

Massachusetts Department of Correction One-Year Recidivism Rates of Men and Women Released 2017 – 2022: A Multi-Year Descriptive Analysis of Risk Reduction Programs



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Descriptive Analysis of Risk Reduction Programs



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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.

Motivational Enhancement Program (MEP): is a 4-week program that introduces participants to basic program concepts while encouraging positive behavioral change. The program is designed to motivate participants to participate in more intensive programs to address their broader criminogenic need areas.

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.

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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 a 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.

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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 rates¹ 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, 2022, 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 five programs examined were Pathways, General Population Services, Vocational Programming, Academic Education, and Motivational Enhancement Program (MEP)². 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 three of the five programs for female releases and all six programs for male releases.
- For incarcerated individuals released to the community from January 1, 2017 to December 31, 2022, the overall one-year recidivism rate was 10.6% for men and 11.4% for women.
- Women who were released and completed a minimum of 26 weeks of Pathway programming had a significantly lower recidivism rate of 3.6% compared to 14.7% 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 8.9% for those who did not earn a vocational certification.
- The recidivism rate for women released who completed the MEP was 11.3%, compared with 15.8% for those who did not complete the MEP.
- The recidivism rate for men released who were eligible for substance use programming and completed the CRA was 7.1% compared to 14.9% 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 10.6% compared to 13.8% 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 11.1% compared to 13.3% 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 5.2% compared to 11.6% for those who did not earn a vocational certification.

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, 2022, 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.

² MEP has been added to this year's report.

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- The recidivism rate for men released who were eligible for academic programming and completed the education program was 9.0% compared to 11.4% for those who did not complete the program and earn their high school equivalency.
The recidivism rate for men released who were eligible for PTR programming and completed the program was 7.4% compared to 11.8% for those who did not complete the program.
- 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.

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. MEP is utilized to support the Pathways model by utilizing this program to motivate participants to engage in Pathways and other programming resources. To measure success, recidivism rates are used to determine an incarcerated individual's ability to abstain from criminal behavior after being released 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, 2022, 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. As the agency has progressed from an AP unit to a Secure Adjustment Unit model, MEP has been utilized to motivate incarcerated women to engage in Pathways 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.

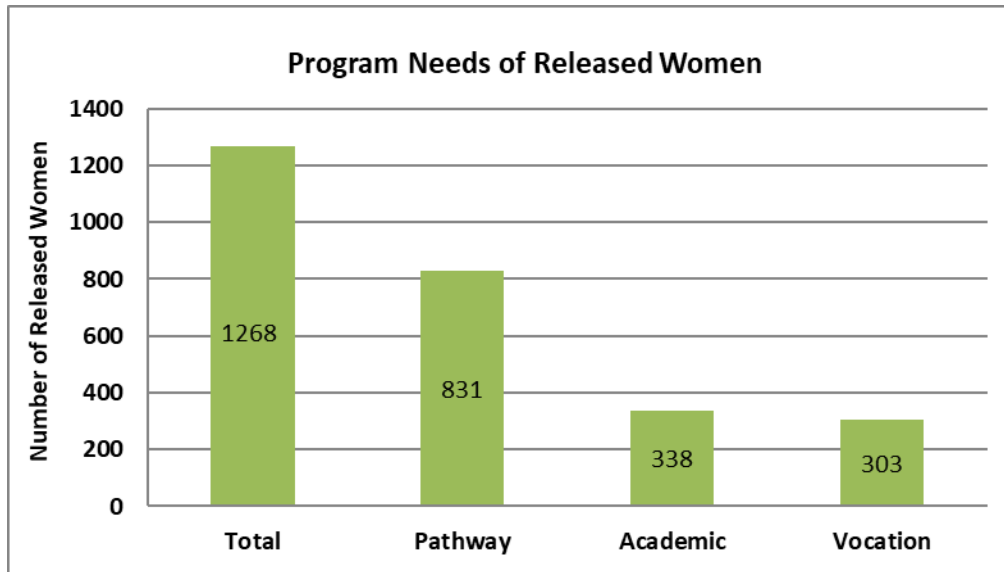
Methodology for Recidivism Analysis

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 2022 whose first release occurred during the time-period. Overall, there were 7,874 men released and 1,268 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

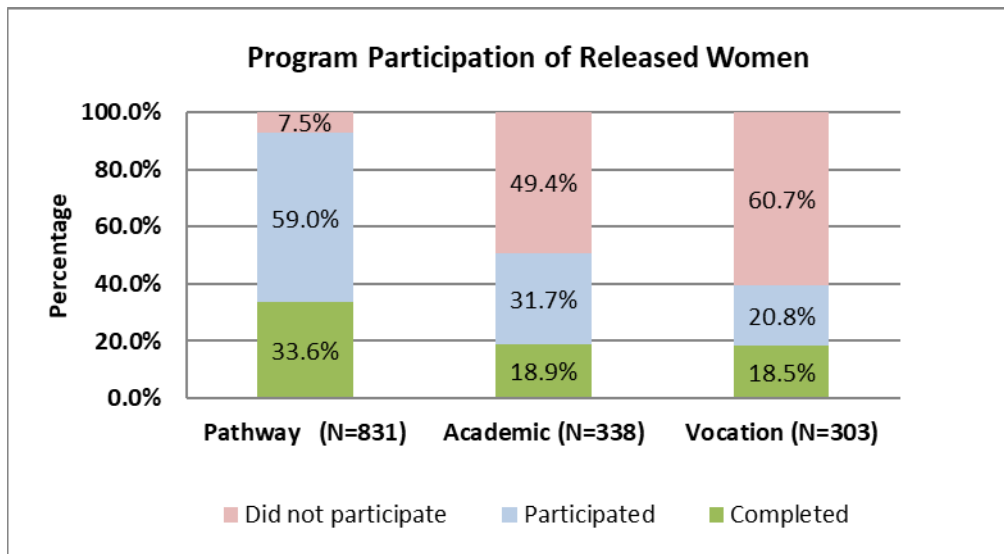
Criminogenic Need Programs

Graph 1



Of the 1,268 incarcerated women released from the MA DOC between 2017 and 2022, 831 (65.5%) were identified as eligible for Pathway Programming, 338 (26.7%) were determined to have an academic program need, and 303 (23.9%) were recognized as having a vocational program need. (Graph 1)

Graph 2

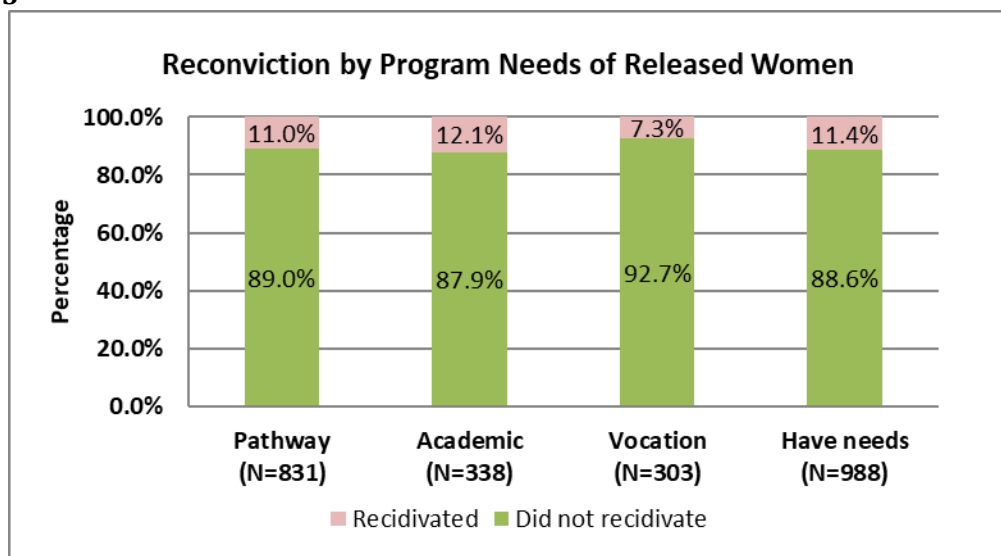


For women eligible for Pathway programming, 33.6% completed a Pathway program, 59.0% participated but did not complete 26 weeks of the program, and the remaining 7.5% did not participate in the program. In contrast, among incarcerated individuals with an academic need, 18.9% completed the program and earned their High School Equivalency (HSE), 31.7% participated

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in the program but did not earn an HSE, and 49.4% were not involved in the program³. For the incarcerated individuals with a vocation need, 18.5% completed the program, 20.8% participated in the program, and the remaining 60.7% 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 academic need had the highest rate of recidivism at 12.1%, followed by incarcerated individuals eligible for Pathway programming at 11.0%, and for vocation programming at the lowest rate of 7.3%. The rate of recidivism for all incarcerated individuals released from 2017 to 2022 who had a program need was at 11.4%. (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%	56	8.9%	247	7.3%	303
Pathway Program**	3.6%	279	14.7%	552	11.0%	831
Academic Program	6.3%	64	13.5%	274	12.1%	338
GPS Program	9.6%	156	8.6%	187	9.0%	343
MEP Program*	11.3%	680	15.8%	588	13.4%	1,268

* 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 five program groups. Among women eligible for vocational programming, 0.0% recidivated if they completed the program compared with 8.9% of the incarcerated individuals who did not complete the program. The

³ 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.

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difference between meeting and not meeting the programming need was 3.6% vs. 14.7% for the Pathway program, and 11.3% vs. 15.8% for the Motivational Enhancement Program (MEP).

Women releases who were eligible for academic programming and completed the education program was also associated with a lower rate of recidivism of 6.3% compared with 13.5% of those who did not complete the program. The difference, however, is not statistically significant at the 95% confidence level.⁴

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 9.6% 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 assessed⁵ 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 (N=140) where a much higher percentage of individuals who completed the GPS Program recidivated (28.6%) 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%	56	6.3%	63	9.8%	184	7.3%	303
Pathway Program**	3.6%	279	14.5%	490	16.1%	62	11.0%	831
Academic Program	6.3%	64	11.2%	107	15.0%	167	12.1%	338
GPS Program	9.6%	156	7.0%	128	11.9%	59	9.0%	343
MEP Program**	11.3%	680	11.3%	177	17.8%	411	13.4%	1,268

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

To break down the “Need Not Met” category in Table 1 into two participation groups, Table 2 shows participation in any of the five programs is associated with a lower rate of recidivism when compared with incarcerated individuals who did not participate in a program. Although a statistically significant difference between the two participation groups is only found in the MEP, the data flow of the other four 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 11.3% vs. 17.8% for the MEP, 6.3% vs. 9.8% for vocational programming, 14.5% vs. 16.1% for the Pathway Program, 11.2% vs. 15.0% for academic programming, and 7.0% vs. 11.9% for the 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 7.0%, followed by those who completed the program (9.6%) and who did not participate in the program (11.9%), suggesting participation in

⁴ 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.

⁵ 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.

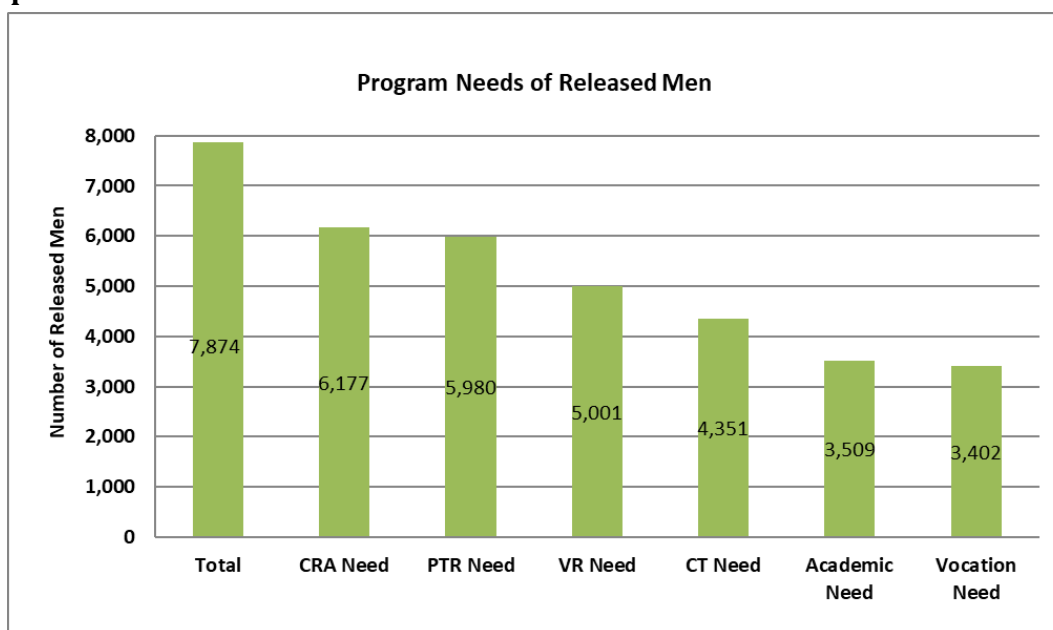
or completion of a GPS Program could reduce the rate of recidivism than those who did not participate.

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 five programs studied, namely for vocational programs, the Pathway Program and the MEP. It also suggests that participation in a program had potential for lowering the rate of recidivism for all five 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

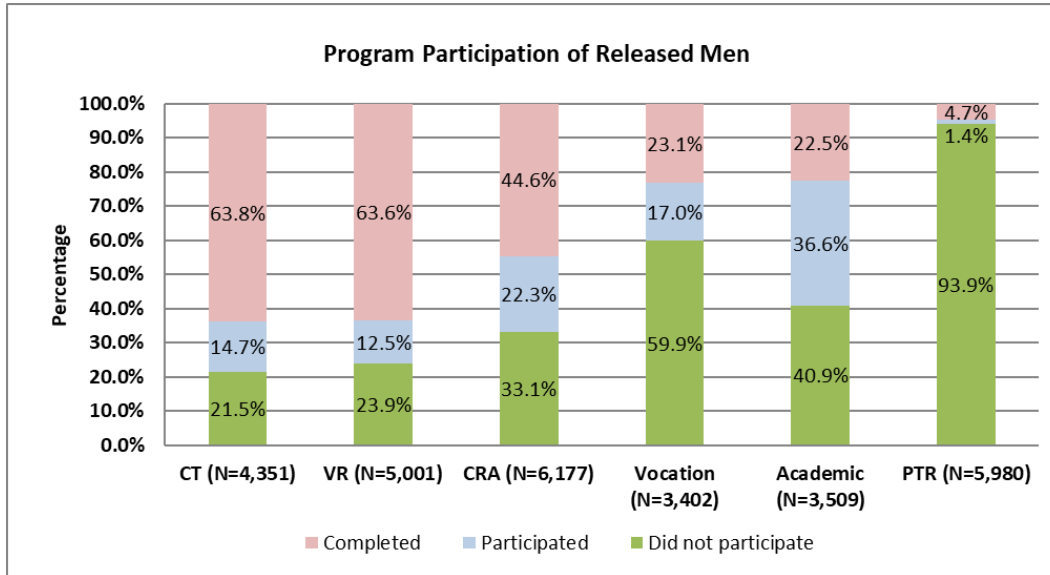
Criminogenic Need Programs

Graph 4



The MA DOC released a total of 7,874 incarcerated men to the community via parole or expiration of sentence between 2017 and 2022. Most of the released incarcerated individuals were identified as having a Correctional Recovery Academy (CRA) need (78.4%), and/or Pathway to Recovery (PTR) need (75.9), and/or Violence Reduction (VR) need (63.5%), and/or a Criminal Thinking (CT) need (55.3%). Less than one-half of the released incarcerated individuals were determined to have an academic education need (44.6%), and/or a vocational program need (43.2%). (Graph 4)

Graph 5



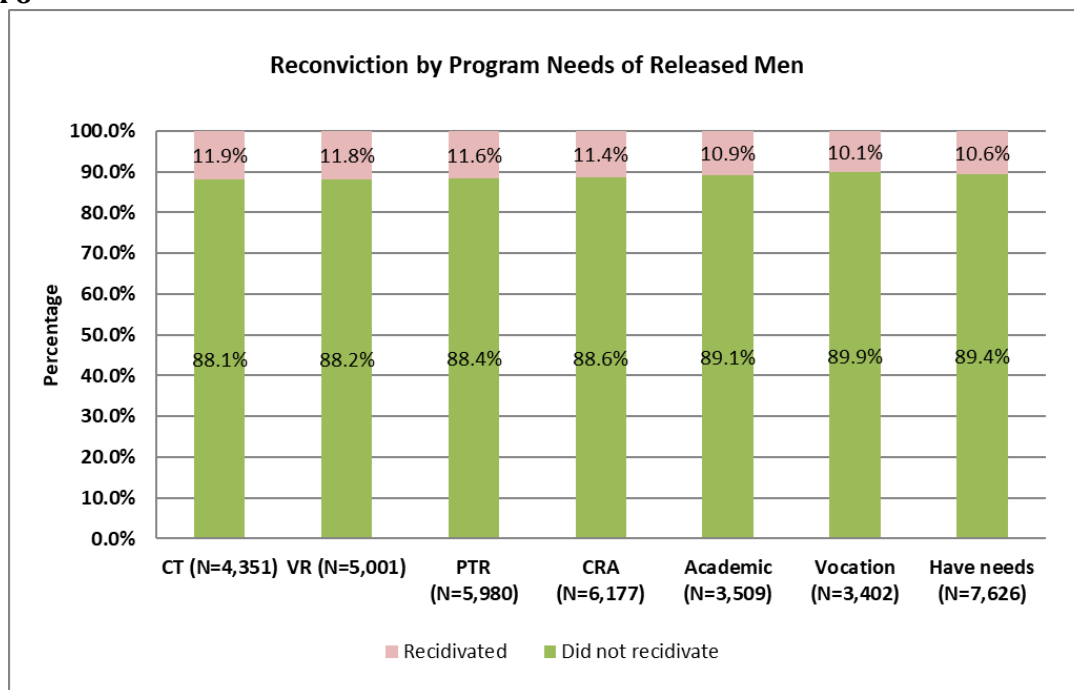
Most incarcerated individuals with a CT need or a VR need completed the corresponding CT program (63.8%) and the VR program (63.6%). Less than one in two incarcerated individuals completed the CRA program (44.6%), which was the program with the largest need. The rate of program completion dropped substantially to 23.1% for vocational programs, 22.5% for academic education program and 4.7% 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 36.6% followed by CRA (22.3%), vocation (17.0%), CT (14.7%), VR (12.5%) and PTR (1.4%) programs.

The remaining incarcerated individuals with needs did not participate in the corresponding program, ranging from the highest non-participation rate of 93.9% for the PTR program⁶ to the lowest rate of 21.5% for the CT program. (Graph 5)

⁶ 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 11.9% and 11.8% respectively, followed by incarcerated individuals with a PTR need (11.6%) a CRA need (11.4%), an academic need (10.9%), and a vocation need (10.1%). The overall rate of recidivism for incarcerated individuals with a need delineated above was 10.6%.

Table 3

One-Year Recidivism 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%	2,758	14.9%	3,419	11.4%	6,177
Pathway to Recovery (PTR)*	7.4%	283	11.8%	5,697	11.6%	5,980
Criminal Addictive Thinking (CT)*	11.1%	2,776	13.3%	1,575	11.9%	4,351
Violence Reduction (VR) **	10.6%	3,179	13.8%	1,822	11.8%	5,001
Academic Program*	9.0%	791	11.4%	2,718	10.9%	3,509
Vocation Program**	5.2%	785	11.6%	2,617	10.1%	3,402

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

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 all six programs. Among incarcerated men eligible for the CRA, 7.1% recidivated if they had completed the CRA compared with 14.9% of the incarcerated individuals whose need was not met. The difference between the two 'need met' categories was 7.4% vs. 11.8% for the PTR program, 11.1% vs. 13.3% for the CT program, 10.6% vs. 13.8% for the VR program, 9.0% vs. 11.4% for the academic program, and 5.2% vs. 11.6% for the vocation program.

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 15 for the vocation program (Appendix I), 8 for the VR program (Appendix G), 5 for the PTR program (Appendix J), and 3 for the CT program (Appendix F) and the academic program (Appendix H). The findings highlight the importance of the CRA program and its broad-based influence on lowering the rate of recidivism.

Table 4

One-Year Recidivism 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%	2,758	14.6%	1,378	15.2%	2,041	11.4%	6,177
Pathway to Recovery (PTR)*	7.4%	283	15.0%	80	11.7%	5,617	11.6%	5,980
Criminal Addictive Thinking (CT) **	11.1%	2,776	16.4%	641	11.2%	934	11.9%	4,351
Violence Reduction (VR) **	10.6%	3,179	15.5%	626	13.0%	1,196	11.8%	5,001
Academic Program *	9.0%	791	12.8%	1,286	10.3%	1,432	10.9%	3,509
Vocation Program**	5.2%	785	11.2%	578	11.7%	2,039	10.1%	3,402

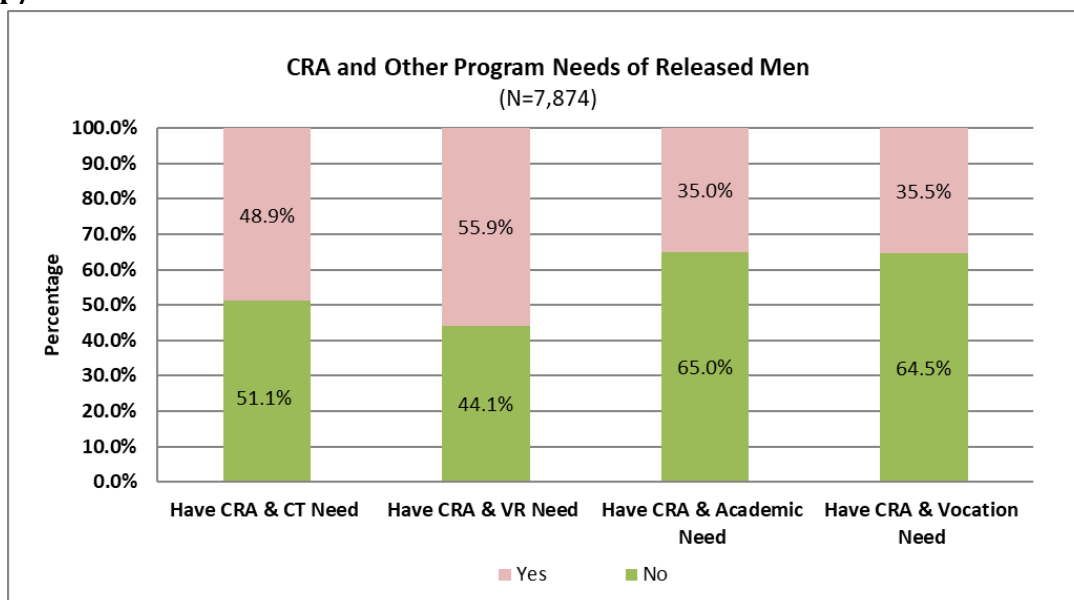
* denotes $p < .05$, ** denotes $p < .01$

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 four 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 and vocation programs were the exceptions where 14.6% and 11.2% of incarcerated individuals in the participation group recidivated compared with 15.2% and 11.7% of those in the non-participation group respectively, though the differences were not statistically significant.

For the four programs where the participation groups were associated with higher rates of recidivism than the non-participation groups, the differences in CT and academic programs were statistically significant. A further investigation into these two programs reveals that incarcerated individuals participated but did not complete the programs for a reason. Participants who did not complete these programs have higher recidivism risk scores, come from higher (medium or maximum) release security institutions, and tend to be younger than 35 years of age compared to their non-participation counterparts. Our past studies suggest that incarcerated individuals with these characteristics were more likely to recidivate than older individuals with lower recidivism scores and lower institution release security levels. The level of participation in these programs for non-completers can also vary widely. Participation in either CT or academic programs appeared to be unable to counterbalance the negative influences of these factors to reduce recidivism among program participants when compared with non-participants.

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 (48.9%), and about one-third of incarcerated individuals as having both a CRA and a vocation need (35.5%), and both a CRA and an academic need (35.0%). 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 Recidivism 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**	6.5%	1,269	7.6%	435	16.3%	1,173	16.8%	974	12.2%	3,851
Have Need for both CRA and VR**	7.1%	1,442	6.7%	566	15.2%	1,344	18.2%	1,051	12.2%	4,403
Have Need for both CRA and Academic**	6.9%	275	7.0%	802	14.9%	315	14.9%	1,301	11.7%	2,693
Have Need for both CRA and Vocation**	4.7%	295	7.9%	1,118	9.1%	242	17.0%	1,144	11.4%	2,799

** denotes $p < .01$

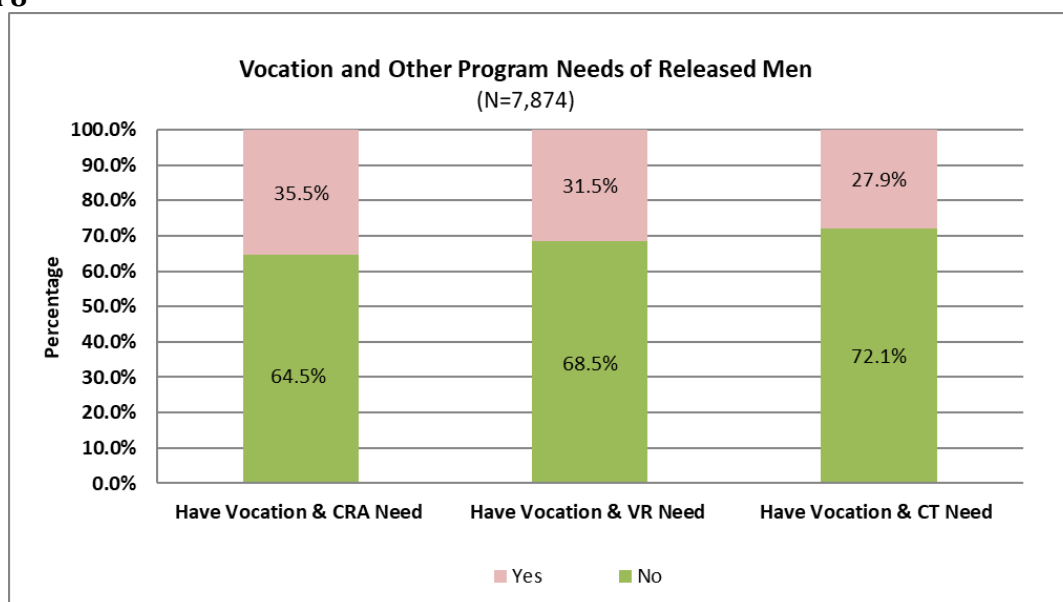
The association between incarcerated individuals with CRA plus other program needs and the rate of recidivism, as shown in Table 5, revealed the importance of meeting both needs or meeting the CRA need only in lowering the rate of recidivism. For three out of the four program combinations shown above, meeting both needs and meeting CRA need were associated with a lower rate of recidivism when compared with incarcerated individuals in the other two comparison groups, the other need met group, and neither need met group. The only exception is among incarcerated individuals having both a CRA and a vocation need where meeting both needs, the CRA need or the vocation need resulted in lower rate of recidivism when compared with the neither need met group. Specifically, meeting the CRA need and the vocation need was associated with the lowest rate of

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recidivism of 4.7% and completing a CRA program reduced the rate of recidivism the most, to 6.7% for incarcerated individuals with 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 examining only 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 15.2% and 9.1% respectively compared with 18.2% and 17.0% of incarcerated individuals whose need was not met correspondingly. 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. However, among incarcerated individuals who had an academic need but not a CRA need (N=816), meeting the academic need was strongly associated with a lower rate of recidivism of 2.5% compared with 9.9% among those who did not meet their academic need. (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 (35.5%) or as having a combined vocation and VR need (31.5%). A little over one-quarter of incarcerated individuals were found to have both a vocation and a CT need (27.9%).

Table 6

One-Year Recidivism 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**	4.7%	295	9.1%	242	7.9%	1,118	17.0%	1,144	11.4%	2,799
Have Need for Vocation & VR**	5.9%	393	10.2%	108	11.8%	1,305	13.1%	678	11.2%	2,484
Have Need for Vocation & CT**	6.6%	346	5.3%	95	11.2%	1,166	15.1%	591	11.3%	2,198

* 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 4.7% and 5.9%, 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 5.3%. Meeting both vocation and CT need was identified with the second lowest rate of recidivism of 6.6%.

Summary

In summary, most incarcerated women released from the MA DOC between 2017 and 2022 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 three of the five programs, especially for the Pathway program. It also suggests that participation in a program had potential for lowering the rate of recidivism for all five 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 2022 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 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 need⁷.

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 all six programs. Participating in, but not completing, these programs was not found to influence a reduction in recidivism.

As for incarcerated individuals with CRA and another need, meeting the CRA need alone or in combination with the other need produced the best result in lowering the rate of recidivism. Similar findings were seen for those with a vocation and another need, 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

⁷ 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.

completed programs could be different from incarcerated individuals who did not complete the programs⁸, and these differences can affect recidivism rates.

⁸ 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.

Appendices

Appendix A: Recidivism 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**	3.6%	279	14.7%	552	11.0%	831
Recidivism Risk Score	High**	3.2%	94	17.7%	277	14.0%	371
	Moderate	1.9%	53	7.9%	101	5.8%	154
	Low	0.8%	120	4.5%	132	2.8%	252
	ELMO/Pre-release	5.1%	99	8.0%	25	5.6%	124
Release Institution Security Level	Minimum**	1.0%	100	13.1%	251	9.7%	351
	Medium**	5.0%	80	16.7%	276	14.0%	356
Post Release Supervision	Non-supervised*	7.7%	52	21.5%	237	19.0%	289
	Supervised**	2.6%	227	9.5%	315	6.6%	542
Time Served	Less than 3 yrs**	4.7%	191	14.8%	532	12.2%	723
	3 to less than 6 yrs*	1.5%	67	13.3%	15	3.7%	82
	6 or more yrs	0.0%	21	0.0%	5	0.0%	26
Governing Offense Type	Drug	1.5%	68	8.3%	109	5.6%	177
	Person**	3.6%	137	12.9%	170	8.8%	307
	Property*	7.1%	42	23.6%	161	20.2%	203
	Sex	0.0%	9	0.0%	8	0.0%	17
	Other Crimes	4.3%	23	11.5%	104	10.2%	127
Governing Offense	Non-violent**	3.8%	133	15.8%	374	12.6%	507
	Violent**	3.4%	146	12.4%	178	8.3%	324
Race/Ethnicity	White**	2.4%	168	15.4%	416	11.6%	584
	Black/African American	6.3%	48	18.6%	59	13.1%	107
	Hispanic	0.0%	30	5.0%	40	2.9%	70
	Other^[1]	9.1%	33	10.8%	37	10.0%	70
Age at Release	Less than 35**	3.8%	105	15.8%	278	12.5%	383
	35 or more**	3.4%	174	13.5%	274	9.6%	448

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

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

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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%	64	13.5%	274	12.1%	338
Recidivism Risk Score	High*	0.0%	31	14.7%	116	11.6%	147
	Moderate	7.1%	14	10.2%	49	9.5%	63
	Low	0.0%	10	2.7%	73	2.4%	83
Release Institution Security Level	ELMO/Pre-release	10.0%	10	3.1%	32	4.8%	42
	Minimum	4.2%	24	10.5%	105	9.3%	129
	Medium	6.7%	30	18.2%	137	16.2%	167
Post Release Supervision	Non-supervised	5.9%	17	23.0%	122	20.9%	139
	Supervised	6.4%	47	5.9%	152	6.0%	199
Time Served	Less than 3 yrs	8.5%	47	14.3%	252	13.4%	299
	3 to less than 6 yrs	0.0%	12	5.6%	18	3.3%	30
	6 or more yrs	0.0%	5	0.0%	4	0.0%	9
Governing Offense Type	Drug	6.3%	16	8.6%	70	8.1%	86
	Person	8.6%	35	13.0%	92	11.8%	127
	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	16.7%	48	15.1%	53
Governing Offense	Non-violent	3.6%	28	14.0%	179	12.6%	207
	Violent	8.3%	36	12.6%	95	11.5%	131
Race/Ethnicity	White	7.5%	40	15.2%	164	13.7%	204
	Black/African American	0.0%	10	14.0%	43	11.3%	53
	Hispanic	0.0%	4	5.9%	34	5.3%	38
	Other^[1]	10.0%	10	12.1%	33	11.6%	43
Age at Release	Less than 35	7.5%	40	17.5%	120	15.0%	160
	35 or more	4.2%	24	10.4%	154	9.6%	178

* denotes $p < .05$

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

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Appendix C: Recidivism 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	Recidivism*	0.0%	56	8.9%	247	7.3%	303
Recidivism Risk Score	High	0.0%	21	14.0%	136	12.1%	157
	Moderate	0.0%	9	2.6%	39	2.1%	48
	Low	0.0%	24	1.6%	63	1.1%	87
Release Institution Security Level	ELMO/Pre-release	0.0%	15	5.9%	34	4.1%	49
	Minimum	0.0%	19	5.8%	86	4.8%	105
	Medium	0.0%	22	11.8%	127	10.1%	149
Post Release Supervision	Non-supervised	0.0%	7	14.8%	88	13.7%	95
	Supervised	0.0%	49	5.7%	159	4.3%	208
Time Served	Less than 3 yrs	0.0%	17	10.0%	211	9.2%	228
	3 to less than 6 yrs	0.0%	28	3.6%	28	1.8%	56
	6 or more yrs	0.0%	11	0.0%	8	0.0%	19
Governing Offense Type	Drug	0.0%	6	4.4%	45	3.9%	51
	Person	0.0%	39	8.1%	124	6.1%	163
	Property	0.0%	3	16.4%	55	15.5%	58
	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%	11	10.3%	117	9.4%	128
	Violent	0.0%	45	7.7%	130	5.7%	175
Race/Ethnicity	White	0.0%	26	8.4%	179	7.3%	205
	Black/African American	0.0%	15	12.9%	31	8.7%	46
	Hispanic	0.0%	6	5.9%	17	4.3%	23
	Other^[1]	0.0%	9	10.0%	20	6.9%	29
Age at Release	Less than 35	0.0%	27	9.2%	119	7.5%	146
	35 or more	0.0%	29	8.6%	128	7.0%	157

* denotes $p < .05$

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

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Appendix D: Recidivism 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	Recidivism	9.6%	156	8.6%	187	9.0%	343
Recidivism Risk Score	High	6.9%	87	9.4%	32	7.6%	119
	Moderate	4.8%	21	7.7%	13	5.9%	34
	Low	7.4%	27	4.3%	23	6.0%	50
Release Institution Security Level	ELMO/Pre-release	0.0%	7	0.0%	4	0.0%	11
	Minimum*	0.0%	40	11.5%	61	6.9%	101
	Medium	13.8%	109	7.4%	122	10.4%	231
Post Release Supervision	Non-supervised*	19.3%	57	7.5%	93	12.0%	150
	Supervised	4.0%	99	9.6%	94	6.7%	193
Time Served	Less than 3 yrs	10.0%	140	8.7%	183	9.3%	323
	3 to less than 6 yrs	8.3%	12	0.0%	3	6.7%	15
	6 or more yrs	0.0%	4	0.0%	1	0.0%	5
Governing Offense Type	Drug	11.5%	26	8.9%	45	9.9%	71
	Person	4.5%	66	5.3%	38	4.8%	104
	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	13.5%	89	9.5%	147	11.0%	236
	Violent	4.5%	67	5.0%	40	4.7%	107
Race/Ethnicity	White	11.2%	107	8.7%	149	9.8%	256
	Black/African American	4.8%	21	11.8%	17	7.9%	38
	Hispanic	0.0%	17	8.3%	12	3.4%	29
	Other^[1]	18.2%	11	0.0%	9	10.0%	20
Age at Release	Less than 35	9.5%	84	11.5%	96	10.6%	180
	35 or more	9.7%	72	5.5%	91	7.4%	163

* denotes $p < .05$

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

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Appendix E: Recidivism Rates of Released Women by MEP Need Met vs. Not Met with Control Variables							
Control Variable	Category	MEP Need Met		MEP Need Not Met		Total	
		PCT	N	PCT	N	PCT	N
Total	Recidivism*	11.3%	680	15.8%	588	13.4%	1,268
Recidivism Risk Score	High	13.6%	280	15.6%	109	14.1%	389
	Moderate	7.5%	107	1.9%	52	5.7%	159
	Low	2.2%	178	4.9%	81	3.1%	259
Release Institution Security Level	ELMO/Pre-release	4.5%	89	8.6%	35	5.6%	124
	Minimum*	8.0%	274	15.6%	147	10.7%	421
	Medium	16.1%	317	16.5%	406	16.3%	723
Post Release Supervision	Non-supervised*	19.0%	253	19.8%	323	19.4%	576
	Supervised	6.8%	427	10.9%	265	8.4%	692
Time Served	Less than 3 yrs*	12.3%	616	16.8%	542	14.4%	1,158
	3 to less than 6 yrs	2.0%	50	6.1%	33	3.6%	83
	6 or more yrs	0.0%	14	0.0%	13	0.0%	27
Governing Offense Type	Drug*	8.1%	161	16.3%	104	11.3%	265
	Person	9.4%	233	11.0%	145	10.1%	378
	Property	19.7%	157	19.7%	147	19.7%	304
	Sex	0.0%	10	0.0%	11	0.0%	21
	Other Crimes	9.2%	119	17.1%	181	14.0%	300
Governing Offense	Non-violent*	12.6%	437	17.8%	432	15.2%	869
	Violent	9.1%	243	10.3%	156	9.5%	399
Race/Ethnicity	White	12.1%	479	16.4%	469	14.2%	948
	Black/African American	14.3%	91	9.8%	51	12.7%	142
	Hispanic**	1.6%	61	20.0%	30	7.7%	91
	Other ^[1]	10.2%	49	13.2%	38	11.5%	87
Age at Release	Less than 35	12.5%	305	17.9%	291	15.1%	596
	35 or more	10.4%	375	13.8%	297	11.9%	672

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

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

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Appendix F: Recidivism 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%	2,758	14.9%	3,419	11.4%	6,177
Recidivism Risk Score	High**	9.2%	1,676	18.6%	2,377	14.7%	4,053
	Moderate*	4.2%	667	7.6%	659	5.9%	1,326
	Low	2.7%	406	3.3%	362	3.0%	768
Release Institution Security Level	ELMO/Pre-release	4.7%	642	5.2%	155	4.8%	797
	Minimum	6.1%	920	8.2%	414	6.7%	1,334
	Medium**	9.2%	1,131	14.5%	2,077	12.7%	3,208
	Maximum*	9.2%	65	21.6%	773	20.6%	838
Post Release Supervision	Non-supervised**	9.0%	645	18.2%	1,238	15.0%	1,883
	Supervised**	6.5%	2,113	13.1%	2,181	9.9%	4,294
Time Served	Less than 3 yrs**	7.4%	1,345	16.3%	2,055	12.8%	3,400
	3 to less than 6 yrs**	7.5%	865	13.5%	918	10.6%	1,783
	6 or more yrs**	5.8%	548	11.7%	446	8.5%	994
Governing Offense Type	Drug**	7.0%	800	11.0%	670	8.8%	1,470
	Person**	6.3%	1,182	15.8%	1,583	11.8%	2,765
	Property**	11.0%	290	23.6%	444	18.7%	734
	Sex	8.3%	84	8.9%	270	8.8%	354
	Other Crimes**	6.5%	402	12.8%	452	9.8%	854
Governing Offense	Non-violent**	7.6%	1,492	15.1%	1,566	11.5%	3,058
	Violent**	6.5%	1,266	14.8%	1,853	11.4%	3,119
Race/Ethnicity	White**	6.8%	1073	16.1%	1532	12.2%	2,605
	Black/African American**	6.8%	828	16.3%	860	11.6%	1,688
	Hispanic**	7.7%	821	12.5%	986	10.3%	1,807
	Other^[1]	11.1%	36	4.9%	41	7.8%	77
Age at Release	Less than 35**	7.5%	978	16.6%	1,724	13.3%	2,702
	35 or more**	6.9%	1,780	13.2%	1,695	10.0%	3,475

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

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

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Appendix G: Recidivism 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*	11.1%	2,776	13.3%	1,575	11.9%	4,351
Recidivism Risk Score	High*	13.4%	1,984	16.3%	1,157	14.5%	3,141
	Moderate	6.0%	601	5.7%	318	5.9%	919
	Low	2.2%	185	2.1%	94	2.2%	279
Release Institution Security Level	ELMO/Pre-release	3.8%	314	2.9%	136	3.6%	450
	Minimum	6.5%	618	9.1%	264	7.3%	882
	Medium	11.9%	1,507	14.1%	807	12.7%	2,314
	Maximum	22.6%	337	18.5%	368	20.4%	705
Post Release Supervision	Non-supervised	15.5%	737	16.1%	554	15.7%	1,291
	Supervised *	9.5%	2,039	11.9%	1,021	10.3%	3,060
Time Served	Less than 3 yrs	12.6%	1,210	14.6%	983	13.5%	2,193
	3 to less than 6 yrs	11.0%	937	11.1%	415	11.0%	1,352
	6 or more yrs	8.4%	629	11.3%	177	9.1%	806
Governing Offense Type	Drug	9.7%	545	9.5%	349	9.6%	894
	Person	11.3%	1,377	14.0%	701	12.2%	2,078
	Property	15.0%	293	21.2%	203	17.5%	496
	Sex	7.8%	115	12.1%	91	9.7%	206
	Other Crimes	10.3%	446	10.8%	231	10.5%	677
Governing Offense	Non-violent	11.1%	1,284	12.9%	783	11.8%	2,067
	Violent	11.1%	1,492	13.8%	792	12.0%	2,284
Race/Ethnicity	White	11.7%	995	14.2%	655	12.7%	1,650
	Black/African American*	11.0%	939	15.1%	458	12.3%	1,397
	Hispanic	10.5%	800	10.6%	443	10.5%	1,243
	Other^[1]	11.9%	42	5.3%	19	9.8%	61
Age at Release	Less than 35	12.7%	1,289	14.9%	821	13.6%	2,110
	35 or more	9.7%	1,487	11.7%	754	10.4%	2,241

* denotes $p < .05$

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

Descriptive Analysis of Risk Reduction Programs

Appendix H: Recidivism 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**	10.6%	3,179	13.8%	1,822	11.8%	5,001
Recidivism Risk Score	High**	13.1%	2,252	17.1%	1,325	14.5%	3,577
	Moderate	4.9%	675	6.6%	381	5.5%	1,056
	Low	2.9%	244	0.0%	109	2.0%	353
Release Institution Security Level	ELMO/Pre-release	3.6%	358	5.6%	214	4.4%	572
	Minimum	6.6%	743	8.4%	334	7.1%	1,077
	Medium	12.2%	1,732	14.1%	859	12.8%	2,591
	Maximum	18.8%	346	21.9%	415	20.5%	761
Post Release Supervision	Non-supervised**	13.9%	841	18.9%	651	16.1%	1,492
	Supervised	9.5%	2,338	11.0%	1,171	10.0%	3,509
Time Served	Less than 3 yrs	12.0%	1,395	14.3%	1,180	13.0%	2,575
	3 to less than 6 yrs*	10.0%	1,091	14.1%	453	11.2%	1,544
	6 or more yrs	8.9%	693	10.1%	189	9.2%	882
Governing Offense Type	Drug	8.2%	582	11.8%	432	9.8%	1,014
	Person**	10.1%	1,659	15.5%	795	11.8%	2,454
	Property	20.7%	329	19.9%	206	20.4%	535
	Sex	5.9%	118	10.2%	108	8.0%	226
	Other Crimes	9.8%	491	9.3%	281	9.6%	772
Governing Offense	Non-violent	11.7%	1,402	12.8%	919	12.1%	2,321
	Violent**	9.8%	1,777	14.8%	903	11.5%	2,680
Race/Ethnicity	White**	11.4%	1,184	15.6%	761	13.1%	1,945
	Black/African American*	10.3%	1,048	14.3%	516	11.6%	1,564
	Hispanic	10.0%	898	11.3%	523	10.5%	1,421
	Other^[1]	10.2%	49	0.0%	22	7.0%	71
Age at Release	Less than 35**	12.1%	1,434	16.1%	902	13.7%	2,336
	35 or more	9.4%	1,745	11.6%	920	10.2%	2,665

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

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

Descriptive Analysis of Risk Reduction Programs

Appendix I: Recidivism 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*	9.0%	791	11.4%	2,718	10.9%	3,509
Recidivism Risk Score	High	13.8%	457	15.3%	1,662	15.0%	2,119
	Moderate	4.1%	148	5.8%	485	5.4%	633
	Low	1.1%	178	3.4%	503	2.8%	681
Release Institution Security Level	ELMO/Pre-release	3.9%	103	3.8%	366	3.8%	469
	Minimum	6.3%	189	6.1%	587	6.2%	776
	Medium	9.9%	414	13.0%	1,347	12.3%	1,761
	Maximum	16.5%	85	20.6%	418	19.9%	503
Post Release Supervision	Non-supervised	11.9%	194	13.6%	929	13.3%	1,123
	Supervised	8.0%	597	10.3%	1,789	9.8%	2,386
Time Served	Less than 3 yrs	15.9%	170	12.4%	1,742	12.7%	1,912
	3 to less than 6 yrs	10.0%	279	9.9%	674	10.0%	953
	6 or more yrs*	4.7%	342	9.3%	302	6.8%	644
Governing Offense Type	Drug	9.9%	131	7.7%	827	8.0%	958
	Person*	9.4%	426	14.2%	1,023	12.8%	1,449
	Property	11.1%	36	18.4%	294	17.6%	330
	Sex	2.9%	102	7.9%	190	6.2%	292
	Other Crimes	11.5%	96	8.6%	384	9.2%	480
Governing Offense	Non-violent	10.6%	263	10.0%	1,505	10.1%	1,768
	Violent**	8.1%	528	13.2%	1,213	11.7%	1,741
Race/Ethnicity	White	9.5%	220	12.9%	808	12.2%	1,028
	Black/African American	9.7%	248	13.7%	679	12.6%	927
	Hispanic	8.7%	298	9.5%	1,193	9.3%	1,491
	Other^[1]	0.0%	25	2.6%	38	1.6%	63
Age at Release	Less than 35	12.5%	352	14.1%	1,184	13.7%	1,536
	35 or more*	6.2%	439	9.4%	1,534	8.7%	1,973

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

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

Descriptive Analysis of Risk Reduction Programs

Appendix J: Recidivism 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**	5.2%	785	11.6%	2,617	10.1%	3,402
Recidivism Risk Score	High*	8.7%	390	14.7%	1,788	13.6%	2,178
	Moderate	3.8%	160	6.2%	515	5.6%	675
	Low	0.4%	232	2.6%	307	1.7%	539
Release Institution Security Level	ELMO/Pre-release	3.7%	108	5.3%	302	4.9%	410
	Minimum	3.5%	170	6.7%	507	5.9%	677
	Medium**	5.0%	462	12.7%	1,446	10.8%	1,908
	Maximum	17.8%	45	19.1%	362	18.9%	407
Post Release Supervision	Non-supervised**	5.7%	175	14.8%	765	13.1%	940
	Supervised**	5.1%	610	10.3%	1,852	9.0%	2,462
Time Served	Less than 3 yrs*	6.7%	135	12.8%	1,358	12.3%	1,493
	3 to less than 6 yrs**	5.1%	272	10.8%	824	9.4%	1,096
	6 or more yrs*	4.8%	378	9.2%	435	7.1%	813
Governing Offense Type	Drug	5.0%	100	9.0%	592	8.4%	692
	Person**	5.7%	352	12.1%	1,122	10.6%	1,474
	Property	11.4%	44	18.9%	318	18.0%	362
	Sex	2.9%	208	6.7%	179	4.7%	387
	Other Crimes	6.2%	81	10.3%	406	9.7%	487
Governing Offense	Non-violent*	6.7%	225	11.8%	1,316	11.0%	1,541
	Violent**	4.6%	560	11.4%	1,301	9.3%	1,861
Race/Ethnicity	White**	5.7%	349	12.3%	1203	10.8%	1,552
	Black/African American*	5.8%	259	10.4%	782	9.2%	1,041
	Hispanic**	3.1%	159	11.7%	597	9.9%	756
	Other^[1]	5.6%	18	11.4%	35	9.4%	53
Age at Release	Less than 35**	5.2%	269	12.9%	1169	11.5%	1,438
	35 or more**	5.2%	516	10.5%	1,448	9.1%	1,964

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

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

Descriptive Analysis of Risk Reduction Programs

Appendix K: Recidivism 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	Recidivism*	7.4%	283	11.8%	5,697	11.6%	5,980
Recidivism Risk Score	High	11.0%	155	14.9%	3,795	14.7%	3,950
	Moderate	5.6%	72	5.9%	1,196	5.8%	1,268
	Low	0.0%	56	3.2%	630	2.9%	686
Release Institution Security Level	ELMO/Pre-release	0.0%	4	5.1%	747	5.1%	751
	Minimum	3.6%	28	7.2%	1,227	7.1%	1,255
	Medium*	8.1%	247	12.9%	2,883	12.5%	3,130
	Maximum	0.0%	4	20.5%	840	20.4%	844
Post Release Supervision	Non-supervised	12.2%	74	15.2%	1,740	15.0%	1,814
	Supervised*	5.7%	209	10.3%	3,957	10.0%	4,166
Time Served	Less than 3 yrs	12.5%	112	12.8%	3,251	12.8%	3,363
	3 to less than 6 yrs*	3.1%	97	11.1%	1,618	10.7%	1,715
	6 or more yrs	5.4%	74	9.1%	828	8.8%	902
Governing Offense Type	Drug	8.0%	25	9.0%	1,395	8.9%	1,420
	Person	6.3%	80	12.1%	2,582	11.9%	2,662
	Property	22.2%	18	18.5%	691	18.6%	709
	Sex	6.7%	134	9.5%	222	8.4%	356
	Other Crimes	3.8%	26	10.3%	807	10.1%	833
Governing Offense	Non-violent	10.1%	69	11.6%	2,893	11.6%	2,962
	Violent*	6.5%	214	11.9%	2,804	11.5%	3,018
Race/Ethnicity	White	7.7%	143	12.6%	2,414	12.3%	2,557
	Black/African American	11.1%	72	11.8%	1,537	11.7%	1,609
	Hispanic	3.4%	58	10.7%	1,681	10.5%	1,739
	Other^[1]	0.0%	10	9.2%	65	8.0%	75
Age at Release	Less than 35*	2.3%	88	13.7%	2,548	13.4%	2,636
	35 or more	9.7%	195	10.2%	3,149	10.1%	3,344

* denotes $p < .05$

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