Massachusetts Department of Correction
One-Year Recidivism Rates of Men and Women Released 2017 – 2021: A Multi-Year Descriptive Analysis of Risk Reduction Programs

Executive Office of Public Safety and Security
November 2024

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

Prepared by:
Hollie A. Matthews, Deputy Director, Research and Planning Division
Matthew J. Moniz, Director, Program Services and Reentry
Kelly Paquin, Operations Analyst Manager, Office of Assistant Deputy Commissioner of Reentry
Jiqiang Rong, Statistician, Research and Planning Division
Bernard Audette, Ed.D., Director of Inmate Training and Education

Rhiana Kohl, Ph.D.
Executive Director of Strategic Planning & Research
Massachusetts Department of Correction
Research and Planning Division
50 Maple Street
Milford, MA 01757
Research@massmail.state.ma.us

Acknowledgments

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

Massachusetts Department of Correction, Inmate Training and Education Division
Massachusetts Department of Correction, Program Services Division
Massachusetts Department of Correction, Research and Planning Division

If you have any questions regarding this report, please contact the Research and Planning Division.

Table of Contents

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.

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

Correctional Recovery Academy (CRA): Is an intensive 6-month substance use program currently located at four institutions: Northeastern Correctional Center, MCI-Norfolk, MCI-Shirley, and North Central Correctional Institution (NCCI-Gardner). CRA targets relapse prevention and cognitive behavioral treatment. The program utilizes rolling admission and combines elements of a therapeutic community's social learning approach with an advanced cognitive behavioral curriculum.

Criminal Addictive Thinking Program (CT): Is an 8-week program designed to focus on altering the pro-criminal thinking patterns identified as separating those who are serious repeat incarcerated individuals from those who are not. The program focuses specifically on criminal sentiments and how to develop pro-social alternatives to pro-criminal activities and associates.

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

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 current incarceration.

Need Met: Indicates an incarcerated individual who completed the core program for the corresponding criminogenic need area. For example, male incarcerated individuals with a substance use, anger, or criminal thinking need are recommended for the Correctional Recovery Academy (CRA), Violence Reduction Program (VR), or Criminal Addictive Thinking Program (CT), respectively.

Need Not Met: Indicates the 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.

Override: As part of the Massachusetts Department of Correction case management model, incarcerated individuals who do not score moderate or high in a criminogenic need area based on their needs assessment, receive a program recommendation formulated by their Correctional Program Officer (CPO) due to documentary evidence the incarcerated individual can benefit from participating in such a program.

Pathway Program Continuum: For women, gender-responsive and trauma-informed approaches have been incorporated into the framework of treatment services for the incarcerated individuals. Each Pathway has a unique set of curricula designed to address each incarcerated individual's specific pathway into the criminal justice system with the goal of reducing the likelihood of recidivism by addressing the unique issues associated with incarcerated individuals such as trauma, abuse,

relationship dysfunction, substance abuse, and mental illness. The four Pathways are as follows: Life in Recovery, Building Positive Connections, Healthy Living Community, and Healing for the Future. The model of facilitation addresses multiple need areas within one week of instruction. While the incarcerated individual may be enrolled for the entirety of one's sentence, program completion is achieved when the incarcerated individual participates in 26-weeks of each curriculum represented in the incarcerated individual's Pathway Continuum.

Pathway to Recovery (PTR): A non-residential substance abuse program that is 16 weeks in duration and meets three times per week for a total treatment dosage of 72 hours. Groups are psycho-educational in nature and consist of didactic lectures, group discussions, and skills practice. Upon completion of the program, participants are recommended to the Substance Abuse (SA) Graduate Maintenance Program. This program is intended to allow participants to remain engaged in their recovery and SA treatment for the duration of their sentence.

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" 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 recidivism risk incarcerated individuals. 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. Please note recidivism risk score categories used in the analysis are based on the highest score from the general and violent recidivism risk scores. 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.

Typology Assessment: A trauma-informed gender-biased COMPAS assessment designed to apply further identification pertaining to an incarcerated individual's specific criminogenic needs and to guide matching interventions.

Violence Reduction (VR): Violence Reduction is an 8-week program that targets cognitions that contribute to violent behavior. The goal of this program is to decrease violent behavior and the likelihood of institutional disturbances. During the program, participants identify the specific

cognitions which have led to their violent behavior. Once those cognitions are identified, participants are taught pro-social strategies and skills to diminish the likelihood of continued violence. Upon completion of the program, participants are recommended to the General Population Maintenance Program.

Vocational Programming: Instructional programs focusing on the skills required for a specific job function or trade. Current vocational program opportunities include the following: automotive, barber training, building trades, culinary arts, food service training, small engine repair, welding, and wheelchair repair.

Executive Summary

The purpose of this study is to analyze the recidivism rates[1] of Massachusetts Department of Correction (MA DOC) criminally sentenced incarcerated individuals who completed programs to address their criminogenic need areas and were released to the community via expiration of sentence or parole from January 1, 2017 – December 31, 2021, to determine if expected reductions in recidivism were observed. The report is divided into two sections: one for female releases and one for male releases. For the female releases, the four programs examined were Pathways, General Population Services, Vocational Programming, and Academic Education. For male releases, the six programs examined were Criminal Thinking, Academic Education, Violence Reduction, Correctional Recovery Academy (CRA), Vocational Programming, and Pathway to Recovery (PTR) program.

Key Findings

- Program completion was associated with a lower rate of one-year recidivism for two of the four programs for female releases and four of the six programs for male releases.
- For incarcerated individuals released to the community from January 1, 2017 to December 31, 2021, the overall one-year recidivism rate was 10.7% for men and 13.9% for women.
- Women who were released and completed a minimum of 26 weeks of Pathway programming had a significantly lower recidivism rate of 3.9% compared to 15.4% for those who participated but did not complete 26 weeks of the program and who did not participate in the program.
- The recidivism rate for women released who were eligible for vocational programming and completed the certification was 0.0%, compared to 9.8% for those who did not earn a vocational certification.
- The recidivism rate for men released who were eligible for substance use programming and completed the CRA was 7.1% compared to 15.2% for the incarcerated individuals who did not complete this program.
- The recidivism rate for men released who were eligible for anger management programming and completed the Violence Reduction Program was 10.7% compared to 14.1% for those who did not complete this program.
- The recidivism rate for men released who were eligible for criminal thinking programming and completed the Criminal Addictive Thinking Program was 11.2% compared to 13.6% for those who did not complete this program.
- The recidivism rate for men released who were eligible for vocational programming and completed the certification was 5.8% compared to 11.8% for those who did not earn a vocational certification.
- Analysis illustrating the completion of multiple programs and the associated recidivism rates suggests that completion of the CRA was driving the lower recidivism rate among male releases. This is evidenced by incarcerated individuals who completed Violence Reduction, Criminal Thinking, and Academic Education programs without completing the CRA recidivating at a higher rate.

[1] 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, 2017 – December 31, 2021, whose first release occurred during this time-period. The reconviction date is based on the initial arraignment date associated with the reconviction. The recidivism rate is calculated by dividing the number of incarcerated individuals reconvicted by the number of incarcerated individuals in the release cohort.

Introduction

A primary objective of the MA DOC is to rehabilitate incarcerated individuals and prepare them for successful reentry to the community with the purpose of increasing the likelihood for them to become productive citizens. Incarcerated men are assessed through a risk/needs analysis and those identified as being at a moderate to high risk of recidivism are recommended to programs designed to target their specific criminogenic need areas, with the goal of eliminating future criminality. Although it is known that the incarcerated population is comprised of men with multiple criminogenic needs, the majority of this report examines the recidivism rate related to the completion of the program associated with a single need area. The model of facilitation for incarcerated men is designed to address one's criminogenic need through corresponding programming. Incarcerated women are assessed through a typology assessment and are further delineated into one of four corresponding programming prescriptions termed Pathways. The Pathway model is a holistic approach and allows MA DOC to provide evidence-based treatment designed to address each woman's criminogenic needs and streamline treatment services. The model of facilitation addresses multiple need areas within one week of instruction, to include comprehensive Pathway specific programming and academic or vocational services. To measure success, recidivism rates are used to determine an incarcerated individual's ability to abstain from criminal behavior after release from prison.

How recidivism is conceptualized and how an incarcerated population is targeted can drastically influence a reported recidivism rate. Commonly used 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 based on criminally sentenced incarcerated individuals released to the community via expiration of sentence or parole from January 1, 2017 – December 31, 2021, whose first release occurred during this time-period. 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, a fine, or a guilty finding. Due to the time it takes to prosecute a crime and reach final resolution of a charge, the initial arraignment date associated with the new conviction is used to determine the date of reconviction.

This report is one example of the MA DOC's data-driven approach to evidence-based decision making.

Methodology for Program Eligibility

The goal of this analysis is to explore MA DOC recidivism rates with reference to risk reduction programs based on program recommendation eligibility, which is defined for each criminogenic need areas as follows:

Programming for All Incarcerated Individuals-

Academic Education Need:
To identify an incarcerated individual's educational need, staff record and verify an incarcerated individual's self-reported level of completed education. Incarcerated individuals are further assessed through Tests for Adult Basic Education (TABE) administration. Incarcerated individuals without a verified high school diploma or equivalency were identified as having an academic education need and are recommended to the appropriate level of education as dictated by the TABE scores.

Vocational Programming Need:
The COMPAS vocational scale is categorized ranging from 1 to 10 based on decile cut points and then categorized as low (1-5), moderate (6-7), or high (8–10). Incarcerated individuals with a high school diploma equivalency who score moderate or high risk on the vocation need scale or have an override are considered eligible for vocational services.

Programming for Incarcerated Women-

Pathway Programming Need:
All incarcerated women who are serving more than 90 days and complete a COMPAS Typology Assessment are eligible for Pathway Programming. It is intended that the incarcerated individual remain program engaged for the entirety of one's sentence. Twenty-six weeks of participation equals one cycle of curricula and is considered program completion for this study; however, incarcerated individuals are encouraged to remain enrolled beyond the 26-week mark. Additionally, behavioral infractions will require re-enrollment into those components of the program which address the causal factors of the infraction.

General Population Services (GPS) Programming:
Through an Inter-departmental Service Agreement (ISA) with the Trial Court, funding was provided to the MA DOC to provide additional programming to the incarcerated population. The portion of these funds devoted to the men were utilized to increase the number of tracks available for the already established Criminal Thinking and Violence Reduction programs. The portion devoted to women in the population was utilized to initiate general population programming separate and apart from the continuous Pathway programming model.

Unlike other programs highlighted in this report, General Population Services program eligibility is not based on criminogenic need; but rather due to placement in the Close Custody Unit (CCU) or Accountability Program (AP) and the subsequent expectation the incarcerated individual returns to Pathway programming. Prior to returning to Pathway programming, the incarcerated individual would participate in the GPS Program which focuses on criminal thinking, violence reduction, and substance use education to develop pro-social alternatives intended to maintain one's presence in general population housing and Pathway programming.

Programming for Incarcerated Men-

CRA Need:
The COMPAS substance abuse scale is categorized ranging from 1 to 10 based on decile cut points and then categorized as low (1-2), moderate (3-4), or high (5–10). The Texas Christian University Drug Screen II or V (TCUDS) 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). Incarcerated individuals who score moderate or high risk on the substance abuse scale, high on the TCUDS-II, Mild or above on the TCUDS-V, or have an override are considered eligible for substance use programming.

Criminal Thinking (CT) Need:
The COMPAS criminal thinking scale is categorized ranging from 1 to 10 based on decile cut points and then categorized as low (1-5), moderate (6-7), or high (8–10). Incarcerated individuals who score moderate to high risk on the criminal thinking need scale or have an override are considered eligible for criminal thinking programming.

Violence Reduction Need:
The COMPAS anger scale is categorized ranging from 1 to 10 based on decile cut points and then categorized as low (1-4), moderate (5-7), or high (8–10). Incarcerated individuals who score moderate to high risk on the anger need scale or have an override are considered eligible for anger management programming.

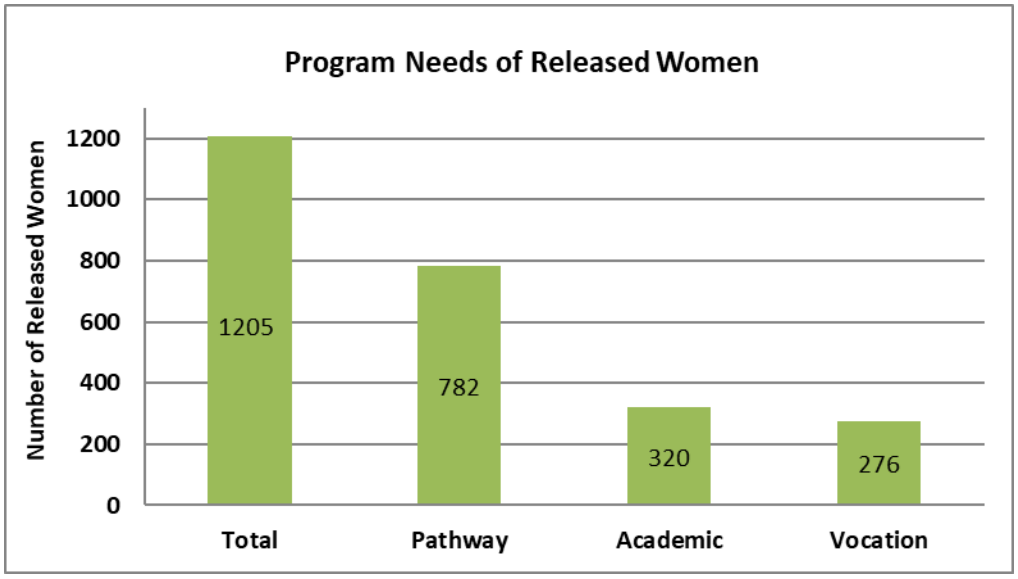
Methodology for Recidivism Analysis

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 men and women released to the community via expiration of sentence or parole during the years 2017 through 2021 whose first release occurred during the time-period. Overall, there were 6,811 men released and 1,205 women released to the community. Recidivism information was gathered from the Massachusetts Board of Probation (BOP). Data is based on information available at the time of collection and is subject to change. The criminal activity of incarcerated individuals released to the community was tracked through the Massachusetts Criminal Justice Information System (CJIS) to determine any reconviction within one year of the incarcerated individual's release to the community.

Women Data Findings

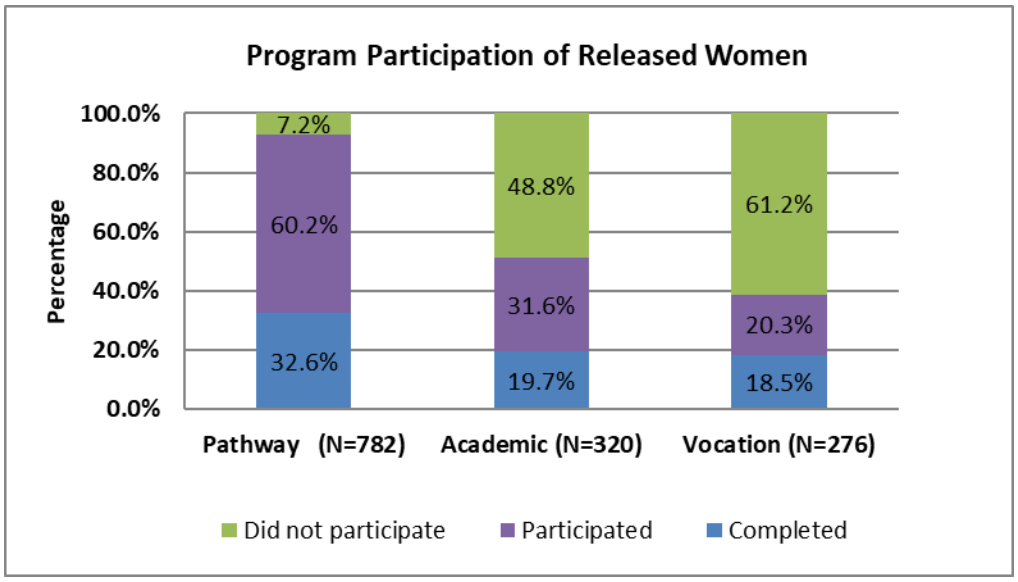
Criminogenic Need Programs

Graph 1



Of the 1,205 incarcerated women released from the MA DOC between 2017 and 2021, 782 (64.9%) were identified as eligible for Pathway Programming, 320 (26.6%) were determined to have an academic program need, and 276 (22.9%) were recognized as having a vocational program need. (Graph 1)

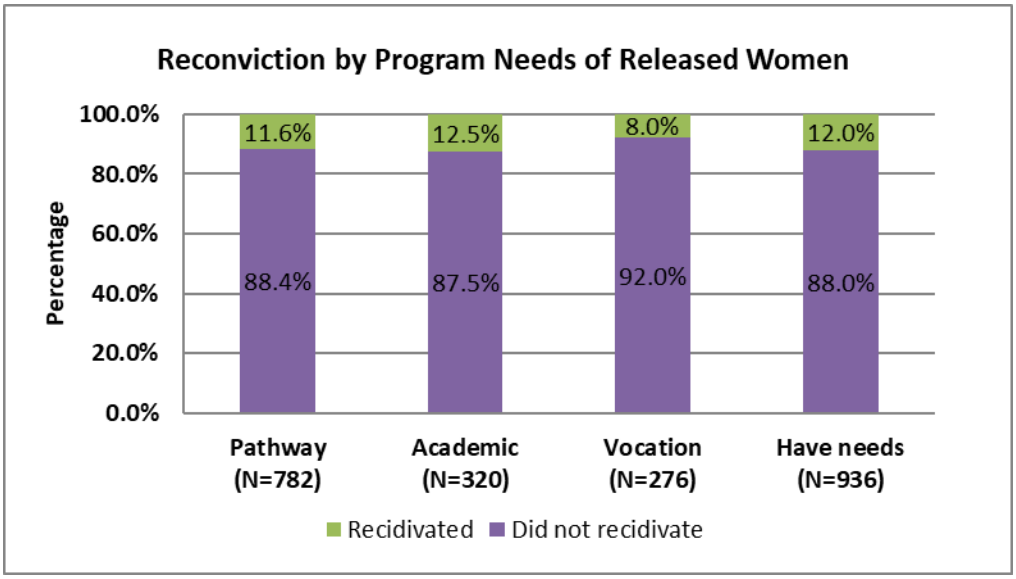
Graph 2



For women eligible for Pathway programming, 32.6% completed a Pathway program, 60.2% participated but did not complete 26 weeks of the program, and the remaining 7.2% did not participate in the program. In contrast, among incarcerated individuals with an academic need, 19.7% completed the program and earned their High School Equivalency (HSE), 31.6% participated

in the program but did not earn an HSE, and 48.8% were not involved in the program[2]. For the incarcerated individuals with a vocation need, 18.5% completed the program, 20.3% participated in the program, and the remaining 61.2% did not take part in the program. (Graph 2)

Graph 3



The recidivism rate was different for incarcerated individuals in each need group. Incarcerated individuals with an academic need had the highest rate of recidivism at 12.5%, followed by incarcerated individuals eligible for Pathway programming at 11.6%, and for vocation at the lowest rate of 8.0%. The rate of recidivism for all incarcerated individuals released from 2017 to 2021 who had a program need was at 12.0%. (Graph 3)

Table 1

One-Year Reconviction Rates of Released Women by Need Met vs. Not Met

Program Name	Need Met		Need Not Met		TOTAL	
	PCT	N	PCT	N	PCT	N
Vocational Program*	0.0%	51	9.8%	225	8.0%	276
Pathway Program**	3.9%	255	15.4%	527	11.6%	782
Academic Program	6.3%	63	14.0%	257	12.5%	320
GPS Program	10.6%	142	8.6%	185	9.5%	327

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

To investigate the association between whether the program need of an incarcerated individual was met and the corresponding recidivism rate, Table 1 shows that those who completed the corresponding program were associated with a lower rate of recidivism for three of the four program groups. Among women eligible for vocational programming, 0.0% recidivated if they completed the program compared with 9.8% of the incarcerated individuals who did not complete the program. The difference between meeting and not meeting the programming need was 3.9% vs. 15.4% for the

[2] Incarcerated individuals assessed as having an academic education or vocational program need and/or deemed eligible for an academic or vocational program have the option to decline participation in the recommended program.

Pathway program, and 6.3% vs. 14.0% for the Academic Program. It should be noted that the difference identified in the Academic Program is not statistically significant. [3]

Women who completed the GPS Program were associated with a higher rate of recidivism, though not statistically significant. Among women eligible for the GPS Program, 8.6% of them recidivated if they did not complete the program compared with 10.6% of the incarcerated individuals who completed the program. GPS program eligibility was established when one was removed from the general population and placed in the Close Custody Unit (CCU) or Accountability Program. The composition of the assessed[4] cohort placed in CCU contained a majority of high-risk to recidivate individuals. While the program did not reduce overall recidivism, those high and medium risk incarcerated individuals who completed the program appeared to have a lower recidivism rate than those high and medium risk incarcerated individuals who did not complete the program (see Appendix D). It was among the eligible incarcerated individuals without risk assessment scores where a much higher percentage of individuals who completed the GPS Program recidivated (30.0%) than the individuals who did not complete the program (9.2%).

Table 2

One-Year Reconviction Rates of Released Women by Program Participation

Program Name	Need Met		Participated		Did Not Participate		TOTAL	
	PCT	N	PCT	N	PCT	N	PCT	N
Vocational Program*	0.0%	51	7.1%	56	10.7%	169	8.0%	276
Pathway Program**	3.9%	255	15.1%	471	17.9%	56	11.6%	782
Academic Program	6.3%	63	11.9%	101	15.4%	156	12.5%	320
GPS Program	10.6%	142	7.1%	126	11.9%	59	9.5%	327

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

To break down the "Need Not Met" category in Table 1 into two participation groups, Table 2 shows the association between completing a program (Need Met) and lower rate of recidivism in three of the four programs; as well as illustrating participation in any of the four programs is associated with a lower rate of recidivism when compared with incarcerated individuals who did not participate in a program. Although statistically significant differences are only found in the Vocational and the Pathway Program, the data flow of the other two programs exhibits encouraging signs that participating in a program could influence whether an incarcerated individual would recidivate in the future. The difference in the rate of recidivism between the two participation categories was 7.1% vs. 10.7% for vocational programming, 15.1% vs. 17.9% for the Pathway Program, 11.9% vs. 15.4% for academic programming, and 7.1% vs. 11.9% for GPS Program. In particular, the recidivism rate for the incarcerated individuals who participated in the GPS Program but did not complete were shown to have the lowest recidivism rate, at 7.1%, followed by those who completed the program (10.6%) and who did not participate in the program (11.9%), suggesting participation in or completion of a GPS Program could reduce the rate of recidivism than those who did not participate.

In short, an investigation into the association between program completion and the rate of one-year recidivism shows that program completion was associated with a lower rate of recidivism for three of the four programs studied, especially for vocational programs and the Pathway Program. It also

[3] Statistical significance refers to whether any differences observed between groups being studied are "real" or due to chance. In most sciences, results yielding a p-value of .05 or 95% confidence level are on the borderline of statistical significance. At this level or higher, we would conclude that the differences observed between groups are not due to chance.

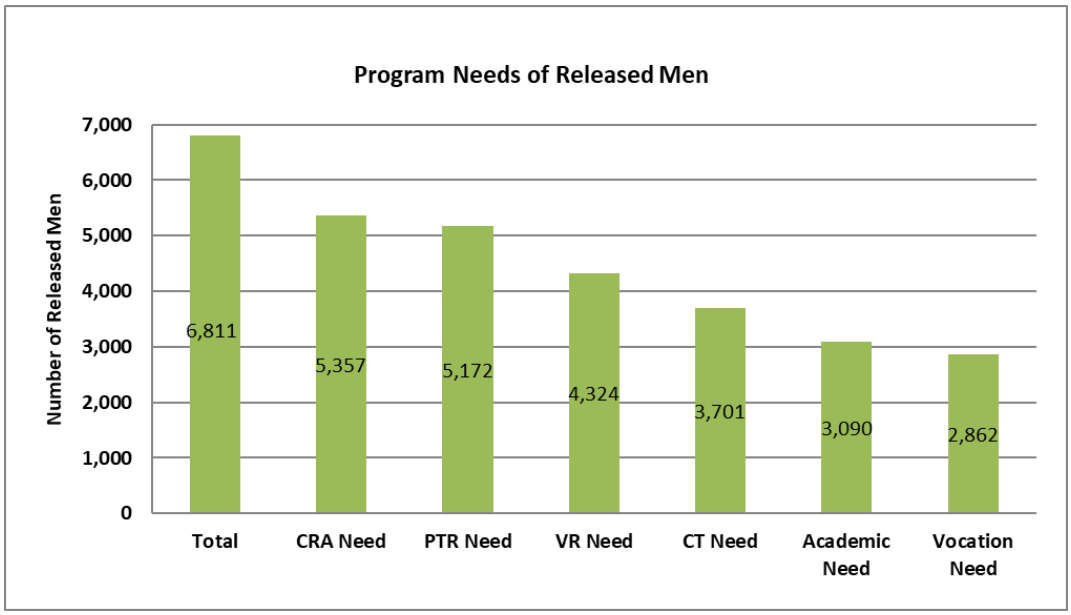
[4] Due to shorter sentences of less than 90 days, 64% of those who did not complete the program and 14% of those who did complete the program were not administered the COMPAS Risk Assessment.

suggests that participation in a program had potential for lowering the rate of recidivism for all four programs. Therefore, increasing the number of incarcerated individuals who complete (or at least participate in the program that they are eligible for) plays an important role in lowering the rate of recidivism.

Men Data Findings

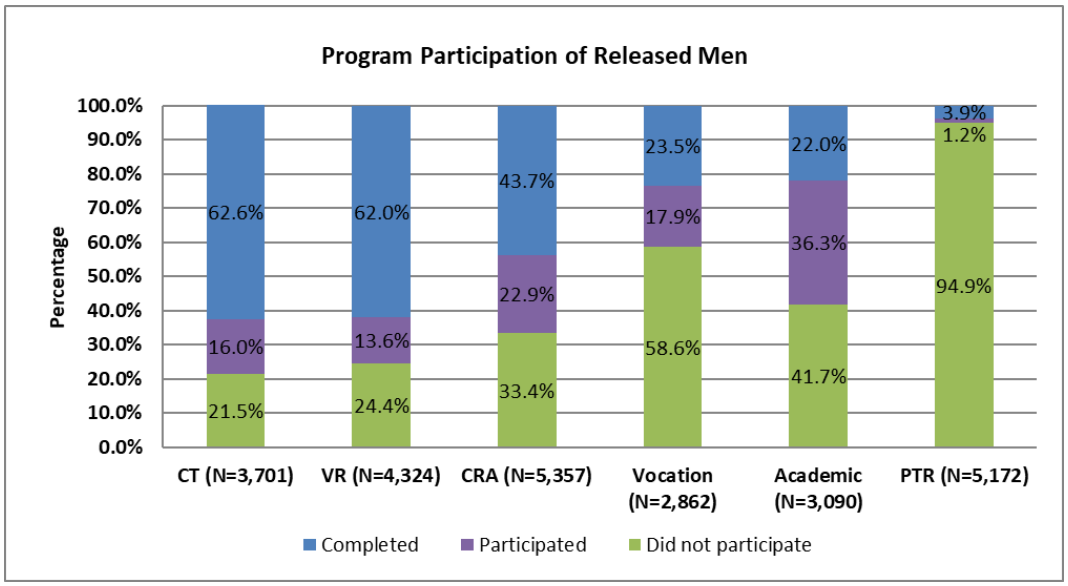
Criminogenic Need Programs

Graph 4



The MA DOC released a total of 6,811 incarcerated men to the community via parole or expiration of sentence between 2017 and 2021. Most of the released incarcerated individuals were identified as having a Correctional Recovery Academy (CRA) need (78.7%), and/or Pathway to Recovery (PTR) need (75.9), and/or Violence Reduction (VR) need (63.5%), and/or a Criminal Thinking (CT) need (54.3%). Less than one-half of the released incarcerated individuals were determined to have an academic education need (45.4%), and/or a vocational program need (42.0%). (Graph 4)

Graph 5



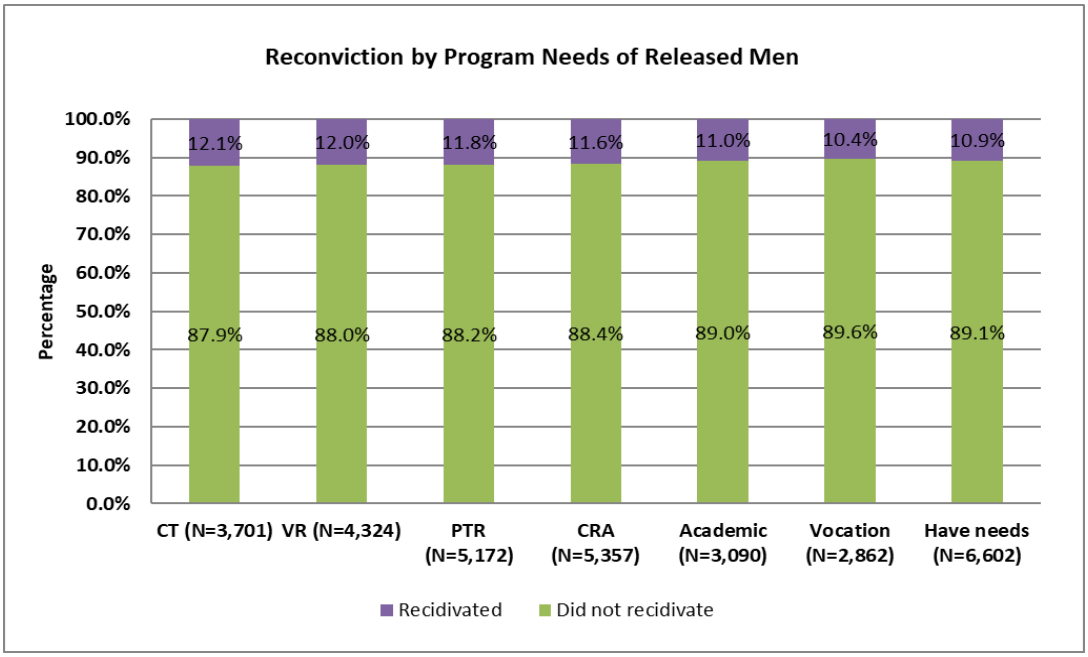
Most incarcerated individuals with a CT need or a VR need completed the corresponding CT program (62.6%) and the VR program (62.0%). Less than one in two incarcerated individuals completed the CRA program (43.7%), which was the program with the largest need. The rate of program completion dropped substantially to 23.5% for vocational programs, 22.0% for academic education program and 3.9% for PTR Program.

On the other hand, when looking at the category of participation (excludes those who completed a program) incarcerated individuals with an academic need had the highest participation rate of 36.3% followed by CRA (22.9%), vocation (17.9%), CT (16.0%), VR (13.6%) and PTR (1.2%) programs.

The remaining incarcerated individuals with needs did not participate in the corresponding program, ranging from the highest non-participation rate of 94.9% for the PTR program[5] to the lowest rate of 21.5% for the CT program. (Graph 5)

[5] Incarcerated individuals assessed to have a substance use need are considered eligible for the CRA and the PTR program. The high instance of non-participation in the PTR program is due to many with a substance use need attending the CRA program for their substance use need. The PTR program is attended by individuals who have limited access to the CRA program due to their housing facility.

Graph 6



Graph 6 shows the rate of one-year recidivism for incarcerated individuals in different need groups. Incarcerated individuals with a CT and/or a VR need had the highest recidivism rate of 12.1% and 12.0% respectively, followed by incarcerated individuals with a PTR need (11.8%) a CRA need (11.6%), an academic need (11.0%), and a vocation need (10.4%). The overall rate of recidivism for incarcerated individuals with a need delineated above was 10.9%.

Table 3

One-Year Reconviction Rates of Released Men by Need Met vs. Not Met

Program Name	Need Met		Need Not Met		TOTAL	
	PCT	N	PCT	N	PCT	N
Correctional Recovery Academy (CRA) **	7.1%	2,343	15.2%	3,014	11.6%	5,357
Pathway to Recovery (PTR)	7.9%	202	11.9%	4,970	11.8%	5,172
Criminal Addictive Thinking (CT)*	11.2%	2,315	13.6%	1,386	12.1%	3,701
Violence Reduction (VR) **	10.7%	2,688	14.1%	1,636	12.0%	4,324
Academic Program	9.4%	679	11.5%	2,411	11.0%	3,090
Vocation Program**	5.8%	673	11.8%	2,189	10.4%	2,862

Table 3 shows the association between whether the program need of an incarcerated individual was met and the corresponding recidivism rate. As shown, program completion (Need Met) was associated with a lower rate of recidivism for CRA, CT, VR and vocation programs. Among incarcerated men eligible for the CRA, 7.1% recidivated if they had completed the CRA compared with 15.2% of the incarcerated individuals whose need was not met. The difference between the two 'need met' categories was 11.2% vs. 13.6% for the CT program, 10.7% vs. 14.1% for the VR program, and 5.8% vs. 11.8% for the vocation program. Incarcerated individuals who met their PTR and academic program needs were also associated with lower rates of recidivism when compared with those who did not meet their program needs, but the differences found here were not statistically significant at the 95% confidence level.

The difference between the rate of recidivism and the two-need met categories for the CRA program was not only statistically significant in the total population, but also in 20 out of the 25 subgroups of population tested (See Appendix E). Next to the CRA program, the subgroups with statistically significant difference between recidivism and the two-need met cohorts were 12 for the vocation program (Appendix I), 8 for the VR program (Appendix G), and 2 for the CT program (Appendix F) and the PTR program (Appendix J). The findings highlight the importance of the CRA program and its broad-based influence on lowering the rate of recidivism.

Table 4

One-Year Reconviction Rates of Released Men by Program Participation

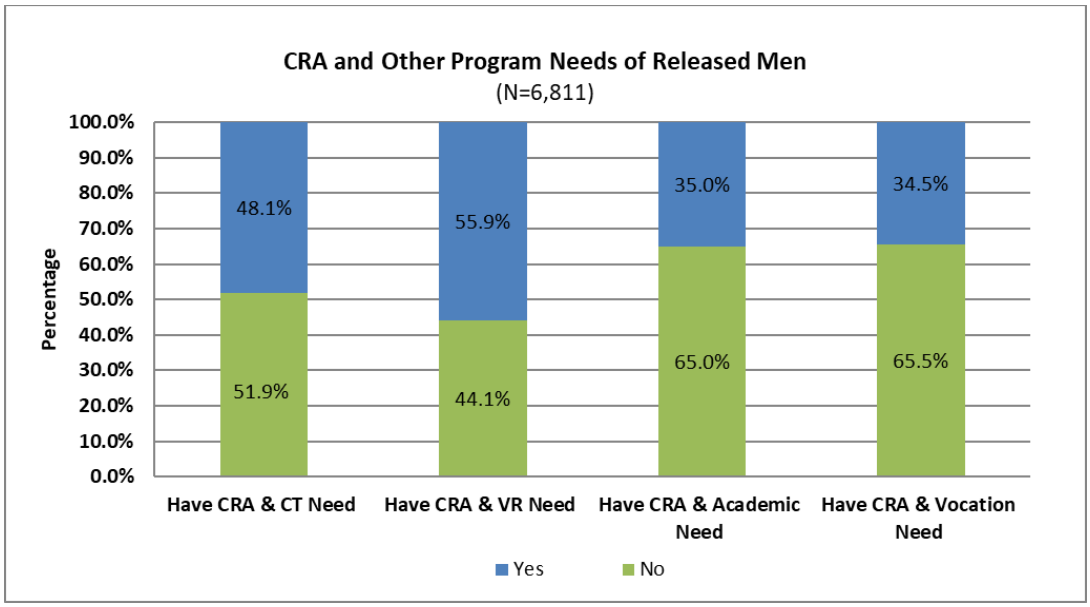
Program Name	Need Met		Participated		Did Not Participate		TOTAL	
	PCT	N	PCT	N	PCT	N	PCT	N
Correctional Recovery Academy (CRA) **	7.1%	2,343	14.7%	1,227	15.5%	1,787	11.6%	5,357
Pathway to Recovery (PTR)	7.9%	202	17.7%	62	11.9%	4,908	11.8%	5,172
Criminal Addictive Thinking (CT)**	11.2%	2,315	15.9%	592	11.8%	794	12.1%	3,701
Violence Reduction (VR) **	10.7%	2,688	15.5%	582	13.4%	1,054	12.0%	4,324
Academic Program	9.4%	679	12.7%	1,123	10.4%	1,288	11.0%	3,090
Vocation Program**	5.8%	673	11.7%	511	11.8%	1,678	10.4%	2,862

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

To break down the "Need Not Met" category in Table 3 into participation and non-participation groups, Table 4 highlights the importance of meeting program needs to lower the rate of recidivism. In five out of six programs, participating in but not completing a program was not associated with a lower rate of recidivism when compared to incarcerated individuals in the non-participation groups. The CRA program was the only exception where 14.7% of incarcerated individuals in the participation group recidivated compared with 15.5% of those in the non-participation group, though the difference was not statistically significant.

Men Multiple Need Cohort Data Findings

Graph 7



In addition to looking at incarcerated individuals with each individual program need, Graph 7 shows the share of incarcerated individuals with two needs, a CRA need plus a CT need, a VR need, an academic need, or a vocation need. As shown, most incarcerated individuals were identified as having

both a CRA and a VR need (55.9%), close to one-half of incarcerated individuals as having a combined CRA and CT need (48.1%), and about one-third of incarcerated individuals as having both a CRA and an academic need (35.0%), and both a CRA and a vocation need (34.5%). It should be noted that the findings shown in Graph 7 do not mean that these incarcerated individuals had only two needs; an overwhelming majority of them were identified as having more than two needs.

Table 5

One-Year Reconviction Rates of Released Men with CRA and Other Program Need by Needs Met vs. Not Met

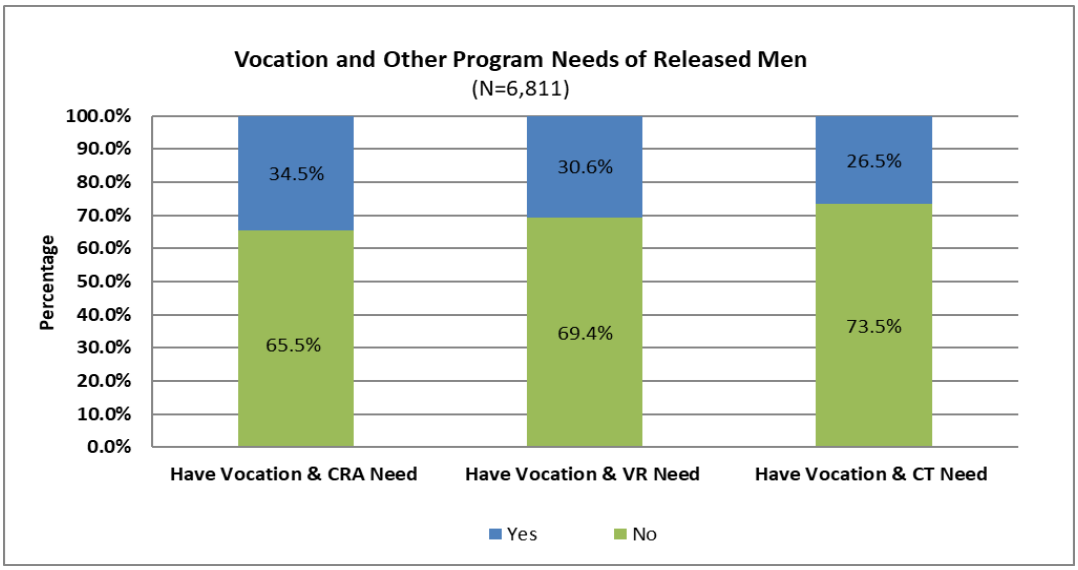
Need Type	Both Needs Met		CRA Need Met		The Other Need Met		Neither Need Met		Total	
	PCT	N	PCT	N	PCT	N	PCT	N	PCT	N
Have Need for both CRA and CT**	6.7%	1,032	7.3%	371	16.0%	1,009	17.2%	865	12.4%	3,277
Have Need for both CRA and VR**	7.2%	1,194	7.0%	501	15.1%	1,160	18.4%	951	12.4%	3,806
Have Need for both CRA and Academic**	7.5%	226	6.6%	702	14.6%	288	15.0%	1,169	11.7%	2,385
Have Need for both CRA and Vocation**	5.6%	249	7.5%	902	9.2%	218	17.4%	981	11.6%	2,350

** denotes p <.01

The association between incarcerated individuals with CRA plus other program needs and the rate of recidivism, as shown in Table 5, revealed the importance of meeting both needs or meeting the CRA need only in lowering the rate of recidivism. Meeting the CRA need and the vocation need was associated with the lowest rate of recidivism of 5.6% when compared with incarcerated individuals in the other three comparison groups, the CRA need met group, the other need met group, and neither need met group. Completing a CRA program reduced the rate of recidivism the most to 6.6% and 7.0% for incarcerated individuals with an academic or a VR need. Despite the differences identified above, there was no statistically significant difference between meeting both needs and meeting CRA need only in reducing the rate of recidivism. Again, it is important to note that many of the incarcerated individuals discussed have more than two program area needs. This analysis is only examining CRA and one other identified need area.

Furthermore, for incarcerated individuals with a VR or a vocation need in addition to a CRA need, meeting the VR or vocation need only was associated with a lower rate of recidivism of 15.1% and 9.2% respectively when compared with incarcerated individuals whose need was not met. Both differences were statistically significant. Meeting the CT, or academic need alone, on the other hand, had no effect on reducing the rate of recidivism. (Table 5)

Graph 8



To further investigate the effect of the vocational program on the reduction of recidivism, Graph 8 shows the share of incarcerated individuals with a vocation need plus a CRA need, a VR need, and a CT need. As shown, about one-third of incarcerated individuals were identified as having both a vocation and a CRA need (34.5%) or as having a combined vocation and VR need (30.6%). A little over one-quarter of incarcerated individuals were found to have both a vocation and a CT need (26.5%).

Table 6

One-Year Reconviction Rates of Male Releases with Vocation and Other Program Need by Needs Met vs. Not Met

Need Type	Both Needs Met		VOC Need Met		The Other Need Met		Neither Need Met		Total	
	PCT	N	PCT	N	PCT	N	PCT	N	PCT	N
Have Need for Vocation & CRA**	5.6%	249	9.2%	218	7.5%	902	17.4%	981	11.6%	2,350
Have Need for Vocation & VR*	6.4%	330	11.3%	97	11.9%	1,064	13.3%	595	11.4%	2,086
Have Need for Vocation & CT**	7.3%	286	6.0%	83	11.7%	938	15.0%	501	11.7%	1,808

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

The association between incarcerated individuals with vocation and other program needs and the rate of recidivism, as shown in Table 6, revealed the importance of meeting both needs or meeting the vocation need only in lowering the rate of recidivism. Meeting both vocation and CRA need or both vocation and VR need was associated with the lowest rate of recidivism of 5.6% and 6.4%, respectively, among the four comparison groups. As for the incarcerated individuals with both a vocation and a CT need, meeting vocation need alone was associated with the lowest rate of recidivism of 6.0%. Meeting both vocation and CT need was identified with the second lowest rate of recidivism of 7.3%.

Summary

In summary, most incarcerated women released from the MA DOC between 2017 and 2021 had a Pathway Programming need. About a quarter of them had an academic need and about one in five had a vocational program need. Of the incarcerated individuals with a program need, about one-third finished Pathway Programming and about one in five completed vocational and academic programs.

The association between program completion and the rate of one-year recidivism shows that program completion was associated with a lower rate of recidivism for two of the four programs, especially for the Pathway program. It also suggests that participation in a program had potential for lowering the rate of recidivism for all four programs. Therefore, increasing the number of incarcerated individuals who complete (or at least participate in the program that they are eligible for) plays an important role in lowering the rate of recidivism.

Most incarcerated men released between the years of 2017 and 2021 from the MA DOC were identified as having a need for CRA, PTR, VR, or CT programs. Close to one-half of the incarcerated individuals were found to qualify for an academic or vocation program. When it comes to meeting these needs, substantial differences exist. About three out of five of incarcerated individuals met their CT and VR needs, about one-half of them met their CRA program need, about one in four met their vocation and academic program needs, and only a handful of them met their PTR program need[6].

An investigation into the association between program completion and the rate of one-year recidivism shows that program completion was associated with a lower rate of recidivism for CRA, VR, CT, and vocation programs. Participating in, but not completing, these programs was not found to influence a reduction in recidivism.

As for incarcerated individuals with two needs, meeting the CRA need alone or in combination with the other need produced the best result in lowering the rate of recidivism. Meeting vocation need alone or in combination with the other need is found to be associated with either the lowest or the second lowest rate of recidivism.

The analysis within this report has shown that completion of programs addressing criminogenic needs was associated with a lower rate of recidivism. However, incarcerated individuals who completed programs could be different from incarcerated individuals who did not complete the programs and these differences can affect recidivism rates.

[6] The high instance of non-participation in the PTR program is due to many with a substance use need attending the CRA program for their substance use need. The PTR program is attended by individuals who have limited access to the CRA program due to their housing facility.

Appendices

Appendix A: Reconviction Rates of Released Women by Pathway Need Met vs. Not Met with Control Variables

Control Variable	Category	Pathway Need Met		Pathway Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Reconviction**	3.9%	255	15.4%	527	11.6%	782
Recidivism Risk Score	High**	3.4%	87	18.8%	261	14.9%	348
	Moderate	2.0%	50	8.2%	97	6.1%	147
	Low	0.9%	107	4.7%	127	3.0%	234
Release Institution Security Level	ELMO/Pre-release	5.3%	95	9.1%	22	6.0%	117
	Minimum**	1.1%	92	13.3%	249	10.0%	341
	Medium*	5.9%	68	18.0%	256	15.4%	324
Post Release Supervision	Non-supervised*	8.3%	48	22.8%	224	20.2%	272
	Supervised**	2.9%	207	9.9%	303	7.1%	510
Time Served	Less than 3 yrs**	5.1%	177	15.5%	511	12.8%	688
	3 to less than 6 yrs	1.7%	59	15.4%	13	4.2%	72
	6 or more yrs	0.0%	19	0.0%	3	0.0%	22
Governing Offense Type	Drug	1.6%	62	9.0%	100	6.2%	162
	Person**	4.2%	120	14.0%	157	9.7%	277
	Property*	7.3%	41	23.9%	159	20.5%	200
	Sex	0.0%	9	0.0%	8	0.0%	17
	Other Crimes	4.3%	23	11.7%	103	10.3%	126
Governing Offense	Non-violent**	4.0%	126	16.3%	362	13.1%	488
	Violent**	3.9%	129	13.3%	165	9.2%	294
Race/Ethnicity	White**	2.6%	156	16.0%	400	12.2%	556
	Black/African American	7.3%	41	19.3%	57	14.3%	98
	Hispanic	0.0%	28	5.4%	37	3.1%	65
	Other[1]	10.0%	30	12.1%	33	11.1%	63
Age at Release	Less than 35**	4.1%	97	16.5%	266	13.2%	363
	35 or more**	3.8%	158	14.2%	261	10.3%	419

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

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

Appendix B: Reconviction Rates of Released Women by Academic Need Met vs. Not Met with Control Variables

Control Variable	Category	Academic Need Met		Academic Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Reconviction	6.3%	63	14.0%	257	12.5%	320
Recidivism Risk Score	High*	0.0%	31	15.7%	108	12.2%	139
	Moderate	7.1%	14	10.9%	46	10.0%	60
	Low	0.0%	9	2.9%	70	2.5%	79
Release Institution Security Level	ELMO/Pre-release	10.0%	10	3.3%	30	5.0%	40
	Minimum	4.2%	24	10.7%	103	9.4%	127
	Medium	6.9%	29	19.4%	124	17.0%	153
Post Release Supervision	Non-supervised	5.9%	17	24.3%	115	22.0%	132
	Supervised*	6.5%	46	5.6%	142	5.9%	188
Time Served	Less than 3 yrs	8.5%	47	14.7%	238	13.7%	285
	3 to less than 6 yrs	0.0%	12	5.9%	17	3.4%	29
	6 or more yrs	0.0%	4	0.0%	2	0.0%	6
Governing Offense Type	Drug	6.3%	16	7.7%	65	7.4%	81
	Person	8.8%	34	14.6%	82	12.9%	116
	Property	0.0%	7	18.0%	61	16.2%	68
	Sex	0.0%	1	0.0%	3	0.0%	4
	Other Crimes	0.0%	5	17.4%	46	15.7%	51
Governing Offense	Non-violent	3.6%	28	14.0%	172	12.5%	200
	Violent	8.6%	35	14.1%	85	12.5%	120
Race/Ethnicity	White	7.5%	40	15.6%	154	13.9%	194
	Black/African American	0.0%	9	15.0%	40	12.2%	49
	Hispanic	0.0%	4	6.1%	33	5.4%	37
	Other[1]	10.0%	10	13.3%	30	12.5%	40
Age at Release	Less than 35	7.5%	40	18.3%	115	15.5%	155
	35 or more	4.3%	23	10.6%	142	9.7%	165

* denotes $p < .05$

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

Appendix C: Reconviction Rates of Released Women by Vocation Need Met vs. Not Met with Control Variables

Control Variable	Category	Vocational Need Met		Vocational Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Reconviction*	0.0%	51	9.8%	225	8.0%	276
Recidivism Risk Score	High	0.0%	20	15.0%	127	12.9%	147
	Moderate	0.0%	9	2.9%	35	2.3%	44
	Low	0.0%	20	1.8%	55	1.3%	75
Release Institution Security Level	ELMO/Pre-release	0.0%	13	6.3%	32	4.4%	45
	Minimum	0.0%	18	6.2%	81	5.1%	99
	Medium	0.0%	20	13.4%	112	11.4%	132
Post Release Supervision	Non-supervised	0.0%	7	16.5%	79	15.1%	86
	Supervised*	0.0%	44	6.2%	146	4.7%	190
Time Served	Less than 3 yrs	0.0%	17	10.7%	196	9.9%	213
	3 to less than 6 yrs	0.0%	25	4.5%	22	2.1%	47
	6 or more yrs	0.0%	9	0.0%	7	0.0%	16
Governing Offense Type	Drug	0.0%	5	5.0%	40	4.4%	45
	Person	0.0%	35	9.2%	109	6.9%	144
	Property	0.0%	3	17.0%	53	16.1%	56
	Sex	0.0%	6	0.0%	6	0.0%	12
	Other Crimes	0.0%	2	5.9%	17	5.3%	19
Governing Offense	Non-violent	0.0%	10	10.9%	110	10.0%	120
	Violent	0.0%	41	8.7%	115	6.4%	156
Race/Ethnicity	White	0.0%	25	9.1%	165	7.9%	190
	Black/African American	0.0%	12	14.3%	28	10.0%	40
	Hispanic	0.0%	5	6.3%	16	4.8%	21
	Other[1]	0.0%	9	12.5%	16	8.0%	25
Age at Release	Less than 35	0.0%	26	10.1%	109	8.1%	135
	35 or more	0.0%	25	9.5%	116	7.8%	141

* denotes $p < .05$

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

Appendix D: Reconviction Rates of Released Women by GPS Need Met vs. Not Met with Control Variables

Control Variable	Category	GPS Need Met		GPS Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Reconviction	10.6%	142	8.6%	185	9.5%	327
Recidivism Risk Score	High	7.8%	77	9.7%	31	8.3%	108
	Moderate	5.0%	20	7.7%	13	6.1%	33
	Low	8.0%	25	4.5%	22	6.4%	47
Release Institution Security Level	ELMO/Pre-release	0.0%	5	0.0%	4	0.0%	9
	Minimum*	0.0%	37	11.7%	60	7.2%	97
	Medium	15.0%	100	7.4%	121	10.9%	221
Post Release Supervision	Non-supervised*	20.4%	54	7.6%	92	12.3%	146
	Supervised	4.5%	88	9.7%	93	7.2%	181
Time Served	Less than 3 yrs	10.5%	133	8.8%	182	9.5%	315
	3 to less than 6 yrs	14.3%	7	0.0%	2	11.1%	9
	6 or more yrs	0.0%	2	0.0%	1	0.0%	3
Governing Offense Type	Drug	14.3%	21	8.9%	45	10.6%	66
	Person	5.3%	57	5.6%	36	5.4%	93
	Property	13.3%	30	10.4%	48	11.5%	78
	Sex	0.0%	1	0.0%	2	0.0%	3
	Other Crimes	15.2%	33	9.3%	54	11.5%	87
Governing Offense	Non-violent	14.3%	84	9.5%	147	11.3%	231
	Violent	5.2%	58	5.3%	38	5.2%	96
Race/Ethnicity	White	11.9%	101	8.7%	149	10.0%	250
	Black/African American	6.3%	16	11.8%	17	9.1%	33
	Hispanic	0.0%	16	8.3%	12	3.6%	28
	Other[1]	22.2%	9	0.0%	7	12.5%	16
Age at Release	Less than 35	10.3%	78	11.6%	95	11.0%	173
	35 or more	10.9%	64	5.6%	90	7.8%	154

* denotes $p < .05$

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

Appendix E: Reconviction Rates of Released Men by CRA Need Met vs. Not Met with Control Variables

Control Variable	Category	CRA Need Met		CRA Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Reconviction**	7.1%	2,343	15.2%	3,014	11.6%	5,357
Recidivism Risk Score	High**	9.3%	1,412	18.8%	2,091	15.0%	3,503
	Moderate*	4.2%	573	7.4%	592	5.8%	1,165
	Low	2.3%	349	3.8%	312	3.0%	661
Release Institution Security Level	ELMO/Pre-release	4.8%	602	4.8%	147	4.8%	749
	Minimum	6.2%	757	7.9%	365	6.8%	1,122
	Medium**	9.3%	929	14.9%	1,816	13.0%	2,745
	Maximum*	9.1%	55	21.9%	686	20.9%	741
Post Release Supervision	Non-supervised**	9.1%	606	18.2%	1,143	15.0%	1,749
	Supervised**	6.4%	1,737	13.3%	1,871	10.0%	3,608
Time Served	Less than 3 yrs**	7.4%	1,156	16.5%	1,837	13.0%	2,993
	3 to less than 6 yrs**	7.4%	743	14.0%	788	10.8%	1,531
	6 or more yrs*	6.1%	444	11.1%	389	8.4%	833
Governing Offense Type	Drug**	6.6%	696	11.3%	603	8.8%	1,299
	Person**	6.7%	973	15.9%	1,392	12.1%	2,365
	Property**	11.8%	254	23.6%	399	19.0%	653
	Sex	9.2%	76	9.8%	224	9.7%	300
	Other Crimes**	5.5%	344	13.1%	396	9.6%	740
Governing Offense	Non-violent**	7.3%	1,294	15.3%	1,398	11.5%	2,692
	Violent**	6.9%	1,049	15.0%	1,616	11.8%	2,665
Race/Ethnicity	White**	7.3%	923	16.3%	1346	12.6%	2,269
	Black/African American**	6.7%	697	16.6%	761	11.9%	1,458
	Hispanic**	7.2%	693	12.6%	871	10.2%	1,564
	Other[1]	10.0%	30	5.6%	36	7.6%	66
Age at Release	Less than 35**	7.4%	828	16.7%	1,525	13.4%	2,353
	35 or more**	7.0%	1,515	13.6%	1,489	10.3%	3,004

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

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

Appendix F: Reconviction Rates of Released Men by CT Need Met vs. Not Met with Control Variables

Control Variable	Category	CT Need Met		CT Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	**Reconviction***	11.2%	2,315	13.6%	1,386	12.1%	3,701
Recidivism Risk Score	**High***	13.6%	1,665	16.7%	1,015	14.8%	2,680
	Moderate	5.4%	498	5.6%	287	5.5%	785
	Low	2.7%	148	1.3%	78	2.2%	226
Release Institution Security Level	**ELMO/Pre-release**	3.9%	284	3.1%	129	3.6%	413
	Minimum	6.4%	486	8.0%	226	6.9%	712
	Medium	12.1%	1,256	14.8%	697	13.1%	1,953
	Maximum	22.5%	289	18.9%	334	20.5%	623
Post Release Supervision	**Non-supervised**	15.0%	681	16.8%	505	15.8%	1,186
	Supervised	9.6%	1,634	11.7%	881	10.3%	2,515
Time Served	**Less than 3 yrs**	12.4%	1,062	14.9%	851	13.5%	1,913
	3 to less than 6 yrs	11.3%	754	11.8%	381	11.5%	1,135
	6 or more yrs	8.4%	499	10.4%	154	8.9%	653
Governing Offense Type	**Drug**	10.1%	455	9.6%	311	9.9%	766
	Person	11.6%	1,147	14.4%	609	12.6%	1,756
	Property	14.4%	243	20.9%	182	17.2%	425
	Sex	9.4%	96	12.7%	79	10.9%	175
	Other Crimes	9.6%	374	10.7%	205	10.0%	579
Governing Offense	**Non-violent**	10.9%	1,072	12.9%	698	11.7%	1,770
	Violent	11.4%	1,243	14.2%	688	12.4%	1,931
Race/Ethnicity	**White**	11.9%	829	14.6%	584	13.0%	1,413
	Black/African American*	10.9%	790	15.4%	395	12.4%	1,185
	Hispanic	10.6%	661	10.5%	392	10.5%	1,053
	Other[1]	11.4%	35	6.7%	15	10.0%	50
Age at Release	**Less than 35**	12.1%	1,095	15.2%	725	13.4%	1,820
	35 or more	10.3%	1,220	11.8%	661	10.8%	1,881

* denotes $p < .05$

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

Appendix G: Reconviction Rates of Released Men by VR Need Met vs. Not Met with Control Variables

Control Variable	Category	VR Need Met		VR Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Reconviction**	10.7%	2,688	14.1%	1,636	12.0%	4,324
Recidivism Risk Score	High**	13.3%	1,907	17.4%	1,186	14.8%	3,093
	Moderate	4.4%	573	6.8%	351	5.3%	924
	Low	3.0%	201	0.0%	92	2.0%	293
Release Institution Security Level	ELMO/Pre-release	3.6%	336	5.4%	205	4.3%	541
	Minimum	6.4%	595	8.4%	298	7.1%	893
	Medium	12.6%	1,458	14.5%	761	13.2%	2,219
	Maximum	18.4%	299	22.8%	372	20.9%	671
Post Release Supervision	Non-supervised**	13.6%	780	19.3%	601	16.1%	1,381
	Supervised	9.5%	1,908	11.1%	1,035	10.1%	2,943
Time Served	Less than 3 yrs	12.1%	1,231	14.6%	1,050	13.2%	2,281
	3 to less than 6 yrs*	10.0%	907	14.4%	417	11.4%	1,324
	6 or more yrs	8.7%	550	10.7%	169	9.2%	719
Governing Offense Type	Drug	8.3%	505	11.4%	394	9.7%	899
	Person**	10.2%	1,362	16.0%	714	12.2%	2,076
	Property	20.7%	290	21.1%	185	20.8%	475
	Sex	5.9%	102	11.5%	96	8.6%	198
	Other Crimes	9.6%	429	8.9%	247	9.3%	676
Governing Offense	Non-violent	11.7%	1,224	12.8%	826	12.1%	2,050
	Violent**	9.9%	1,464	15.4%	810	11.9%	2,274
Race/Ethnicity	White*	11.8%	1010	15.9%	684	13.5%	1,694
	Black/African American*	10.2%	884	14.7%	464	11.7%	1,348
	Hispanic	10.0%	753	11.5%	471	10.5%	1,224
	Other[1]	9.8%	41	0.0%	17	6.9%	58
Age at Release	Less than 35**	12.0%	1,228	16.3%	804	13.7%	2,032
	35 or more	9.7%	1,460	12.0%	832	10.5%	2,292

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

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

Appendix H: Reconviction Rates of Released Men by Academic Need Met vs. Not Met with Control Variables

Control Variable	Category	Academic Need Met		Academic Need Not Met		TOTAL	
		PCT	N	PCT	N	PCT	N
Total	**Reconviction**	9.4%	679	11.5%	2,411	11.0%	3,090
Recidivism Risk Score	**High**	14.3%	398	15.4%	1,484	15.1%	1,882
	Moderate	4.7%	128	5.4%	424	5.3%	552
	Low	0.7%	146	3.2%	441	2.6%	587
Release Institution Security Level	**ELMO/Pre-release**	4.2%	96	3.5%	347	3.6%	443
	Minimum	5.8%	154	6.2%	517	6.1%	671
	Medium	10.8%	352	13.1%	1,180	12.5%	1,532
	Maximum	16.9%	77	21.5%	367	20.7%	444
Post Release Supervision	**Non-supervised**	12.2%	180	13.7%	861	13.4%	1,041
	Supervised	8.4%	499	10.3%	1,550	9.8%	2,049
Time Served	**Less than 3 yrs**	16.1%	161	12.2%	1,575	12.6%	1,736
	3 to less than 6 yrs	10.6%	246	10.3%	575	10.4%	821
	6 or more yrs*	4.4%	272	10.0%	261	7.1%	533
Governing Offense Type	**Drug**	10.1%	119	7.7%	751	8.0%	870
	Person	10.0%	359	14.0%	891	12.9%	1,250
	Property	9.4%	32	18.8%	271	17.8%	303
	Sex	3.7%	81	8.7%	161	7.0%	242
	Other Crimes	11.4%	88	8.6%	337	9.2%	425
Governing Offense	**Non-violent**	10.5%	239	10.2%	1,359	10.2%	1,598
	Violent*	8.9%	440	13.2%	1,052	11.9%	1,492
Race/Ethnicity	**White**	10.1%	189	13.0%	725	12.4%	914
	Black/African American	10.3%	213	13.6%	602	12.8%	815
	Hispanic	8.9%	258	9.5%	1,050	9.4%	1,308
	Other[1]	0.0%	19	2.9%	34	1.9%	53
Age at Release	**Less than 35**	12.8%	313	13.8%	1,058	13.6%	1,371
	35 or more	6.6%	366	9.7%	1,353	9.0%	1,719

* denotes $p < .05$

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

Appendix I: Reconviction Rates of Released Men by Vocation Need Met vs. Not Met with Control Variables

Control Variable	Category	Vocation Need Met		Vocation Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	**Reconviction****	5.8%	673	11.8%	2,189	10.4%	2,862
Recidivism Risk Score	**High***	9.6%	343	15.0%	1,486	14.0%	1,829
	Moderate	3.7%	134	6.3%	441	5.7%	575
	Low	0.5%	195	2.3%	256	1.6%	451
Release Institution Security Level	**ELMO/Pre-release**	4.1%	98	5.8%	275	5.4%	373
	Minimum	3.8%	133	5.6%	395	5.1%	528
	Medium**	5.5%	399	13.3%	1,197	11.3%	1,596
	Maximum	18.6%	43	18.9%	322	18.9%	365
Post Release Supervision	**Non-supervised****	6.0%	168	15.1%	696	13.3%	864
	Supervised**	5.7%	505	10.2%	1,493	9.1%	1,998
Time Served	**Less than 3 yrs**	7.3%	124	13.2%	1,152	12.6%	1,276
	3 to less than 6 yrs*	5.8%	243	11.2%	686	9.8%	929
	6 or more yrs	5.2%	306	8.3%	351	6.8%	657
Governing Offense Type	**Drug**	5.9%	85	8.9%	497	8.4%	582
	Person**	6.8%	294	12.4%	924	11.1%	1,218
	Property	8.1%	37	19.7%	269	18.3%	306
	Sex	3.3%	181	8.0%	150	5.4%	331
	Other Crimes	6.6%	76	9.7%	349	9.2%	425
Governing Offense	**Non-violent***	6.6%	198	11.7%	1,115	11.0%	1,313
	Violent**	5.5%	475	11.8%	1,074	9.9%	1,549
Race/Ethnicity	**White****	6.5%	307	13.0%	1008	11.5%	1,315
	Black/African American	6.0%	216	10.5%	658	9.4%	874
	Hispanic*	3.8%	133	11.1%	496	9.5%	629
	Other[1]	5.9%	17	11.1%	27	9.1%	44
Age at Release	**Less than 35****	5.7%	245	13.0%	991	11.6%	1,236
	35 or more**	5.8%	428	10.8%	1,198	9.5%	1,626

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

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

Appendix J: Reconviction Rates of Released Men by PTR Need Met vs. Not Met with Control Variables

Control Variable	Category	Pathway to Recovery Need Met		Pathway to Recovery Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Reconviction	7.9%	202	11.9%	4,970	11.8%	5,172
Recidivism Risk Score	High	12.5%	112	15.2%	3,292	15.1%	3,404
	Moderate	3.8%	52	5.8%	1,060	5.7%	1,112
	Low	0.0%	38	3.1%	550	2.9%	588
Release Institution Security Level	ELMO/Pre-release	0.0%	2	5.2%	699	5.1%	701
	Minimum	0.0%	14	7.2%	1,039	7.1%	1,053
	Medium	8.7%	184	13.1%	2,490	12.8%	2,674
	Maximum	0.0%	2	20.9%	742	20.8%	744
Post Release Supervision	Non-supervised	11.1%	63	15.3%	1,619	15.1%	1,682
	Supervised	6.5%	139	10.3%	3,351	10.2%	3,490
Time Served	Less than 3 yrs	13.5%	89	13.0%	2,865	13.0%	2,954
	3 to less than 6 yrs*	1.7%	58	11.2%	1,410	10.8%	1,468
	6 or more yrs	5.5%	55	9.1%	695	8.8%	750
Governing Offense Type	Drug	12.5%	16	8.9%	1,234	9.0%	1,250
	Person	7.4%	54	12.4%	2,218	12.3%	2,272
	Property	20.0%	15	18.9%	614	18.9%	629
	Sex	7.1%	98	10.3%	203	9.3%	301
	Other Crimes	0.0%	19	10.1%	701	9.9%	720
Governing Offense	Non-violent	10.0%	50	11.7%	2,549	11.6%	2,599
	Violent	7.2%	152	12.2%	2,421	11.9%	2,573
Race/Ethnicity	White	6.6%	106	12.9%	2,123	12.6%	2,229
	Black/African American	15.6%	45	11.9%	1,337	12.0%	1,382
	Hispanic	4.7%	43	10.7%	1,454	10.5%	1,497
	Other[1]	0.0%	8	8.9%	56	7.8%	64
Age at Release	Less than 35*	3.2%	62	13.8%	2,226	13.5%	2,288
	35 or more	10.0%	140	10.4%	2,744	10.4%	2,884

* denotes $p < .05$

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