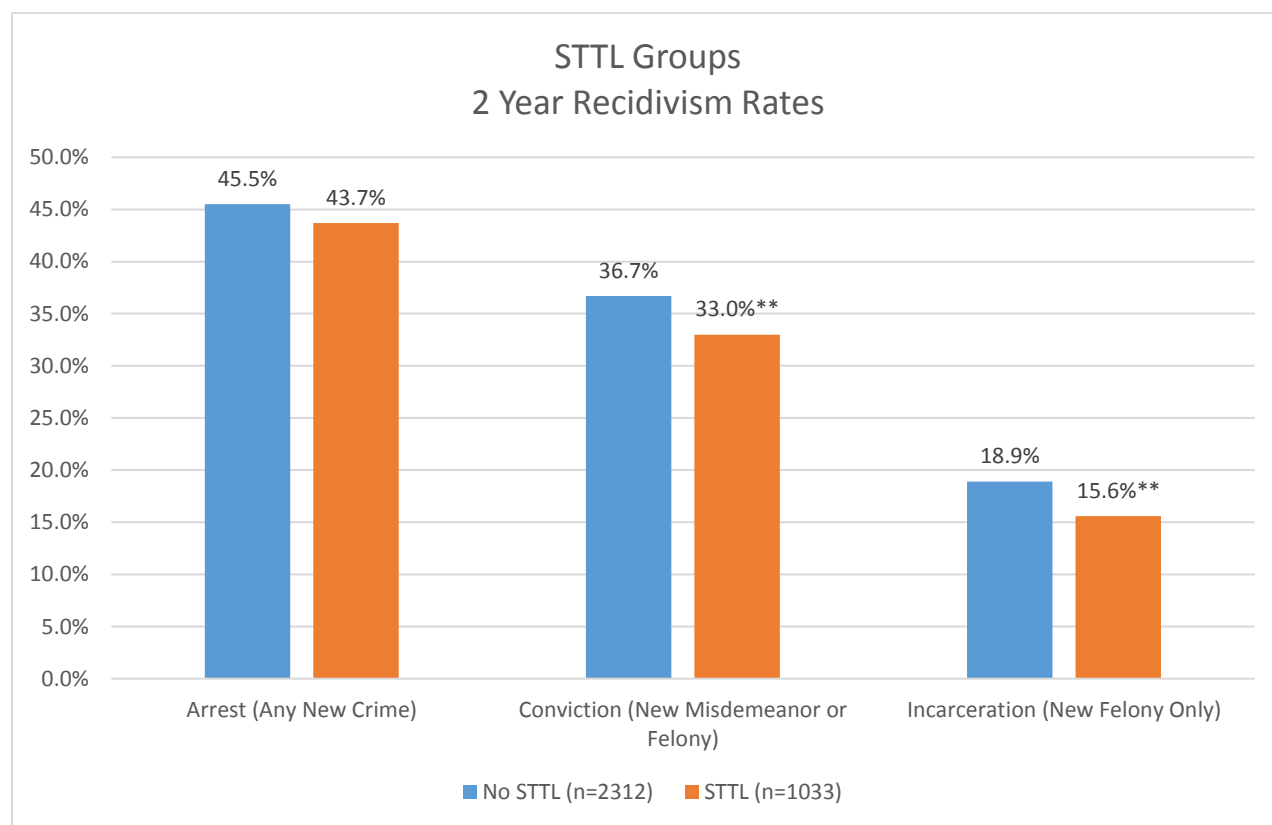
Releases from December 2013 to October 2014 Immigration Holds Removed	Non-STTL Releases, Statutorily Eligible (n=2090)	STTL Releases (n=1033)	Statistical Significance
<b>Ethnicity: Native American</b>	2.8%	1.7%	
<b>Ethnicity: Asian</b>	1.4%	1.2%	
<b>Ethnicity: Hispanic</b>	6.5%	5.3%	
<b>Ethnicity: African-American</b>	9.7%	11.2%	
<b>Ethnicity: Caucasian</b>	79.5%	80.5%	

Table 3: STTL Program Participation by Ethnicity with Immigration Holds Removed

### STTL Groups 2-Year Recidivism Results

Figure 8 shows the 2-year recidivism outcomes for the STTL groups. The previous section highlights the important differences between the groups. The differences in gender, ethnicity, age, average PSC score, and crime type are all statistically significant. The groups are also inherently different in that the reasons or circumstances that an inmate did not receive STTL are not accounted for in this data. The recidivism outcomes displayed reflect the statewide Oregon recidivism definition from House Bill 3194<sup>5</sup>. The statistical tests for the recidivism outcomes do not account for the differences between the two groups in gender, ethnicity, age, average PSC score, and crime type.

The STTL group, or inmates released to STTL from December 2013 to October 2014, show a lower 2-year recidivism rate than the group that did not receive STTL. The 2-year incarceration rate for the non-STTL group is 18.9%, and for the STTL group it is 15.6%. This is a 17.4% drop in the 2-year incarceration rate for the STTL compared to the non-STTL group. This difference is statistically significant. The 2-year conviction rate for the non-STTL group is 36.7%, and for the STTL group it is 33.0%. This difference is also statistically significant shows and a 10.0% drop in the 2-year conviction rate for the STTL group compared to the non-STTL group. The 2-year arrest rate for the non-STTL group is 45.5% compared to 43.7% for the STTL group. This is a 4.0% drop in the arrest rate, and is not statistically significant.



\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

Figure 8: STTL Groups 2 Year Recidivism Rates

<sup>5</sup> [http://www.oregon.gov/cjc/justicereinvestment/Documents/Recidivism\\_Report\\_Nov\\_2015\\_Final.pdf](http://www.oregon.gov/cjc/justicereinvestment/Documents/Recidivism_Report_Nov_2015_Final.pdf)

### Matched Group Summary Statistics

The summary statistics comparing the two groups in Table 1 shows significant differences in gender, ethnicity, average age, average PSC score, and crime type. In order to control for these known variables a matched analysis was performed to see what difference that may make in our initial recidivism analysis of those receiving STTL compared to the non-STTL group. The disaggregation by these factors continues to show a statistically significant difference in statewide recidivism rates<sup>6</sup>. To account for these known differences between the two groups, a matching algorithm was used to find a “twin” for each STTL release in the non-STTL group. The group was matched on all of the summary measures, and out of 1033 STTL releases, matches were found for 983 inmates. Table 4 below shows the comparison between the two groups. Each group has the same proportion by gender, ethnicity, and crime type. The average PSC score is also the same, and the average age shows less than half a year difference. None of the differences in the summary measures are statistically significant. Even after this matching process the two groups are still inherently different due to the factors or circumstances that prevented those in the non-STTL group from participating in the program.

Releases from December 2013 to October 2014	Non-STTL Releases, Statutorily Eligible Matched Group (n=983)	STTL Releases (n=983)	Statistical Significance
<b>Gender: Male</b>	84.0%	84.0%	
<b>Ethnicity: Native American</b>	1.7%	1.7%	
<b>Ethnicity: Asian</b>	0.6%	0.6%	
<b>Ethnicity: Hispanic</b>	5.3%	5.3%	
<b>Ethnicity: African-American</b>	10.1%	10.1%	
<b>Ethnicity: Caucasian</b>	82.3%	82.3%	
<b>Average Age</b>	37.5	37.7	
<b>Average PSC Score</b>	30.2	30.2	
<b>Crime Type: Drug</b>	16.5%	16.5%	
<b>Crime Type: Other</b>	21.4%	21.4%	
<b>Crime Type: Person</b>	19.6%	19.6%	
<b>Crime Type: Property</b>	36.2%	36.2%	
<b>Crime Type: Sex</b>	6.3%	6.3%	

\* *marginal significance (p<0.10)*

\*\* *statistical significance (p<0.05)*

Table 4: Matched Group Summary Statistics

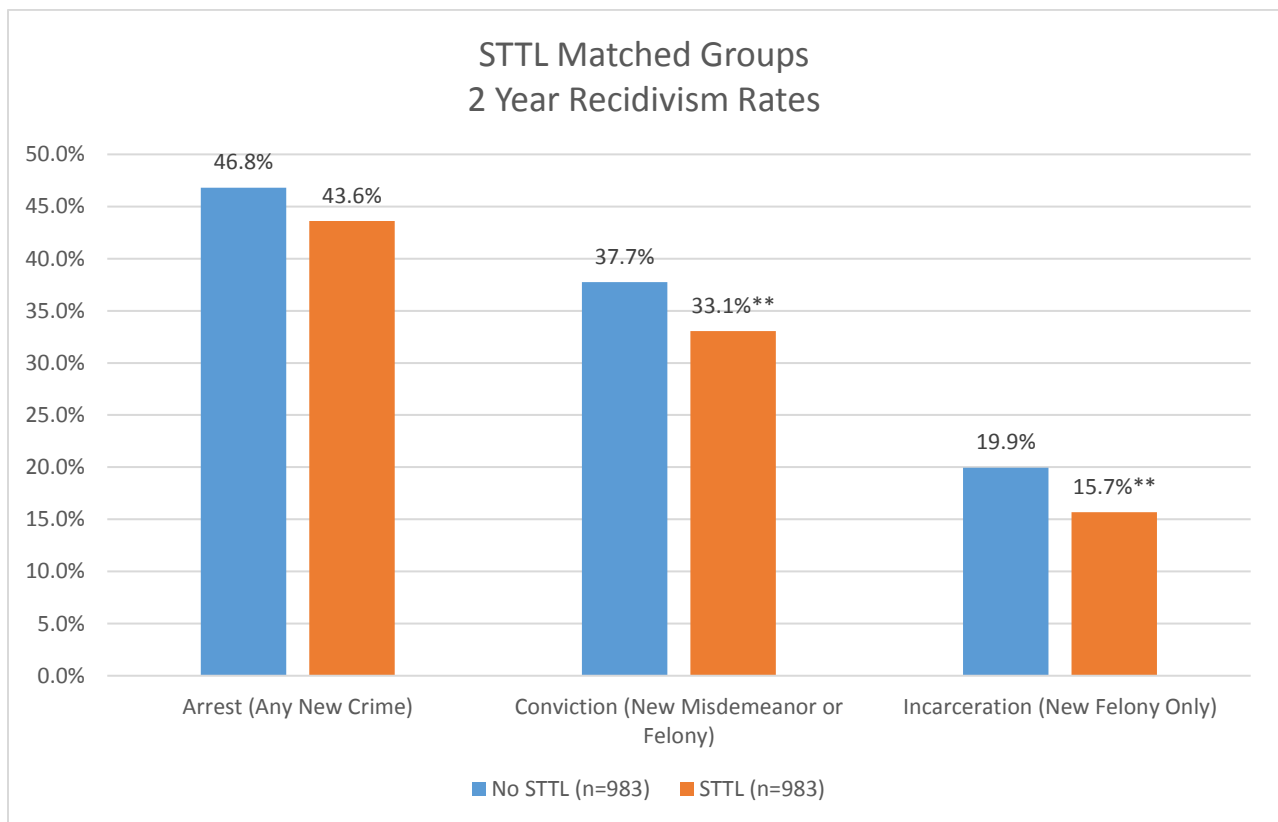
<sup>6</sup> [http://www.oregon.gov/cjc/justicereinvestment/Documents/Recidivism\\_Report\\_Nov\\_2015\\_Final.pdf](http://www.oregon.gov/cjc/justicereinvestment/Documents/Recidivism_Report_Nov_2015_Final.pdf)



### Matched STTL Groups 2-Year Recidivism Results

Figure 9 shows the 2-year recidivism outcomes for the matched STTL groups. The groups have been matched on gender, ethnicity, age, average PSC score, and crime type, but are still inherently different because the reasons or circumstances that an inmate did not receive STTL are not accounted for in this data.

The STTL group, or inmates released to STTL from December 2013 to October 2014, shows lower 2-year recidivism rates than the matched group that did not receive STTL. The 2-year incarceration rate for the non-STTL group is 19.9%, and for the STTL group is 15.7%. This is a 21.4% drop in the 2-year incarceration rate for the STTL compared to the non-STTL group. This difference is statistically significant. The 2-year conviction rate for the non-STTL group is 37.7%, and for the STTL group is 33.1%. This difference is also statistically significant and shows a 12.4% drop in the 2-year conviction rate for the STTL group compared to the non-STTL group. The 2-year arrest rate for the non-STTL group is 46.8% compared to 43.6% for the STTL group. This is a 6.8% drop in the arrest rate, however this difference is not statistically significant.



\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

Figure 9: STTL Matched Groups 2 Year Recidivism Rates

## STTL Recidivism Analysis: November 2014 to October 2015 Releases

This section of the report shows a more recent cohort of releases from November 2014 to October 2015. 1-year recidivism rates are displayed for this cohort of releases. The STTL program, and the number of 90 day STTL releases, was increasing during this time period. This is due to an increasing number of releases who were sentenced on or after August 1, 2013 and were eligible for a maximum of 90 days in the STTL program. This increased the prison bed days saved due to the STTL program. As the STTL program was expanding during this time, it is relevant to examine the 1-year recidivism rates for this group of offenders.

### Group Summary Statistics

The results in Table 1 compare summary statistics for those who participated in the STTL program to those who did not participate. STTL releases from November 2014 to October 2015 are included, and account for 1,264 inmates released to STTL. This group combines releases for the 30 and 90 day rules. A comparison group was comprised of inmates statutorily eligible for STTL who did not participate in the program. This includes releases from November 2014 to October 2015 and accounts for 2,204 releases. As in the previous section, inmates who are released after a mandatory minimum sentence are not eligible for STTL, and were not included in the comparison group. Additionally inmates who participated in the AIP (Alternative to Incarceration) program were not included in the comparison group. There are a wide range of factors that can result in an inmate not participating in STTL when they are statutorily eligible. Examples include discipline and behavior issues within the institution, treatment or other program failure in the institution, detainers, inadequate housing upon release, victim safety concerns, and inmate refusal to participate.

The two groups displayed in Table 1 are the STTL releases, and the non-STTL releases who were statutorily eligible. These two groups are expected to be different, since there are specific reasons or circumstances as to why those in the statutorily eligible group did not participate in the program.

The results displayed in Table 5 show that the two groups are significantly different on the specific summary measures. The non-STTL releases group has a higher proportion of males, a higher proportion of minority groups, a lower average age of about one and a half years, and a higher average PSC score of almost two points. The difference between these measures are statistically significant, meaning that the difference observed is highly unlikely to have happened by chance. The difference in the crime types is not statistically significant.

Releases from November 2014 to October 2015	Non-STTL Releases, Statutorily Eligible (n=2204)	STTL Releases (n=1264)	Statistical Significance
<b>Gender: Male</b>	87.8%	84.7%	**
<b>Ethnicity: Native American</b>	2.5%	2.1%	**
<b>Ethnicity: Asian</b>	1.7%	0.6%	
<b>Ethnicity: Hispanic</b>	10.8%	5.8%	
<b>Ethnicity: African-American</b>	9.6%	7.6%	
<b>Ethnicity: Caucasian</b>	75.4%	83.9%	
<b>Average Age</b>	36.8	38.4	**
<b>Average PSC Score</b>	31.6	30.0	**
<b>Crime Type: Drug</b>	15.7%	14.6%	
<b>Crime Type: Other</b>	21.6%	21.1%	
<b>Crime Type: Person</b>	21.5%	20.7%	
<b>Crime Type: Property</b>	35.5%	36.7%	
<b>Crime Type: Sex</b>	5.4%	7.0%	

\* marginal significance ( $p < 0.10$ )

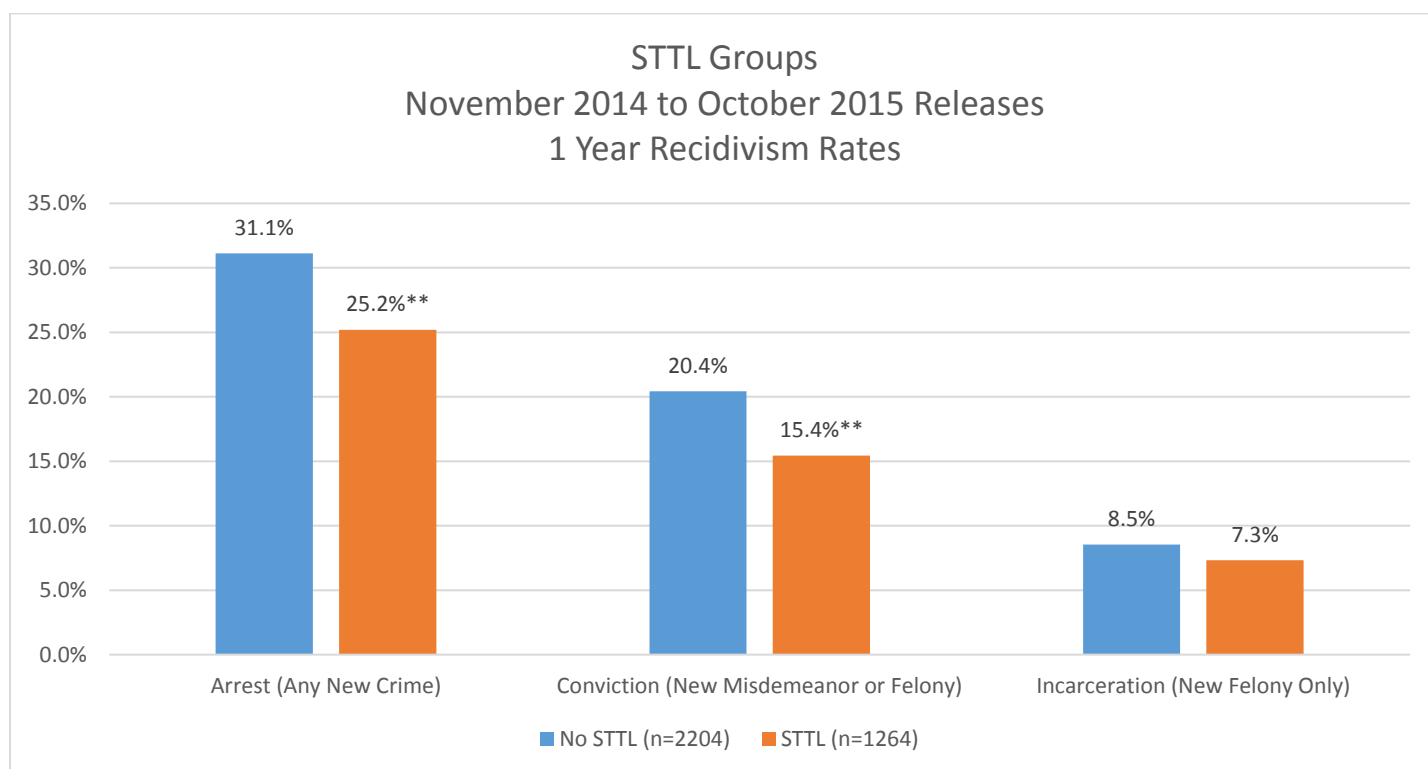
\*\* statistical significance ( $p < 0.05$ )

Table 5: Releases from Nov 2014 to Oct 2015, Group Summary Statistics

### STTL Groups 1-Year Recidivism Results

Figure 10 shows the 1-year recidivism outcomes for the STTL groups. The previous section highlights the important differences between the groups. The differences in gender, ethnicity, age, and average PSC score are all statistically significant. The groups are also inherently different in that the reasons or circumstances that an inmate did not receive STTL are not accounted for in this data. The statistical tests for the recidivism outcomes do not account for the differences between the two groups in gender, ethnicity, age, average PSC score, and crime type.

The STTL group, or inmates released to STTL from November 2014 to October 2015, show a lower 1-year recidivism rate than the group that did not receive STTL. The 1-year incarceration rate for the non-STTL group is 8.5%, and for the STTL group it is 7.3%. This is a 14.2% drop in the 1-year incarceration rate for the STTL compared to the non-STTL group, however this difference is not statistically significant. The 1-year conviction rate for the non-STTL group is 20.4%, and for the STTL group it is 15.4%. This difference is statistically significant and show a 24.4% drop in the 1-year conviction rate for the STTL group compared to the non-STTL group. The 1-year arrest rate for the non-STTL group is 31.1% compared to 25.2% for the STTL group. This is a 19.0% drop in the arrest rate, and is a statistically significant difference.



\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

Figure 10: STTL Groups 1 Year Recidivism Rates

### Matched Group Summary Statistics

The summary statistics comparing the two groups in Table 5 shows significant differences in gender, ethnicity, average age, and average PSC score. In order to control for these known variables a matched analysis was performed to see what difference that may make in our initial recidivism analysis of those receiving STTL compared to the non-STTL group. To account for these known differences between the two groups, a matching algorithm was used to find a “twin” for each STTL release in the non-STTL group. The group was matched on all of the summary measures, and out of 1264 STTL releases, matches were found for 1228 inmates. Table 6 below shows the comparison between the two groups. Each group has the same proportion by gender, ethnicity, and crime type. The average PSC score is also the same, and the average age shows less than half a year difference. None of the differences in the summary measures are statistically significant. Even after this matching process the two groups are still inherently different due to the factors or circumstances that prevented those in the non-STTL group from participating in the program.

Releases from November 2014 to October 2015	Non-STTL Releases, Statutorily Eligible Matched Group (n=1228)	STTL Releases (n=1228)	Statistical Significance
Gender: Male	85.8%	85.8%	
Ethnicity: Native American	1.7%	1.7%	
Ethnicity: Asian	0.5%	0.5%	
Ethnicity: Hispanic	5.8%	5.8%	
Ethnicity: African-American	7.2%	7.2%	
Ethnicity: Caucasian	84.9%	84.9%	
Average Age	38.0	38.2	
Average PSC Score	30.1	30.1	
Crime Type: Drug	14.5%	14.4%	
Crime Type: Other	21.0%	21.1%	
Crime Type: Person	20.8%	20.8%	
Crime Type: Property	37.3%	37.4%	
Crime Type: Sex	6.4%	6.4%	

\* *marginal significance (p<0.10)*

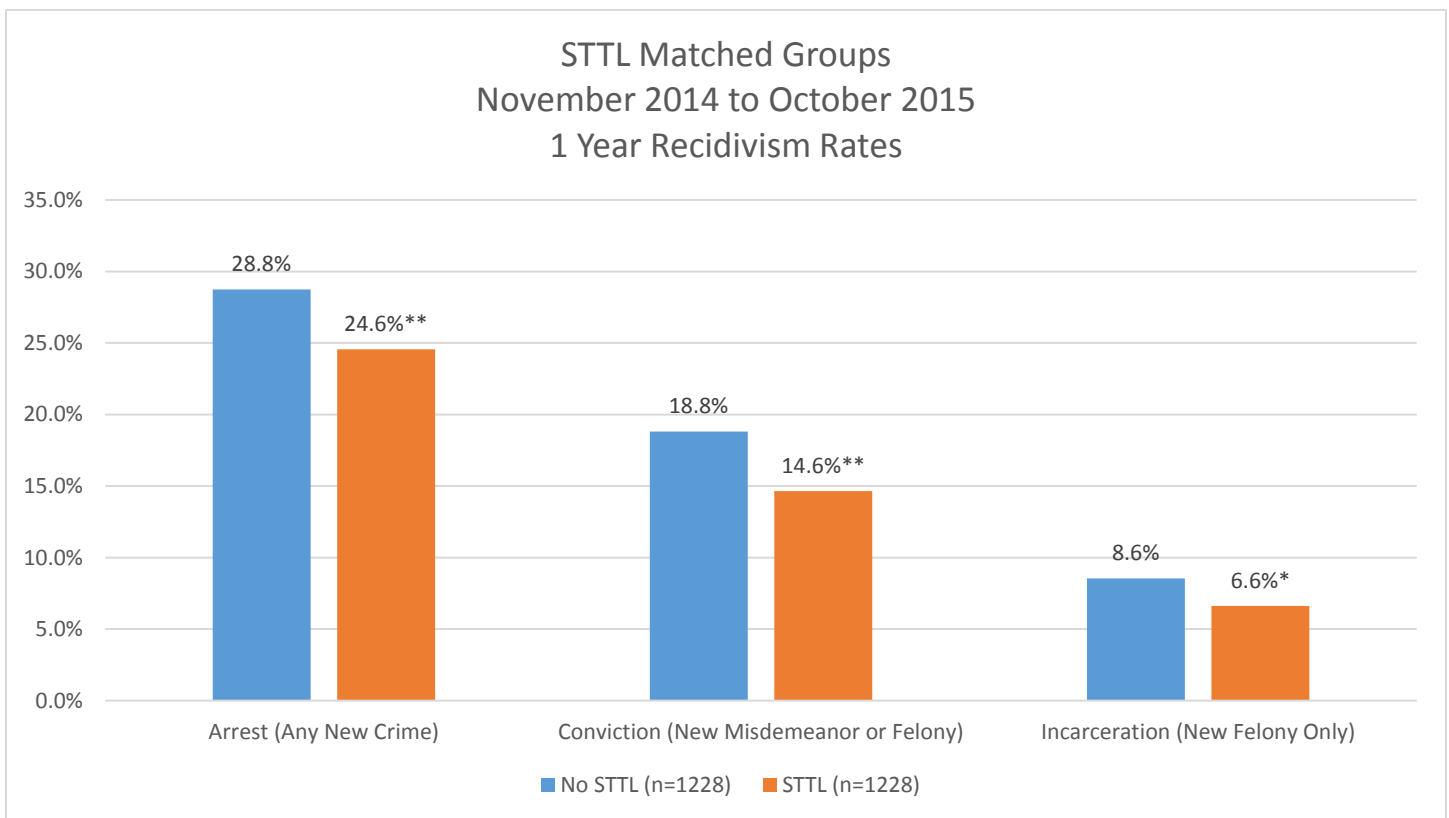
\*\* *statistical significance (p<0.05)*

Table 6: Releases from Nov 2014 to Oct 2015, Matched Group Summary Statistics

### Matched STTL Groups 1-Year Recidivism Results

Figure 11 shows the 1-year recidivism outcomes for the matched STTL groups. The groups have been matched on gender, ethnicity, age, average PSC score, and crime type, but are still inherently different because the reasons or circumstances that an inmate did not receive STTL are not accounted for in this data.

The STTL group, or inmates released to STTL from November 2014 to October 2015, shows lower 1-year recidivism rates than the matched group that did not receive STTL. The 1-year incarceration rate for the non-STTL group is 8.6%, and for the STTL group is 6.6%. This is a 22.7% drop in the 1-year recidivism rate for the STTL compared to the non-STTL group. This difference is marginally statistically significant. The 1-year conviction rate for the non-STTL group is 18.8%, and for the STTL group is 14.6%. This difference is statistically significant and shows a 22.3% drop in the 1-year conviction rate for the STTL group compared to the non-STTL group. The 1-year arrest rate for the non-STTL group is 28.8% compared to 24.6% for the STTL group. This is a 14.5% drop in the arrest rate, and this difference is statistically significant.



\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

Figure 11: STTL Matched Groups 2 Year Recidivism Rates

Appendix

Releases from December 2013 to October 2014	Non-STTL Releases, Statutorily Eligible (n=2312)	STTL Releases (n=1033)	p-value	Statistical Significance	Statistical Significance Test
<b>Gender: Male</b>	89.9%	81.4%	<0.0001	**	Chi-Square Test
<b>Ethnicity: Native American</b>	2.6%	1.7%	<0.0001	**	Chi-Square Test
<b>Ethnicity: Asian</b>	1.7%	1.2%			
<b>Ethnicity: Hispanic</b>	13.9%	5.3%			
<b>Ethnicity: African-American</b>	9.0%	11.2%			
<b>Ethnicity: Caucasian</b>	72.8%	80.5%			
<b>Average Age</b>	36.0	37.9	<0.0001	**	T-test
<b>Average PSC Score</b>	31.7	29.9	<0.0001	**	T-test
<b>Crime Type: Drug</b>	15.2%	16.7%	0.0175	**	Chi-Square Test
<b>Crime Type: Other</b>	19.9%	21.4%			
<b>Crime Type: Person</b>	18.5%	19.6%			
<b>Crime Type: Property</b>	36.5%	35.7%			
<b>Crime Type: Sex</b>	10.0%	6.5%			

\* marginal significance (p<0.10)

\*\* statistical significance (p<0.05)

Releases from December 2013 to October 2014	Non-STTL Releases, Statutorily Eligible (n=983)	STTL Releases (n=983)	p-value	Statistical Significance	Statistical Significance Test
Gender: Male	84.0%	84.0%			
Ethnicity: Native American	1.7%	1.7%			
Ethnicity: Asian	0.6%	0.6%			
Ethnicity: Hispanic	5.3%	5.3%			
Ethnicity: African-American	10.1%	10.1%			
Ethnicity: Caucasian	82.3%	82.3%			
Average Age	37.5	37.7	0.7648		T-test
Average PSC Score	30.2	30.2	0.9798		T-test
Crime Type: Drug	16.5%	16.5%			
Crime Type: Other	21.4%	21.4%			
Crime Type: Person	19.6%	19.6%			
Crime Type: Property	36.2%	36.2%			
Crime Type: Sex	6.3%	6.3%			

\* marginal significance (p<0.10)

\*\* statistical significance (p<0.05)



2 Year Recidivism Rates Releases from December 2013 to October 2014	Non-STTL Releases, Statutorily Eligible (n=2312)	STTL Releases (n=1033)	p-value	Statistical Significance	Statistical Significance Test
Arrest (Any New Crime)	45.5%	43.7%	0.3223		Chi-Square Test
Conviction (New Misdemeanor or Felony)	36.7%	33.0%	0.0406	**	Chi-Square Test
Incarceration (New Felony Only)	18.9%	15.6%	0.0224	**	Chi-Square Test

\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

2 Year Recidivism Rates Releases from December 2013 to October 2014	Non-STTL Releases, Statutorily Eligible (n=983)	STTL Releases (n=983)	p-value	Statistical Significance	Statistical Significance Test
Arrest (Any New Crime)	46.8%	43.6%	0.1601		Chi-Square Test
Conviction (New Misdemeanor or Felony)	37.7%	33.1%	0.0301	**	Chi-Square Test
Incarceration (New Felony Only)	19.9%	15.7%	0.0133	**	Chi-Square Test

\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

Releases from November 2014 to October 2015	Non-STTL Releases, Statutorily Eligible (n=2204)	STTL Releases (n=1264)	p-value	Statistical Significance	Statistical Significance Test
<b>Gender: Male</b>	87.8%	84.7%	0.0078	**	Chi-Square Test
<b>Ethnicity: Native American</b>	2.5%	2.1%	<0.0001	**	Chi-Square Test
<b>Ethnicity: Asian</b>	1.7%	0.6%			
<b>Ethnicity: Hispanic</b>	10.8%	5.8%			
<b>Ethnicity: African-American</b>	9.6%	7.6%			
<b>Ethnicity: Caucasian</b>	75.4%	83.9%			
<b>Average Age</b>	36.8	38.4	<0.0001	**	T-test
<b>Average PSC Score</b>	31.6	30.0	0.0003	**	T-test
<b>Crime Type: Drug</b>	15.7%	14.6%	0.3288	**	Chi-Square Test
<b>Crime Type: Other</b>	21.6%	21.1%			
<b>Crime Type: Person</b>	21.8%	20.7%			
<b>Crime Type: Property</b>	35.5%	36.7%			
<b>Crime Type: Sex</b>	5.4%	7.0%			

\* marginal significance (p<0.10)

\*\* statistical significance (p<0.05)

Releases from November 2014 to October 2015	Non-STTL Releases, Statutorily Eligible (n=1228)	STTL Releases (n=1228)	p-value	Statistical Significance	Statistical Significance Test
<b>Gender: Male</b>	85.8%	85.8%			
<b>Ethnicity: Native American</b>	1.7%	1.7%			
<b>Ethnicity: Asian</b>	0.5%	0.5%			
<b>Ethnicity: Hispanic</b>	5.8%	5.8%			
<b>Ethnicity: African-American</b>	7.2%	7.2%			
<b>Ethnicity: Caucasian</b>	84.9%	84.9%			
<b>Average Age</b>	38.0	38.2	0.5744		T-test
<b>Average PSC Score</b>	30.1	30.1	0.9824		T-test
<b>Crime Type: Drug</b>	14.5%	14.4%	0.9867		Chi-Square Test
<b>Crime Type: Other</b>	21.0%	21.1%			
<b>Crime Type: Person</b>	20.8%	20.8%			
<b>Crime Type: Property</b>	37.3%	37.4%			
<b>Crime Type: Sex</b>	6.4%	6.4%			

\* *marginal significance (p<0.10)*

\*\* *statistical significance (p<0.05)*

1 Year Recidivism Rates Releases from November 2014 to October 2015	Non-STTL Releases, Statutorily Eligible (n=2204)	STTL Releases (n=1264)	p-value	Statistical Significance	Statistical Significance Test
Arrest (Any New Crime)	31.1%	25.2%	0.0002	**	Chi-Square Test
Conviction (New Misdemeanor or Felony)	20.4%	15.4%	0.0003	**	Chi-Square Test
Incarceration (New Felony Only)	8.5%	7.3%	0.2089		Chi-Square Test

\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

1 Year Recidivism Rates Releases from November 2014 to October 2015	Non-STTL Releases, Statutorily Eligible (n=1228)	STTL Releases (n=1228)	p-value	Statistical Significance	Statistical Significance Test
Arrest (Any New Crime)	28.8%	24.6%	0.0194	**	Chi-Square Test
Conviction (New Misdemeanor or Felony)	18.8%	14.6%	0.0053	**	Chi-Square Test
Incarceration (New Felony Only)	8.6%	6.6%	0.0698	*	Chi-Square Test

\* marginal significance ( $p < 0.10$ )

\*\* statistical significance ( $p < 0.05$ )

## Literature Review Details

Snodgrass (2011) did a quasi-experimental study to look at prison length of stay and the impact on recidivism. They found no evidence of a relationship between the two. This suggests that releasing offenders three months early is safe. However, this was done in the Netherlands and no services were provided, unlike STTL. They also used six categories for length of stay and the longest was one year or more.

Snodgrass, G. Matthew, Arjan A.J. Blokland, Amelia Haviland, Paul Nieuwbeerta, and Daniel S. Nagin. 2011. "Does the Time cause the crime? An examination of the relationship between time served and reoffending in the Netherlands." *Criminology* 49(4):. 1149.

Drago (2009) used a natural experiment in Italy where due to prison overcrowding, several offenders were released early (similar crime categories as STTL, though they were slightly broader) with the caveat that if they recidivated, any additional time remaining on their sentence would be tacked on to the sentence of their new crime. Offenders were released 1-36 months early, depending on how much time was left on their sentence at the clemency date. Expected sentence length had a slightly negative impact on recidivism. However, this was done in Italy and the length of time was certain.

Drago, Francesco, Roberto Galbiati, and Pietro Vertova. 2009. "The Deterrent Effects of Prison: Evidence from a natural experiment." *Journal of Political Economy* 117(2): 257.

Bushway (2013) compared expected length of sentence to actual time served in Maryland. Using a change to sentencing guidelines that aligned sentencing recommendations with actual sentences served, they compared offenders with the same offenses and criminal histories with differing recommended sentences but similar time served. They found that offenders whose time served was more similar to their expected length of sentence had slightly lower recidivism. Arguably, reducing length of sentence by three months could increase recidivism. It is also arguable that this is looking at recommended sentences rather than actual length of sentences, and this is a transition program that technically doesn't reduce the length of sentence.

Bushway, Shawn D. and Emily G. Owens. 2013. "Framing Punishment: Incarceration, recommended sentences, and recidivism." *Journal of Law and Economics* 56: 301.

Gottfredson (1999) followed 962 offenders sentenced in New Jersey for 20 years, and among the pieces of information he analyzed was the length of sentence impact on recidivism. Using ANOVA with statistical controls for risk and sentence selection factors, he determined that length of sentence has a negative impact on recidivism by less than 2%. However, this method cannot attribute causality.

Gottfredson, Don. 1999. Effects of Judges' Sentencing Decisions on Criminal Careers. NIJ Research in Brief.

Drake (2009) examined Washington's earned release program using a historical quasi-experimental design and found that for those who qualify, recidivism increases in the initial 60 days but is lower overall (3.5%) during the three years post-release. Offender qualifications are similar to STTL but it doesn't provide the additional support and could be up to 50% of their sentence time.

Drake, E.K., R. Barnoski, and S. Aos (2009). Increased Earned Release From Prison: Impacts of a 2003 Law on Recidivism and Crime Costs, Revised. Olympia: Washington State Institute for Public Policy, Document No. 09-04-1201.

Barnoski (2004) examined the relationship between time in prison and recidivism in Washington using statistical controls, a non-causal method. They found no statistically significant relationship for property, robbery, or drug crimes (nonsignificant positive relationship for robbery and property). This supports the safety of STTL; however, this method cannot attribute causality. He used 6 month time intervals.

Barnoski, R. P. 2004. Sentences for Adult Felons in Washington: Options to address prison overcrowding: Pt 2 (recidivism analyses). Olympia, WA: Washington State Institute for Public Policy.

Meade (2012) did a quasi-experimental analysis of offenders in Ohio to examine the relationship between time in prison and recidivism. They found that overall time served is negative with recidivism, but the time categories were larger than a year so this doesn't estimate the impact of 3 or even 6 months.

Meade, Benjamin, Benjamin Steiner, Matthew Makarios, and Lawrence Travis. 2012. "Estimating a Dose-Response Relationship Between Time Served and Prison Recidivism." *Journal of Research in Crime and Delinquency* 50(4): 525-550.

Kuziemko (2013) did a quasi-experimental analysis in Georgia that used a parole policy change to examine the impact of length of stay, and found that each month of prison lowered the recidivism risk by about 1.3%. She also examined the impact of a policy that lengthened time served by requiring offenders to serve a minimum of 90% of their sentence. She found that once offenders had less opportunity to earn early release through good behavior and programming, infractions increased, programming dropped, and recidivism increased. This suggests that programs like STTL might have mixed results – reducing recidivism by providing incentive for good behavior and programming, but increasing recidivism through less prison time.

Kuziemko, Ilyana. 2013. How Should Inmates be Released from Prison? An Assessment of Parole versus Fixed-Sentence Regimes. *Quarterly Journal of Economics* 128(1): 371-424.

OREGON SHORT-TERM TRANSITIONAL LEAVE PROGRAM

STUDY	IMPACT FINDINGS	KEY STUDY FEATURES AND DIFFERENCES			
		Location	Reentry Support	Sentence Reduction	Other
<b>Oregon STTL</b>	Early release reduces recidivism	Oregon	Yes	Yes: 3 months reduction	
<b>Drake et al. 2009</b>	Time in prison increases recidivism	Washington	No	Yes: Up to 50% of sentence	Earned release program
<b>Kuziemko 2013</b>	Incentives reduce recidivism	Georgia	No	Yes: parole (50-90% of sentence)	Incentives for early release
<b>Barnoski 2004</b>	No impact	Washington	No	Yes: up to 50% of sentence	Good behavior in prison is associated with lower recidivism
<b>Snodgrass et al. 2011</b>	No impact	Netherlands	No	No	
<b>Barnoski 2004</b>	Time in prison lowers recidivism	Washington	No	No	
<b>Drago 2009</b>	Time in prison lowers recidivism	Italy	No	Yes: 1-36 months	Known length of prison time for recidivist
<b>Bushway and Owens 2013</b>	Variation between recommended sentence and time served increases recidivism	Maryland	No	Yes: Parole	Focus was on expected versus actual sentence
<b>Gottfredson 1999</b>	Time in prison lowers recidivism	New Jersey	No	No	
<b>Meade et al. 2012</b>	Time in prison lowers recidivism	Ohio	No	No	For sentences over 5 years, longer sentences reduced recidivism
<b>Kuziemko 2013</b>	Time in prison lowers recidivism	Georgia	No	Yes: parole (50-90% of sentence)	