

Massachusetts Department of Correction  
One-Year Recidivism Rates of Men  
Released 2013 – 2020: A Multi-Year  
Descriptive Analysis of Correctional  
Recovery Academy and High School  
Equivalency Credential

Calendar Year 2023



Executive Office of Public Safety and Security  
November 2023

Maura T. Healey, Governor  
Terrence M. Reidy, Secretary of Public Safety and Security

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of  
Correctional Recovery Academy and High School Equivalency Credential

**COMMONWEALTH OF MASSACHUSETTS**

Maura T. Healey, Governor

Kimberley Driscoll, Lieutenant Governor

**EXECUTIVE OFFICE OF PUBLIC SAFETY AND SECURITY**

Terrence M. Reidy, Secretary

**MASSACHUSETTS DEPARTMENT OF CORRECTION**

Carol A. Mici, Commissioner

Rhiana Kohl, Ph.D., Executive Director, Strategic Planning and Research

**PREPARED BY**

Hollie Matthews, Deputy Director, Strategic Planning and Research

Matthew Moniz, Director, Program Services Division and Reentry Services Division

Kelly Paquin, Operations Analyst Manager, Office of the Assistant Deputy Commissioner of Reentry

Jiqiang Rong, Statistician, Research and Planning Division

**ACKNOWLEDGEMENTS**

The publication of this report would not be possible without the assistance of the following:

Massachusetts Department of Correction, Division of Inmate Training and Education

Massachusetts Department of Correction, Program Services Division

Massachusetts Department of Correction, Research and Planning Division

Spectrum Health Systems, Inc.

This and other Massachusetts Department of Correction publications can be accessed on the internet at:

<https://www.mass.gov/research-statistics-and-reports>

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of  
Correctional Recovery Academy and High School Equivalency Credential

**Table of Contents**

**Acknowledgments ..... ii**

**Table of Contents ..... iii**

**Definition of Terms ..... 1**

**Executive Summary ..... 3**

**Key Findings..... 3**

**Introduction..... 4**

**Methodology ..... 5**

**Correctional Recovery Academy and High School Equivalency Credential ..... 8**

**Correctional Recovery Academy ..... 9**

**High School Equivalency Credential..... 10**

**Conclusion ..... 11**

**Works Cited..... 12**

**Appendix A ..... 13**

**Appendix B ..... 14**

**Appendix C ..... 15**

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

**Definition of Terms**

*Academic Education Services:* Incarcerated individuals without a high school diploma or equivalency upon admission are identified as being eligible for Academic Education Services, which range from English as a Second Language (ESL) to Adult Secondary Education (ASE), and facilitates incarcerated individuals earning their high school equivalency.

*Board of Probation:* The Court Activity Record Information (CARI) file that provides criminal history information starting with each arraignment. The Massachusetts Board of Probation (BOP) record maintains the CARI file on the Massachusetts Criminal Justice Information System (CJIS).

*Correctional Offender Management Profiling for Alternative Sanctions (COMPAS):* COMPAS is an automated risk/needs assessment tool utilized to inform the development of an incarcerated individual’s personalized program plan. COMPAS has been normed and validated to the Massachusetts Department of Correction population.

*Criminogenic Need:* Factors which impact criminal behavior and can be altered over time with appropriate treatment and programming.

*Correctional Recovery Academy (CRA):* An intensive 6-month substance use program currently located at four institutions: Northeastern Correctional Center, MCI-Norfolk, MCI-Shirley, and MCI-Concord. CRA targets relapse prevention and cognitive behavioral programming. The program utilizes rolling admission and combines elements of a therapeutic community’s social learning approach with an advanced cognitive behavioral curriculum.

*Electronic Monitoring Program (ELMO):* ELMO is a program which promotes reentry by maximizing an incarcerated individual’s time in the community prior to release, thereby allowing the incarcerated individual to demonstrate their ability to function in a realistic living environment while monitored under strict conditions of accountability.

*Governing Offense:* The offense associated with the sentence imposing the longest maximum discharge date when an incarcerated individual is convicted and sentenced for multiple offenses.

*High School Diploma or Equivalent (General Equivalency Diploma, High School Equivalency Test):* Education level associated with incarcerated individuals with a verified High School Diploma, or High School Equivalency Credential, or those who earned a High School Equivalency Credential during their incarceration.

*Need Met:* Indicates an incarcerated individual who completed the core program for the corresponding criminogenic need area.

*Need Not Met:* Indicates an incarcerated individual who either did not enroll into a core program or enrolled and did not complete. Reasons for not completing a program include, but are not limited to, release, transfer, discipline process, voluntary withdrawal, and failure to meet program expectations.

*Non-Violent Offense:* Any offense that falls under the categories of “Property”, “Drug”, or “Other.”

*Race/Ethnicity:* Incarcerated individuals are asked to self-report their race and ethnicity. The recorded categories are in accordance with 501 CMR 18.00, Data Collection and Reporting Standards for Criminal Justice Agencies. Race categories are: American Indian or Alaska Native; Asian or Pacific Islander; Black or African American; White; and Unknown. Ethnicity categories are: Hispanic or Latino; and Non-Hispanic or Not Latino.

## One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

*Recidivist:* For the purposes of this report a recidivist is defined as any incarcerated individual in the study cohort who, within one year of one's release to the community, is arraigned for an offense that ultimately results in a conviction. For this purpose, "conviction"<sup>1</sup> is defined as any outcome involving a new criminal sentence, probation, suspended sentence, fine, or guilty finding. Additional follow-up time is necessary to collect data because of the time required for an incarcerated individual's new criminal charge to reach final resolution in the trial court. For example, if an incarcerated individual who was released on January 1, 2013, was arraigned for a new offense on March 1, 2013, and subsequently convicted and sentenced in February 2015, that incarcerated individual would be treated as having recidivated within the one-year period.

*Recidivism Rate:* The recidivism rate is calculated by dividing the number of incarcerated individuals reconvicted within one year of release by the number of incarcerated individuals in the release cohort.

*Recidivism Risk Score:* On intake to the prison system, each incarcerated individual is given assessments to establish their Intake/Criminal History/Risk Scale Set. Components of the scale set are the General and Violent Recidivism Risk Scores which may be used to predict recidivism risk. The risk scores are based on a COMPAS Core scale which is a standard decile scale with 1 corresponding to the lowest risk of recidivism and 10 corresponding to the highest risk. The amount of programming required for a given incarcerated individual is established by simplifying this scale to Low, Moderate, and High risk to recidivate. Incarcerated individuals scoring a moderate to high risk to recidivate in either the general or the violent recidivism scale are administered a needs assessment and the incarcerated individual is referred to programming. Due to the implementation of the COMPAS Assessment, incarcerated individuals who were incarcerated at the time of the roll-out were administered a Standing Risk Assessment as a proxy to the Initial Risk or Core Risk Assessment. Those assessment scales are used interchangeably in the analysis.

*Security Level:* The security level designation of the facility from which the incarcerated individual was released. For facilities with multi-level designations, the security level of the housing unit the incarcerated individual was released from within the facility was used.

*Substance Abuse Scale:* The COMPAS substance abuse scale is categorized ranging from 1 to 10 based on decile cut points and then categorized into low (1-2), moderate (3-4), and high (5-10) based on 20/20/60 cut points determined by a substance abuse norm group.

*The Texas Christian University Drug Screen (TCUDS):* TCUDS II or V is utilized as a secondary measurement to determine substance use treatment need. The TCUDS is administered to incarcerated individuals admitted to the reception centers and measures one's recent schedule of use, withdrawal, and tolerance factors providing a low or high score (TCUDS-II), or a None, Mild Disorder, Moderate Disorder, Severe Disorder score (TCUDS-V).

*Time Served:* Time served includes the incarcerated individual's length of stay in Massachusetts Department of Correction custody as well as jail credits received prior to sentencing.

*Violent Offense:* Any offense that falls under crimes against the person, pursuant to M.G.L. c. 265, or a sex offense.

---

<sup>1</sup> For the years 2013 – 2016 a small number of dispositions of continuance without a finding (CWO) were counted as a reconviction as some CWO's can include supervision. The 2017 – 2020 release cohorts do not include CWO's as they are not considered a conviction.

## Executive Summary

The purpose of this study is to analyze the recidivism rates<sup>2</sup> of Massachusetts Department of Correction (MA DOC) criminally sentenced incarcerated individuals released to the community via expiration of sentence or parole from January 1, 2013 – December 31, 2020 who completed programs to address their criminogenic need areas to determine if expected reductions in recidivism were observed.

The two criminogenic need areas examined for the cohort were substance use and academic education. Program completion for incarcerated individuals with a substance use need was determined through completion of the Correctional Recovery Academy (CRA) while educational need was determined through the attainment of a High School Equivalency Credential (HSE). Three distinct cohorts were analyzed, and their associated recidivism rates were examined to determine the differences between incarcerated individuals who successfully completed programming and those who did not. The first cohort consisted of incarcerated individuals with both substance use and academic education need areas. The second cohort consisted of incarcerated individuals with only a substance use need, and the third cohort consisted of incarcerated individuals with only an educational need.

## Key Findings

- Incarcerated individuals with both a substance use need and an educational need had statistically significant lower recidivism rates if both program needs were met. The recidivism rate was 7.8% for incarcerated individuals with both a substance use and educational need who completed CRA and achieved a HSE, compared to a rate of 19.7% for incarcerated individuals who did not meet both need areas.
- Overall, incarcerated individuals with both substance use and educational needs had the highest recidivism rate (16.8%), followed by incarcerated individuals with only a substance use need (14.9%), and incarcerated individuals with only an educational need (14.4%). Incarcerated individuals with neither a substance use need, nor an educational need had the lowest recidivism rate (11.7%). (*See graph 3*).
- Incarcerated individuals with only a substance use need who completed CRA had a recidivism rate of 10.5%. Incarcerated individuals with only a substance use need who did not complete CRA had a recidivism rate of 18.6%.
- Incarcerated individuals who only had an educational need and who also received a HSE had a recidivism rate of 8.8%. Incarcerated individuals with only an educational need who did not receive a HSE had a recidivism rate of 16.1%.
- The lower recidivism rates among those incarcerated individuals who met their criminogenic need areas with programming were consistent under different controlled situations (*See Appendices A, B, and C*). The consistent results across these control groups suggest a robust relationship between completion of programming such as CRA and/or HSE and lower rates of recidivism. These

---

<sup>2</sup> The recidivism rate is based on reconviction within one year for criminally sentenced incarcerated individuals released to the community via expiration of sentence or parole from January 1, 2013 – December 31, 2020, whose first release occurred during this time-period. The reconviction date is based on the initial arraignment date associated with the reconviction.

## One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

programs appeared to work particularly well with incarcerated individuals of higher risk, medium security level, person and property crimes, and in the White and Black or African American racial groups.

- For the overall study cohort of incarcerated individuals with a substance use and/or educational need, the one-year recidivism rate was 15.6%.

Meta-analysis has indicated that programming designed to meet the educational and therapeutic needs of incarcerated individuals with histories of substance use will result in a reduction in the rate of recidivism (Washington State Institute for Public Policy, 2013; Duwe, 2017). The data analyzed in this study comports with prior research that indicates therapeutic communities for substance use programming and educational programming during incarceration, independent of each other, will result in lower recidivism rates (Washington State Institute for Public Policy, 2013; Duwe, 2017). More importantly, MA DOC's findings indicate the key to maximizing recidivism reduction for incarcerated individuals with a substance use and educational need was to meet both need areas.

### **Introduction**

How recidivism is conceptualized and how a recidivism cohort is defined can drastically influence a reported recidivism rate. Common definitions for recidivism include: the recommitting of a crime; the reconviction of a crime; or the reincarceration to jail or prison after release to the community following an incarceration.

For the purposes of this report, recidivism is defined as a reconviction based on an arraignment occurring within one year from the date of an incarcerated individual's release to the community. Conviction types include a criminal sentence to a Massachusetts state or county facility, a term of probation, a suspended sentence, a split sentence, or a fine. Because of the time it takes to prosecute a crime and reach final resolution of a charge, the initial arraignment date associated with the new offense is used to determine the date of reconviction.

A primary objective of MA DOC is to rehabilitate incarcerated individuals and prepare them for successful reentry into society. Incarcerated individuals are assessed through a risk/needs analysis and those identified as being at the highest risk of recidivism are enrolled in programs designed to target their specific criminogenic need areas, with the goal of deterring future criminality. To measure success, recidivism rates are used to determine an incarcerated individual's ability to abstain from criminal behavior after release from prison.

Over the last decade, MA DOC has placed greater emphasis on evidence-based programming as a tool for reducing recidivism and enhancing public safety. Utilizing the best available research, MA DOC has sought to address the root causes of criminal behavior through highly focused and targeted programming. The individual progress of each incarcerated individual is further measured through the review of the incarcerated individual's personalized program plan at each classification review, which must occur at least annually.

The cornerstone of the program services administered by MA DOC is the Risk-Need-Responsivity (RNR) framework. The RNR is predicated on three core principles:

## One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

- **The Risk Principle** asserts that criminal behavior can be reliably predicted. Intensity of services should match the incarcerated individual's risk level and treatment should focus on the higher risk incarcerated individuals;
- **The Need Principle** highlights the importance of addressing criminogenic needs in the design and delivery of treatment; and
- **The Responsivity Principle** focuses on matching an incarcerated individual's personality and learning style with appropriate program settings and approaches (Andrews & Dowden, 2005; Andrews & Dowden, 2006; Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990).

The RNR framework focuses correctional treatment on addressing *criminogenic needs*, factors that impact criminal behavior which can be altered over time with appropriate treatment. For example, an incarcerated individual may have a lengthy criminal record from crimes committed while under the influence of illicit drugs. MA DOC focuses on addressing criminal thinking and substance use as they can be changed with appropriately targeted services. Disregarding incarcerated individuals' major needs has been shown through extensive research to increase their chances of recidivating (Andrews & Bonta, 2006). Other criminogenic needs include employment and pro-social networks/associations, education, and stable housing and home life (Andrews & Bonta, 2006). Research has also shown that individuals who complete the appropriate programs exhibit lower reconviction rates than do individuals who do not complete the appropriate programming while incarcerated (Rodriguez & Usman, 2022).

It is important to note, CRA has evolved over time, and that evolution has been informed by the insights from this report and other empirical research to align the treatment model more closely with evidence-based practices. This report is one example of MA DOC's data-driven approach to evidence-based decision making.

### Methodology

The goal of this analysis is to explore MA DOC recidivism rates with reference to CRA and its associated qualification assessments: general risk, violent risk, and substance use risk; and high school diploma/equivalency attainment based on high school education level upon admission to MA DOC.

CRA is an intensive six-month skill-based residential substance use program. There are a total of 408 residential beds located across four separate MA DOC institutions with an additional 60 graduate support beds. CRA targets substance use, anger management, criminal thinking, and relapse prevention by utilizing a therapeutic community-based approach with an advanced cognitive behavioral curriculum that promotes positive social learning.

To identify incarcerated individuals appropriate for CRA referral, the COMPAS Risk Assessment was used. Upon admission, incarcerated individuals are administered the COMPAS Risk Assessment. Each incarcerated individual given a general or a violent recidivism risk score is placed in a category score ranging from 1 (lowest risk) to 10 (highest risk). Based on this 10-point scale, each incarcerated individual is then placed into one of three recidivism risk categories, Low (score 1-4), Moderate (score 5-7), and High (score 8-10). Incarcerated individuals who score moderate to high risk are also given the COMPAS Needs Assessment to assess programming need. Incarcerated individuals with a moderate to high substance use



## One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

score in the substance abuse scale of the COMPAS Needs Assessment<sup>3</sup> or in the TCUDS<sup>4</sup> are referred to CRA.

To identify an incarcerated individual's educational need, data regarding the incarcerated individual's level of education was gathered upon the incarcerated individual's admission to MA DOC. Incarcerated individuals without a high school diploma or equivalency were identified as having an educational need for the purpose of this study. Analysis was then completed to determine if receiving an HSE, while incarcerated, was associated with a reduced risk of recidivism. MA DOC offers a full continuum of educational programming and services, including basic and advanced courses in adult education, as well as English as a Second Language for non-English speaking incarcerated individuals. The continuum also includes supplemental programming such as special education and Title I<sup>5</sup>, as well as, Bridge to College courses.

One-year reconviction rates were examined for a cohort of incarcerated individuals released to the community via parole or expiration of sentence. Cohort selection included incarcerated individuals released between 2013 and 2020 whose first release occurred during the time period. Overall, there were 12,288 incarcerated individuals released to the community between 2013 and 2020.<sup>6</sup> Of 12,288 men released, 9,373 (76%) were identified as moderate to high risk to recidivate.

Of the 9,373 moderate/high risk incarcerated individuals, 7,603 (81.1%) were identified for the CRA cohort, scoring moderate to high in the substance abuse scale. In addition, 4,434 (47.3%) of the 9,373 moderate/high risk incarcerated individuals were identified as having an educational need as they had not attained an HSE or diploma upon their admission to MA DOC. The combined 7,603 incarcerated individuals in the CRA cohort and 4,434 incarcerated individuals in the educational need cohort resulted in an overall study cohort of 8,567 as 3,470 incarcerated individuals were in both the CRA and educational need cohorts (Graph 1).

---

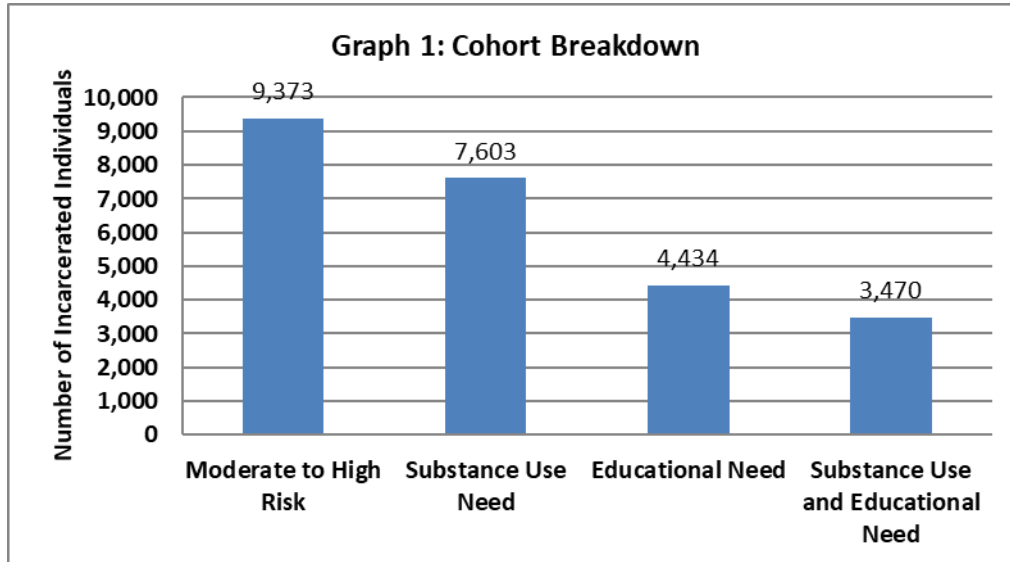
<sup>3</sup> Of the 9,606 moderate to high-risk incarcerated individuals, 233 were not administered a needs assessment and were excluded from the study. This resulted in a recidivism cohort of 9,373.

<sup>4</sup> Starting with the 2018 release cohort, the TCUDS was used along with the COMPAS Needs Assessment to identify substance use need.

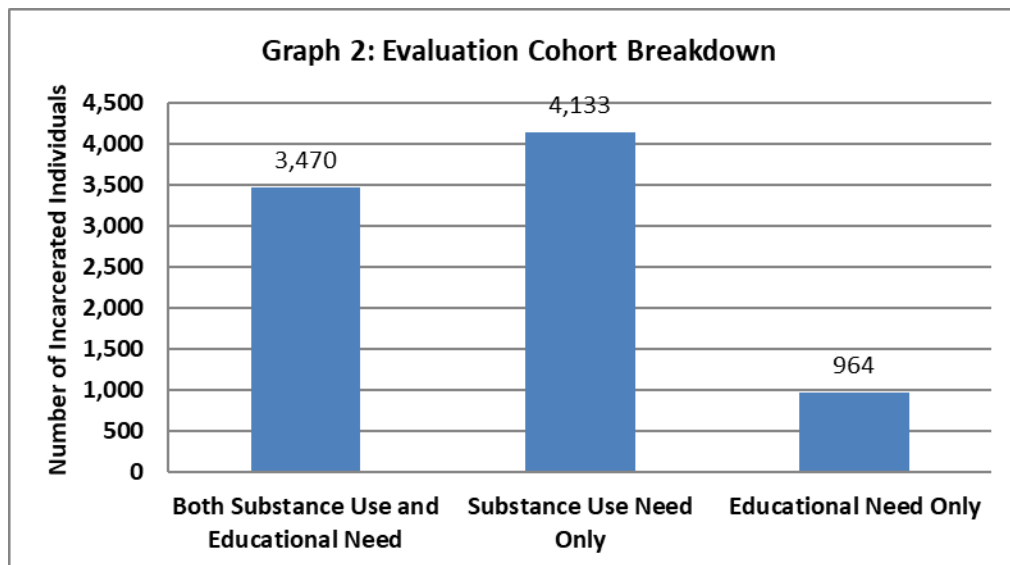
<sup>5</sup> Title I is a state agency program that provides financial assistance to educational programs for youth in state-operated institutions.

<sup>6</sup> An incarcerated individual may not be included in the study for one of several reasons, such as not being released directly to the community or death in the community before the conclusion of the one-year follow-up period.

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential



Of the 8,567 incarcerated individuals with a substance use or educational need, 3,470 (40.5%) had a need in both areas, 4,133 (48.2%) had only a substance use need and 964 (11.3%) had only an educational need. This report will examine the recidivism rates for each of these three cohorts to compare and describe differences between those incarcerated individuals who successfully completed CRA and/or attained an HSE, and those incarcerated individuals who did not participate in programming to address their criminogenic needs.<sup>7</sup> It is important to note that this report only examines substance use and educational needs; there are other incarcerated individual need areas and programs that are not included in this report (Graph 2).



CRA data and HSE data was gathered from MA DOC’s Inmate Management System (IMS) and merged into the cohort data file of calendar years 2013 - 2020 men released to the community. CRA data was sorted to identify incarcerated individuals in the study cohort who completed CRA, which is indicated by a

<sup>7</sup> Please note that an incarcerated individual’s participation in the CRA or the GED program is voluntary, which can lead to data bias and may impact the findings from this study.

## One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

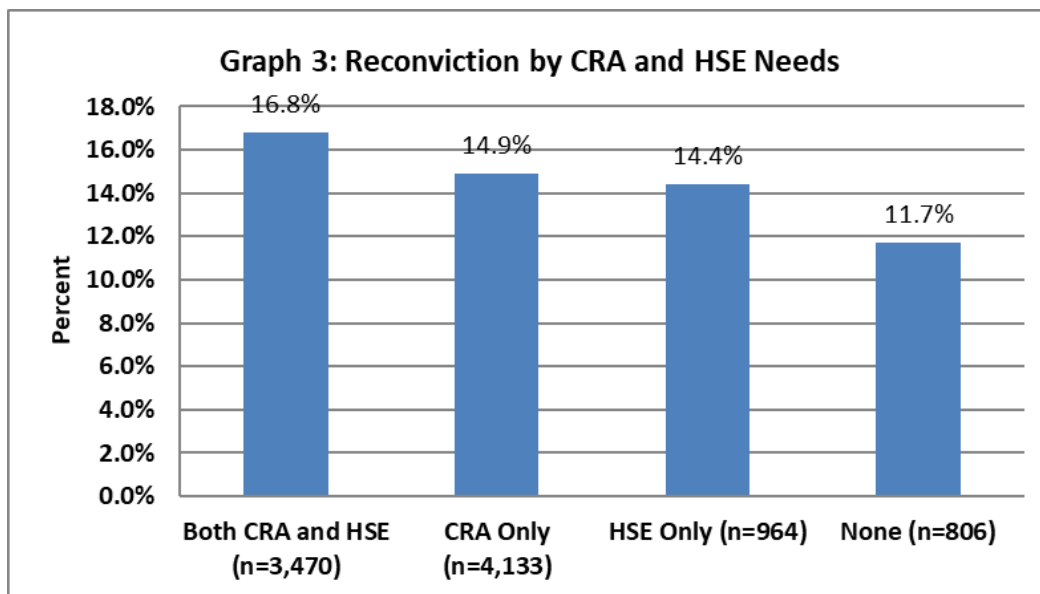
termination reason of ‘Completed Successfully’ for identified CRA types and flagged with their most recent completion date. Data regarding the educational levels of incarcerated individuals was also gathered from IMS to identify incarcerated individuals who received their HSE by passing either the General Equivalency Diploma (GED) or High School Equivalency Test (HiSET) while incarcerated.

For this report, the follow-up timeframe for a recidivist was based on the initial arraignment date for the new charge which resulted in a new criminal sentence, probation term, suspended sentence, guilty finding, or fine. Although there was a one-year timeframe for recidivism, additional time is necessary when collecting reconviction data to allow for an incarcerated individual’s new charge to reach final resolution in the trial court.

### **Section I: Two-Need Area Cohort**

#### **Correctional Recovery Academy and High School Equivalency Credential**

Of the incarcerated individuals with a substance use or educational need, 3,470 had a need in both areas, 4,133 only had a substance use need, and 964 only had an educational need. In graph 3, the recidivism rate for incarcerated individuals identified as having both a substance use and educational need (n = 3,470) was 16.8%, compared to a rate of 11.7% for incarcerated individuals with no need in these two areas. The recidivism rate for incarcerated individuals with a need in only one of the two need areas was 14.9% for a CRA need and 14.4% for an HSE need.

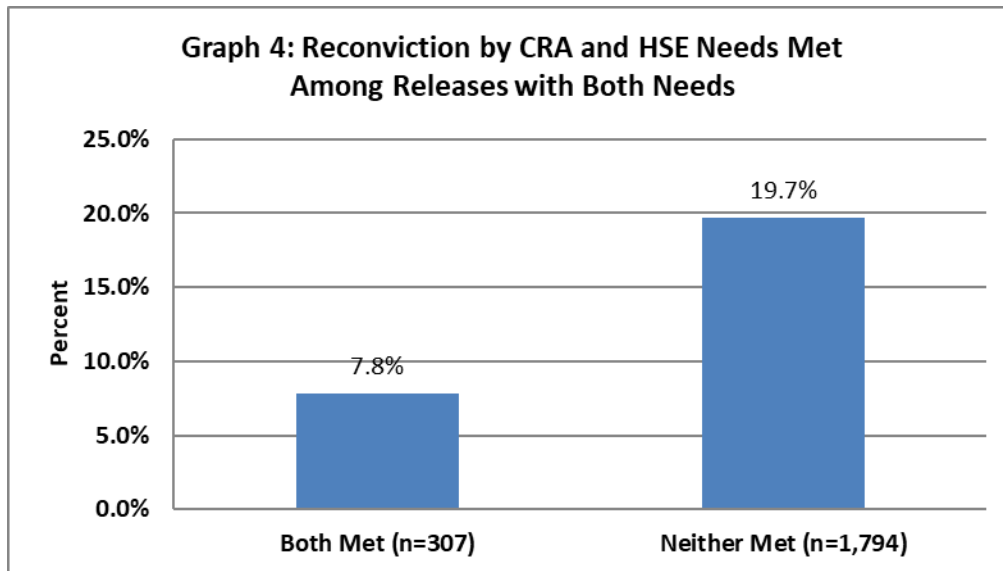


The following analysis (Graph 4) examines recidivism rates of the 3,470 incarcerated individuals who had both a substance use and an educational need. Recidivism rates for incarcerated individuals with two program need areas who met both those needs are examined along with the recidivism rates of incarcerated individuals who did not.

The recidivism rate was only 7.8% when incarcerated individuals with both a substance use and an educational need completed CRA and attained their HSE. The recidivism rate significantly increased to 19.7% when no need area(s) were met. If only one of the need areas was met, meeting the CRA need resulted in a lower recidivism rate. The difference in recidivism rate between incarcerated individuals who met their needs in both areas and those who did not meet their needs in either area is statistically significant

## One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

both in total, and in the subgroups of high recidivism risk score; medium release institution security level or combined medium and maximum security level; incarcerated individuals either supervised or non-supervised post-release; time served of 3 or more years; person, non-violent and violent governing offenses; White, Black or African American, and Hispanic incarcerated individuals; and incarcerated individuals in both the younger than 35, and 35 or older age cohorts. (See Appendix A). This finding highlights the importance of addressing multiple need areas in lowering the rate of recidivism.



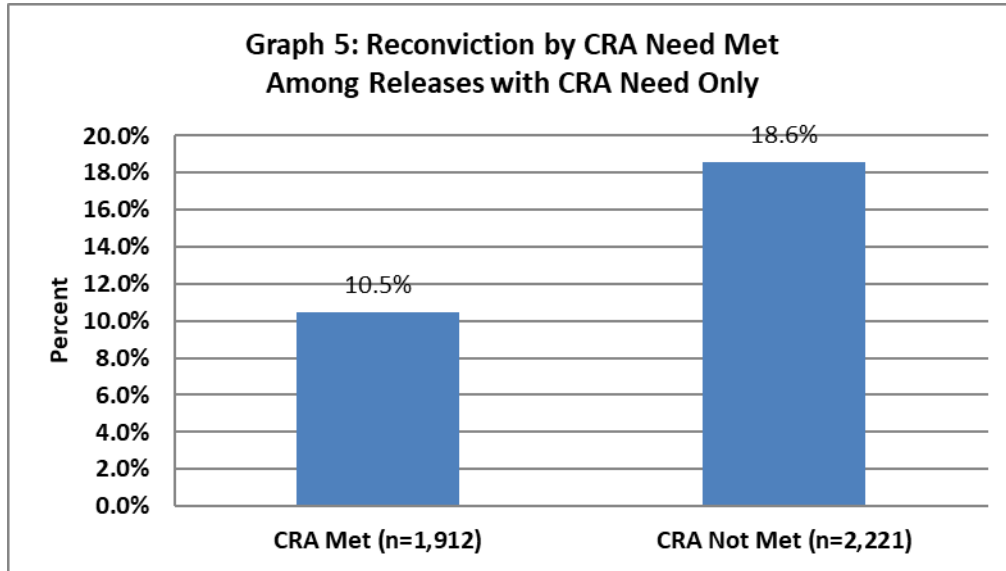
The relationship between meeting two need areas and lower recidivism rates appeared to be consistent under different controlled situations (See Appendix A), which suggests that the relationship is valid and not influenced by the demographic differences of incarcerated individuals.

### **Section 2: One Need Area Cohort**

#### **Correctional Recovery Academy**

There were 4,133 incarcerated individuals who had a substance use need but not an educational need in the study cohort. The recidivism rate for the incarcerated individuals who met their substance use need by completing CRA was 10.5% compared to a rate of 18.6% for those who did not complete CRA. These findings are consistent with prior research indicating a reduction in recidivism rates with the use of effective evidence-based programming (Sherman et al., 2002; Washington State Institute for Public Policy, 2013).

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential



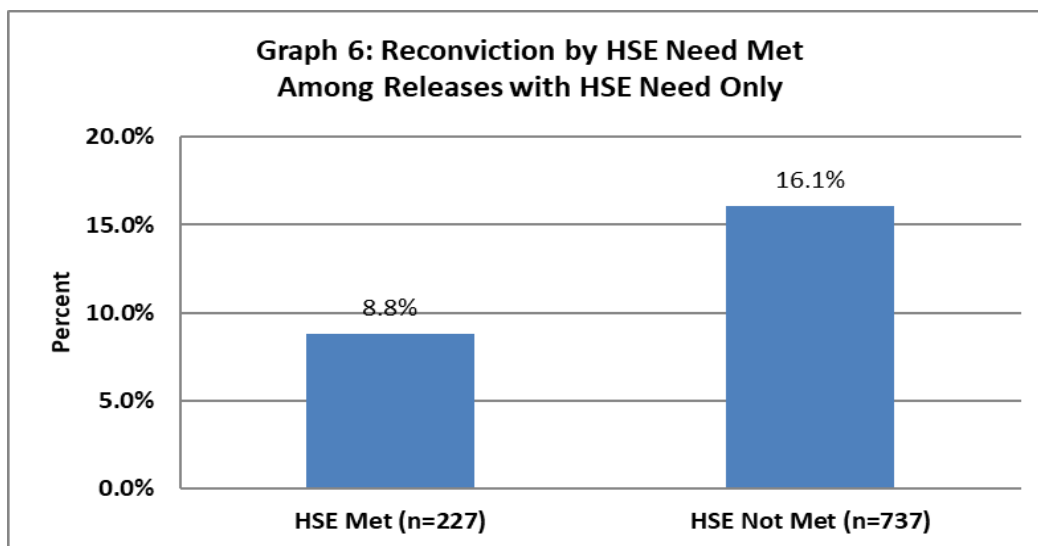
The data shows the association between the successful completion of CRA and the lower rate of recidivism in 22 of the 26 segments of incarcerated individuals we tested, with the exceptions of incarcerated individuals with a moderate recidivism risk score; ELMO/Pre-release or maximum release institution security level; who committed a sex crime; and incarcerated individuals who identified themselves with the racial identifier of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown (*See Appendix B*).

### **Section 3: One Need Area Cohort**

#### **High School Equivalency Credential**

There were 964 incarcerated individuals in the study cohort who had an educational need, but no substance use need. Of these 964 incarcerated individuals, those who received an HSE while incarcerated had a recidivism rate of 8.8% compared to a rate of 16.1% for those who did not receive their HSE. These findings are consistent with prior research indicating a reduction in recidivism rates with the use of effective evidence-based programming (Sherman et al., 2002; Washington State Institute for Public Policy, 2019; Schuster & Stickle, 2023).

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential



See Appendix C for a comparison of recidivism rates for incarcerated individuals with a HSE need only by control variables. It shows a statistically significant association between a lower rate of recidivism and receiving a HSE both in total, and in the subgroups of moderate recidivism risk score; medium release institution security level or combined medium and maximum security level; incarcerated individuals supervised post-release; person and violent crimes; White and Black or African American incarcerated individuals; and incarcerated individuals in both the younger than 35, and 35 or older age cohorts.

## Conclusion

The findings discussed in this report indicate that the key to maximizing recidivism reduction for incarcerated individuals with both a substance use and an educational need is to address both need areas. For incarcerated individuals with only one need, be it CRA or educational, meeting their corresponding need also led to the reduction of recidivism. However, a large number of MA DOC new commitments have been assessed as having more than one need, thus requiring multiple programs to effectively mitigate their risk of reoffending. The goal of this study was to go beyond the traditional approach of identifying the treatment effect of an individual program by exploring the combination of both substance use and educational programming.

The results from this study are promising and consistent with the meta-analyses of similar evidence-based programs, along with previously published statistical analyses by the MA DOC. More importantly, this statistical analysis revealed that incarcerated individuals with both substance use and educational needs had statistically significant lower recidivism rates if both program needs were met. The recidivism rate was 7.8% for incarcerated individuals with both a substance use and an educational need who completed CRA and achieved an HSE. This recidivism rate is compared to a rate of 19.7% for incarcerated individuals who did not meet both need areas. The analysis also found that meeting only the CRA need was also associated with lower rate of recidivism (*See Appendix A*). Future studies will explore the impact of meeting other criminogenic needs areas.

Based on the findings presented herein, there is evidence to support discussion of a modified CRA that would also have an educational component to address the needs of those incarcerated individuals who have both a substance use and an educational need. Introducing such a track that would combine both need areas would allow incarcerated individuals to address both critical needs in an efficient manner, with the added benefit of potentially allowing the programs to further complement each other.

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

**Works Cited**

- Andrews, D.A., & Bonta, J. (2006). *The psychology of Criminal Conduct* (4th ed.). Newark, NJ: LexisNexis.
- Andrews, D.A., & Dowden, C. (2005). *Managing correctional treatment for reduced recidivism: A meta analytic review of program integrity*. *Legal and Criminological Psychology*, 10, 173-187.
- Andrews, D.A., & Dowden, C., (2006). *Risk principle in case classification in correctional treatment: A meta analytic investigation*. *International Journal of Offender Therapy and Comparative Criminology*, 50, 88-100.
- Andrews, D.A., Zinger, I., Hoge, R.D., Bonta, J., Gendreau, P., & Cullen, F.T. (1990). *Does Correctional treatment work? A psychologically informed meta analysis*. *Criminology*, 28, 369-404.
- Duwe, G. (2017). *The Use and Impact of Correctional Programming for Inmates on Pre- and Post-Release Outcomes*. Washington, DC; U.S. Department of Justice Office of Justice Programs. <https://www.ojp.gov/pdffiles1/nij/250476.pdf>.
- Rodriquez, N., & Usman, H. (2023). *An Examination of Prison-Based Programming and Recidivism to Prison*. *Justice Evaluation Journal*. DOI: 10.1080/24751979.2023.2170262.
- Schuster, S. S., & Stickle, B. (2023.). *Are education programs in prison worth it?* Policy Brief. <https://www.stevensprickschuster.net/uploads/1/2/6/4/126430232/s2023-01.pdf>.
- Sherman, L. W., Farrington, D. P., Welsh, B. C., & Mackenzie, D. L. (2002). *Evidence-based crime prevention*. New York: Routledge.
- Washington State Institute for Public Policy (2013). *Inventory of Evidence-Based and Research-Based Programs for Adult Corrections*. [http://www.wsipp.wa.gov/ReportFile/1542/Wsipp\\_Inventory-of-Evidence-Based-and-Research-Based-Programs-for-Adult-Corrections\\_Final-Report.pdf](http://www.wsipp.wa.gov/ReportFile/1542/Wsipp_Inventory-of-Evidence-Based-and-Research-Based-Programs-for-Adult-Corrections_Final-Report.pdf).

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

Appendices

Appendix A: One Year Reconviction Rates by CRA and/or HSE Need Met vs. Not Met with Control Variables

Control Variable	Category	Both Met		CRA Met		HSE Met		None Met		TOTAL	
		PCT	N	PCT	N	PCT	N	PCT	N	PCT	N
Total	Reconviction**	7.8%	307	13.5%	1,023	19.4%	346	19.7%	1,794	16.8%	3,470
Recidivism Risk Score	High**	8.2%	243	16.3%	792	22.5%	275	22.0%	1,470	19.2%	2,780
	Moderate	6.3%	64	3.9%	231	7.0%	71	9.3%	324	7.0%	690
Release Institution Security Level	ELMO/Pre-release	4.2%	72	8.2%	269	11.4%	44	9.8%	133	8.3%	518
	Minimum	9.8%	82	12.2%	295	7.5%	53	10.9%	238	11.1%	668
	Medium*	8.5%	142	17.1%	433	21.1%	185	19.3%	1,018	18.1%	1,778
Security Level	Maximum	9.1%	11	23.1%	26	29.7%	64	29.4%	405	28.7%	506
	Minimum security	7.1%	154	10.3%	564	9.3%	97	10.5%	371	9.9%	1,186
Post Release Supervision	Higher security**	8.5%	153	17.4%	459	23.3%	249	22.1%	1,423	20.4%	2,284
	Non-supervised*	8.1%	74	17.6%	346	24.2%	95	20.8%	753	19.5%	1,268
Time Served	Supervised**	7.7%	233	11.4%	677	17.5%	251	18.9%	1,041	15.3%	2,202
	Less than 3 yrs	15.0%	40	14.7%	428	21.7%	115	18.1%	950	17.4%	1,533
	3 to less than 6 yrs**	7.2%	139	13.5%	460	20.4%	162	20.9%	635	17.0%	1,396
Governing Offense Type	6 or more yrs**	6.3%	128	9.6%	135	13.0%	69	23.4%	209	14.6%	541
	Drug	5.8%	69	10.3%	348	11.6%	69	12.1%	413	10.9%	899
	Person**	6.7%	165	13.5%	364	20.3%	177	22.1%	797	18.1%	1,503
	Property	11.1%	18	20.2%	129	34.4%	32	29.6%	247	26.3%	426
	Sex	0.0%	8	9.1%	22	12.5%	24	17.6%	102	14.7%	156
Governing Offense	Other Crimes	14.9%	47	15.6%	160	20.5%	44	15.7%	235	16.0%	486
	Non-violent*	9.7%	134	13.7%	637	19.3%	145	17.9%	895	15.9%	1,811
Race/Ethnicity	Violent**	6.4%	173	13.2%	386	19.4%	201	21.6%	899	17.8%	1,659
	White**	8.1%	99	13.0%	261	21.9%	155	21.2%	608	18.3%	1,123
	Black/African American*	8.1%	99	16.1%	316	16.2%	99	21.2%	467	17.7%	981
	Hispanic*	8.0%	100	12.2%	435	18.6%	86	17.6%	704	15.2%	1,325
Age at Release	Other <sup>[1]</sup>	0.0%	9	0.0%	11	16.7%	6	13.3%	15	7.3%	41
	Less than 35**	8.6%	174	15.6%	398	21.6%	231	20.6%	948	18.4%	1,751
	35 or more**	6.8%	133	12.2%	625	14.8%	115	18.8%	846	15.2%	1,719

\* denotes p < .05, \*\* denotes p < .01

<sup>[1]</sup>Includes the racial categories of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown.



One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

**Appendix B: One Year Reconviction Rates by CRA Need Met vs. Not Met with Control Variables**

Control Variable	Category	SA Need Met		SA Need Not Met		TOTAL	
		PCT	N	PCT	N	PCT	N
<b>Total</b>	<b>Reconviction**</b>	10.5%	1,912	18.6%	2,221	14.9%	4,133
<b>Recidivism Risk Score</b>	<b>High**</b>	12.3%	1,393	21.6%	1,714	17.5%	3,107
	<b>Moderate</b>	5.6%	519	8.3%	507	6.9%	1,026
<b>Release Institution Security Level</b>	<b>ELMO/Pre-release</b>	8.2%	499	10.1%	277	8.9%	776
	<b>Minimum**</b>	7.8%	539	14.7%	279	10.1%	818
	<b>Medium**</b>	12.7%	824	18.6%	1,215	16.2%	2,039
	<b>Maximum</b>	26.0%	50	26.2%	450	26.2%	500
<b>Security Level</b>	<b>Minimum security**</b>	8.0%	1,038	12.4%	556	9.5%	1,594
	<b>Higher security**</b>	13.5%	874	20.7%	1,665	18.2%	2,539
<b>Post Release Supervision</b>	<b>Non-supervised**</b>	13.9%	511	23.7%	858	20.0%	1,369
	<b>Supervised**</b>	9.3%	1,401	15.4%	1,363	12.3%	2,764
<b>Time Served</b>	<b>Less than 3 yrs**</b>	11.8%	689	20.0%	1,153	16.9%	1,842
	<b>3 to less than 6 yrs**</b>	10.1%	815	17.2%	808	13.6%	1,623
	<b>6 or more yrs**</b>	9.3%	408	16.5%	260	12.1%	668
<b>Governing Offense Type</b>	<b>Drug**</b>	8.7%	484	14.8%	432	11.6%	916
	<b>Person**</b>	10.7%	835	19.2%	1,023	15.3%	1,858
	<b>Property*</b>	15.4%	285	23.9%	385	20.3%	670
	<b>Sex</b>	18.8%	48	17.9%	95	18.2%	143
	<b>Other Crimes**</b>	6.5%	260	15.4%	286	11.2%	546
<b>Governing Offense</b>	<b>Non-violent**</b>	10.0%	1,029	18.1%	1,103	14.2%	2,132
	<b>Violent**</b>	11.1%	883	19.1%	1,118	15.5%	2,001
<b>Race/Ethnicity</b>	<b>White**</b>	11.8%	932	19.6%	1,257	16.3%	2,189
	<b>Black/African American**</b>	9.5%	597	18.8%	573	14.1%	1,170
	<b>Hispanic**</b>	8.6%	361	14.9%	369	11.8%	730
	<b>Other<sup>[1]</sup></b>	13.6%	22	18.2%	22	15.9%	44
<b>Age at Release</b>	<b>Less than 35**</b>	10.8%	771	20.9%	1,112	16.7%	1,883
	<b>35 or more**</b>	10.3%	1,141	16.3%	1,109	13.3%	2,250

\* denotes p < .05, \*\* denotes p < .01

<sup>[1]</sup>Includes the racial categories of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown.

One-Year Recidivism Rates of Men Released 2013 – 2020: A Multi-Year Descriptive Analysis of Correctional Recovery Academy and High School Equivalency Credential

**Appendix C: One Year Reconviction Rates by HSE Need Met vs. Not Met with Control Variables**

Control Variable	Category	HSE Need Met		HSE Need Not Met		TOTAL	
		PCT	N	PCT	N	PCT	N
<b>Total</b>	<b>Reconviction**</b>	8.8%	227	16.1%	737	14.4%	964
<b>Recidivism Risk Score</b>	<b>High</b>	12.9%	147	19.1%	535	17.7%	682
	<b>Moderate*</b>	1.3%	80	8.4%	202	6.4%	282
<b>Release Institution Security Level</b>	<b>ELMO/Pre-release</b>	9.3%	54	12.6%	119	11.6%	173
	<b>Minimum</b>	5.2%	58	8.5%	153	7.6%	211
	<b>Medium*</b>	8.0%	88	18.3%	350	16.2%	438
	<b>Maximum</b>	18.5%	27	23.5%	115	22.5%	142
<b>Security Level</b>	<b>Minimum security</b>	7.1%	112	10.3%	272	9.4%	384
	<b>Higher security*</b>	10.4%	115	19.6%	465	17.8%	580
<b>Post Release Supervision</b>	<b>Non-supervised</b>	14.3%	42	19.4%	288	18.8%	330
	<b>Supervised*</b>	7.6%	185	14.0%	449	12.1%	634
<b>Time Served</b>	<b>Less than 3 yrs</b>	8.6%	35	16.6%	308	15.7%	343
	<b>3 to less than 6 yrs</b>	12.2%	82	17.6%	255	16.3%	337
	<b>6 or more yrs</b>	6.4%	110	13.2%	174	10.6%	284
<b>Governing Offense Type</b>	<b>Drug</b>	8.1%	37	13.8%	195	12.9%	232
	<b>Person**</b>	6.8%	117	19.0%	269	15.3%	386
	<b>Property</b>	0.0%	11	22.2%	72	19.3%	83
	<b>Sex</b>	0.0%	10	14.3%	49	11.9%	59
	<b>Other Crimes</b>	17.3%	52	11.8%	152	13.2%	204
<b>Governing Offense</b>	<b>Non-violent</b>	12.0%	100	14.6%	419	14.1%	519
	<b>Violent**</b>	6.3%	127	18.2%	318	14.8%	445
<b>Race/Ethnicity</b>	<b>White*</b>	6.4%	47	19.7%	127	16.1%	174
	<b>Black/African American*</b>	7.8%	102	17.6%	279	15.0%	381
	<b>Hispanic</b>	11.6%	69	14.0%	321	13.6%	390
	<b>Other<sup>[1]</sup></b>	11.1%	9	0.0%	10	5.3%	19
<b>Age at Release</b>	<b>Less than 35*</b>	11.9%	159	19.0%	400	17.0%	559
	<b>35 or more**</b>	1.5%	68	12.8%	337	10.9%	405

\* denotes p < .05, \*\* denotes p < .01

<sup>[1]</sup>Includes the racial categories of American Indian or Alaska Native, Asian or Pacific Islander, and Unknown.