

Massachusetts Department of Correction
One-Year Recidivism Rates of Men and
Women Released 2017 – 2020: 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 MCI-Concord. 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, a program recommendation is 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,

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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. 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

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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, 2020, 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 three 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, 2020, the overall one-year recidivism rate was 11.0% for men and 14.2% for women.
- Women who released and participated in Pathway Programming had a significantly lower recidivism rate when completing a minimum of 26 weeks of Pathway Programming. The recidivism rate was 4.4% for women who completed a minimum of 26 weeks of Pathway Programming compared to 15.3% for those who participated for less than 26 weeks.
- Women who were eligible for Academic Education and earned a High School equivalency had a recidivism rate of 6.9% compared to 14.5% for those who did not earn this equivalency.
- The recidivism rate for women released who were eligible for vocational programming and completed the certification was 0.0%, compared to 10.0% 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 7.6% compared to 15.4% 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 10.9% compared to 14.5% 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 11.5% compared to 14.2% 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 6.2% 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 indicates that completion of the CRA was driving the lower recidivism rate among male releases. This is evidenced by incarcerated individuals who completed Violence Reduction,

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, 2020, 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.

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 deterring 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, 2020, 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.

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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.

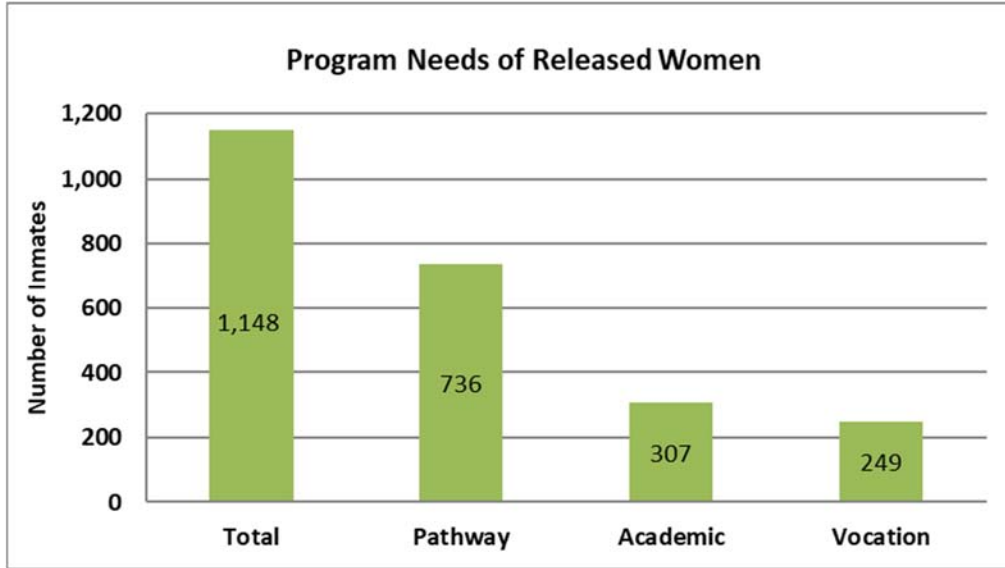
Methodology for Recidivism Analysis

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 2020 whose first release occurred during the time-period. Overall, there were 5,641 men released and 1,148 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

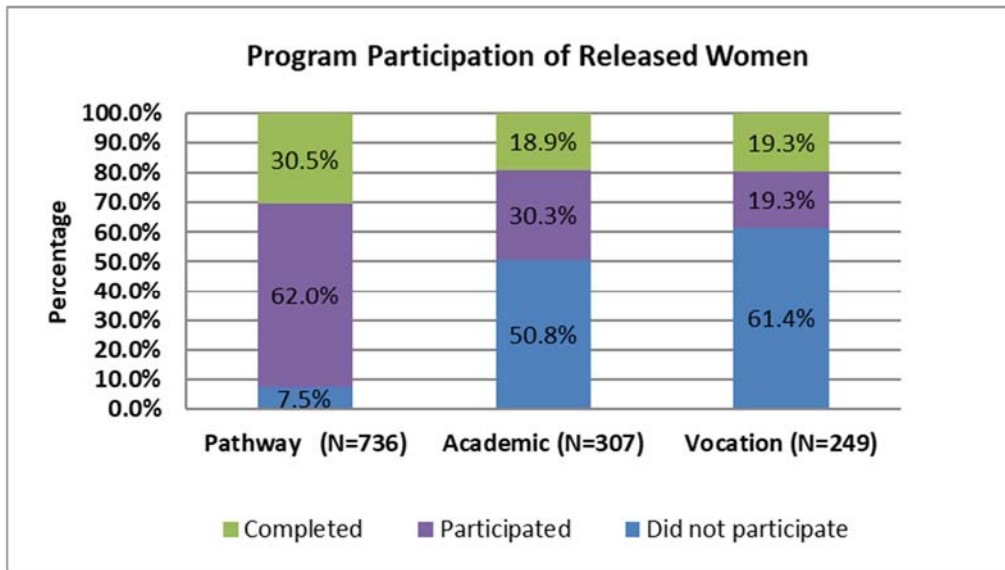
Criminogenic Need Programs

Graph 1



Of the 1,148 incarcerated women released from the MA DOC between 2017 and 2020, 736 (64.1%) were identified as eligible for Pathway Programming, 307 (26.7%) were determined to have an academic program need, and 249 (21.7%) were recognized as having a vocational program need. Please note the number of incarcerated women with an academic need reported here is dramatically lower than the number reported last year because this year’s report recategorized 384 individuals who served less than 90 days as having no academic need. (Graph 1)

Graph 2

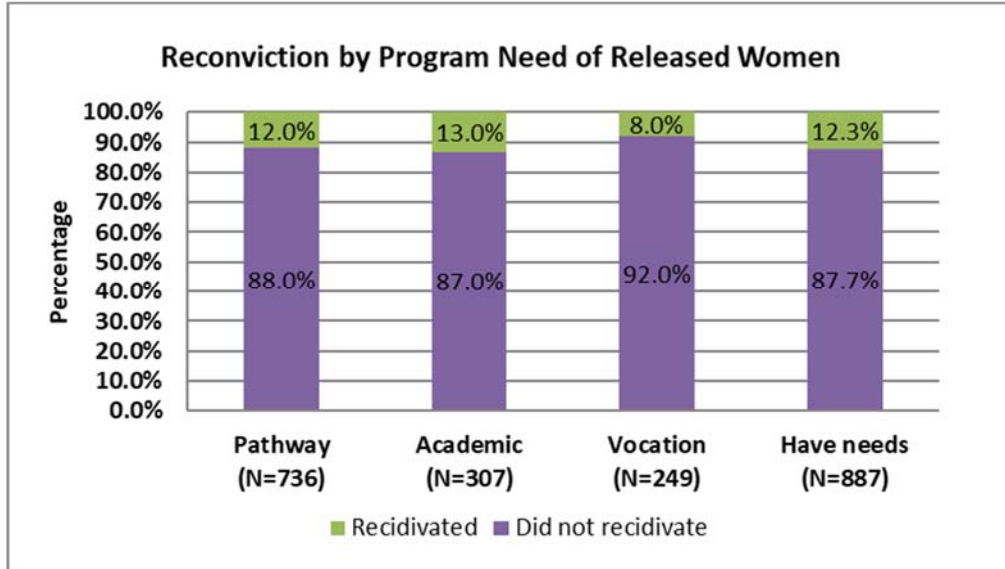


For women eligible for Pathway Programming, 30.5% completed a Pathway Program, 62.0% participated but did not complete 26 weeks of the program, and the remaining 7.5% did not participate in the program. In contrast, among incarcerated individuals with an academic need,

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18.9% completed the program and earned their High School Equivalency (HSE), 30.3% participated in the program but did not earn an HSE, and 50.8% were not involved in the program. For the incarcerated individuals with a vocation need, 19.3% completed the program, 19.3% participated in the program, and the remaining 61.4% 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 13.0%, followed by incarcerated individuals eligible for Pathway programming at 12.0%, and for vocation at the lowest rate of 8.0%. The rate of recidivism for all incarcerated individuals released from 2017 to 2020 who had a program need was at 12.3%. (Graph 3)

Table 1

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

Program Name	Need Met		Need Not Met		TOTAL	
	PCT	N	PCT	N	PCT	N
Pathway Program**	4.4%	225	15.3%	511	12.0%	736
Academic Program	6.9%	58	14.5%	249	13.0%	307
Vocational Program*	0.0%	48	10.0%	201	8.0%	249
GPS Program	10.9%	128	8.9%	179	9.8%	307

* 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 Pathway programming, 4.4% recidivated if they completed 26 weeks of Pathway programming compared with 15.3% of the incarcerated individuals who did not complete 26 weeks of programming. The difference between the two need met categories was 0.0% vs. 10.0% for vocational programming, and 6.9% vs. 14.5% for academic program. It should be noted that the difference identified in the academic program is not statistically significant. However, the data flow found in this program suggests that program completion could reduce the rate of reconviction as well.

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, 8.9% of them recidivated if they did not complete the program compared with 10.9% 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 assessed² 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 (31.6%) than the individuals who did not complete the program (9.3%).

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
Pathway Program**	4.4%	225	14.9%	456	18.2%	55	12.0%	736
Academic Program	6.9%	58	12.9%	93	15.4%	156	13.0%	307
Vocational Program	0.0%	48	8.3%	48	10.5%	153	8.0%	249
GPS Program	10.9%	128	7.3%	123	12.5%	56	9.8%	307

** 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 a statistically significant difference is only found in the Pathway program, the data flow of the other three 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 14.9% vs. 18.2% for the Pathway program, 12.9% vs. 15.4% for academic programming, 8.3% vs. 10.5% for vocational programming, and 7.3% vs. 12.5% for GPS program. In particular, the recidivism rate for the incarcerated individuals who participated in the program but did not complete were shown to have the lowest recidivism rate, at 7.3%, followed by those who completed the program (10.9%) and who did not participate in the program (12.5%), suggesting participation in or completion of a GPS program could reduce the rate of recidivism than those who did not participate.

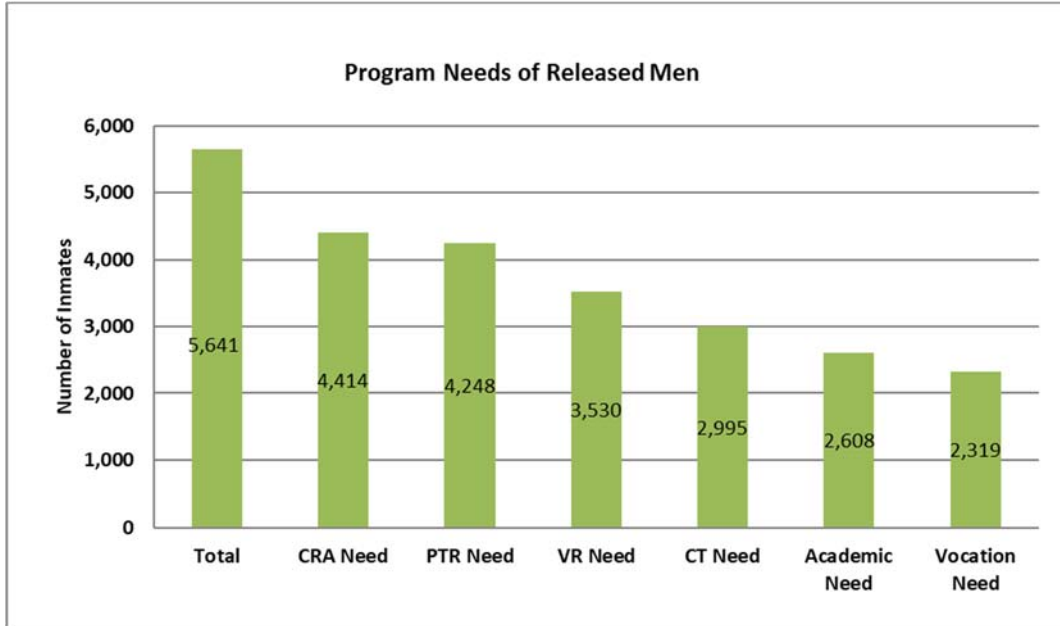
In short, an investigation into the association between program completion and the rate of one-year recidivism shows that program completion was associated with a lower rate of recidivism for three of the four programs studied, especially for the Pathway program. It also suggests that participation in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

² Due to shorter sentences of less than 90 days, 68% of those who did not complete the program and 17% of those who did complete the program were not administered the COMPAS Risk Assessment.

Men Data Findings

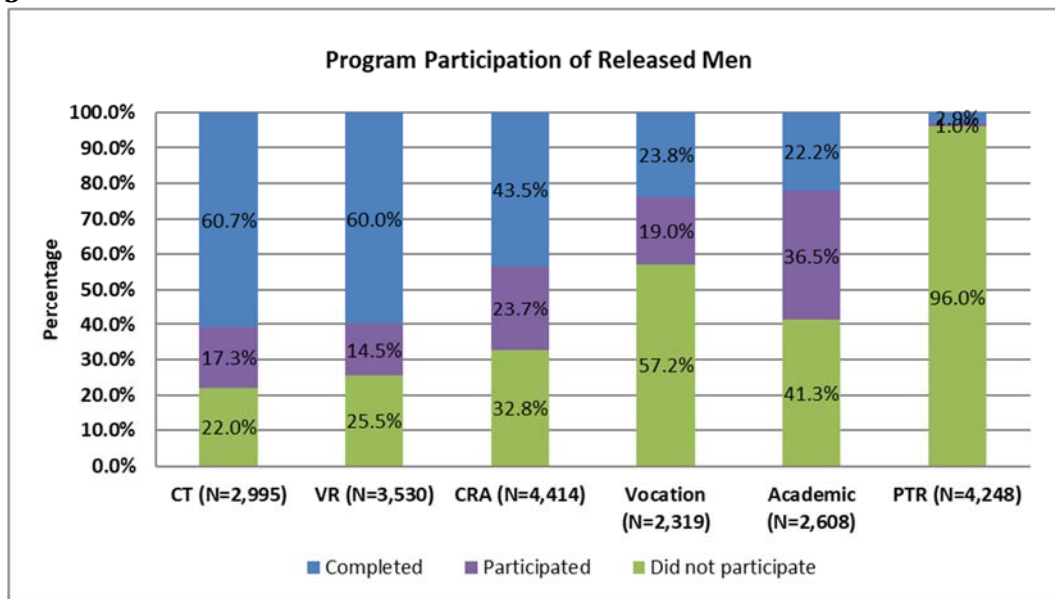
Criminogenic Need Programs

Graph 4



The MA DOC released a total of 5,641 incarcerated men to the community via parole or expiration of sentence between 2017 and 2020. Most of the released incarcerated individuals were identified as having a Correctional Recovery Academy (CRA) need (78.2%), and/or Pathway to Recovery (PTR) need (75.3%), and/or Violence Reduction (VR) need (62.6%), and/or a Criminal Thinking (CT) need (53.1%). Less than one-half of the released incarcerated individuals were determined to have an academic education need (46.2%), and/or a vocational program need (41.1%). (Graph 4)

Graph 5

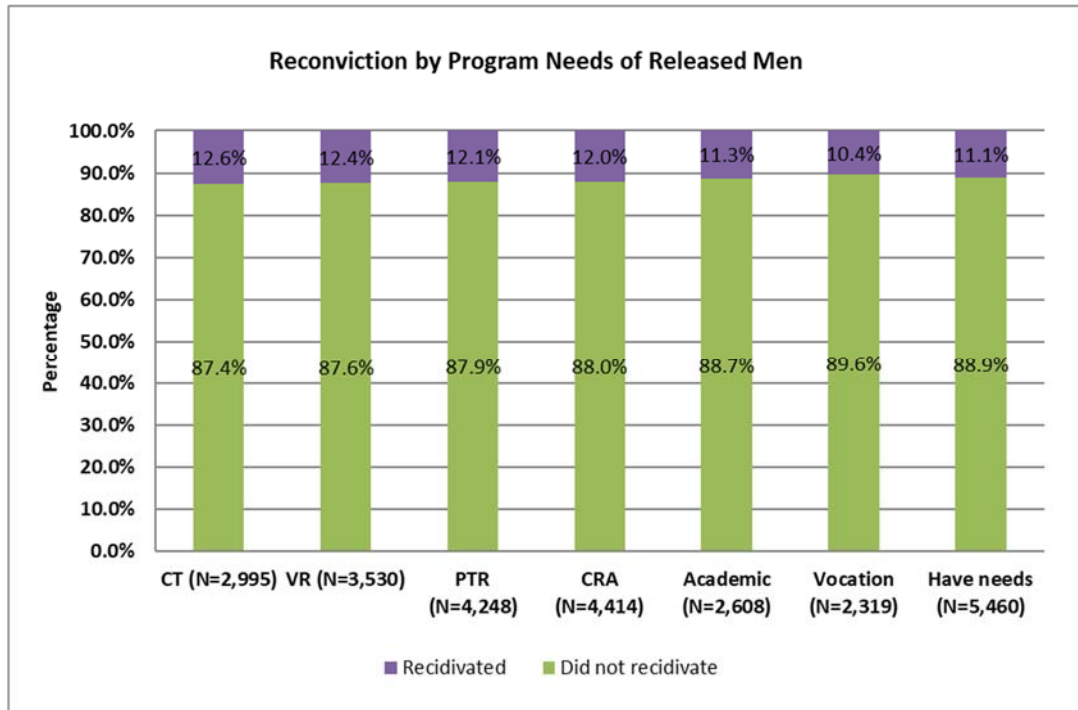


Most incarcerated individuals with a CT need or a VR need completed the corresponding CT program (60.7%) and the VR program (60.0%). Less than one in two incarcerated individuals completed the CRA program (43.5%), which was the program with the largest need. The rate of program completion dropped substantially to 23.8% for vocational programs, 22.2% for academic education program and 2.9% 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 36.5% followed by CRA (23.7%), vocation (19.0%), CT (17.3%), VR (14.5%) and PTR (1.0%) programs.

The remaining incarcerated individuals with needs did not participate in the corresponding program, ranging from the highest non-participation rate of 96.0% for the PTR program³ to the lowest rate of 22.0% for the CT program. (Graph 5)

Graph 6



Graph 6 shows the rate of one-year recidivism for incarcerated individuals in different need groups. Incarcerated individuals with a CT need had the highest recidivism rate of 12.6%, followed by incarcerated individuals with a VR need (12.4%), a PTR need (12.1%), a CRA need (12.0%), an academic need (11.3%), and a vocation need (10.4%). The overall rate of recidivism for incarcerated individuals with a need was 11.1%.

³ 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.

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) **	7.6%	1,920	15.4%	2,494	12.0%	4,414
Pathway to Recovery (PTR)	11.3%	124	12.1%	4,124	12.1%	4,248
Criminal Addictive Thinking (CT)*	11.5%	1,817	14.2%	1,178	12.6%	2,995
Violence Reduction (VR) **	10.9%	2,117	14.5%	1,413	12.4%	3,530
Academic Program	9.8%	579	11.7%	2,029	11.3%	2,608
Vocation Program**	6.2%	551	11.8%	1,768	10.4%	2,319

* 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 CRA, CT, VR and vocation programs. Among incarcerated men eligible for the CRA, 7.6% recidivated if they had completed the CRA compared with 15.4% of the incarcerated individuals whose need was not met. The difference between the two need met categories was 11.5% vs. 14.2% for the CT program, 10.9% vs. 14.5% for the VR program, and 6.2% vs. 11.8% for the vocation program. Incarcerated individuals who met their PTR and academic program needs were 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 10 for the vocation program (Appendix I), 9 for the VR program (Appendix G), and 3 for the CT program (Appendix F). 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) **	7.6%	1,920	14.4%	1,046	16.0%	1,448	12.0%	4,414
Pathway to Recovery (PTR)	11.3%	124	18.2%	44	12.0%	4,080	12.1%	4,248
Criminal Addictive Thinking (CT)*	11.5%	1,817	16.4%	519	12.4%	659	12.6%	2,995
Violence Reduction (VR) **	10.9%	2,117	16.4%	513	13.4%	900	12.4%	3,530
Academic Program	9.8%	579	13.2%	952	10.4%	1,077	11.3%	2,608
Vocation Program**	6.2%	551	12.2%	441	11.6%	1,327	10.4%	2,319

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

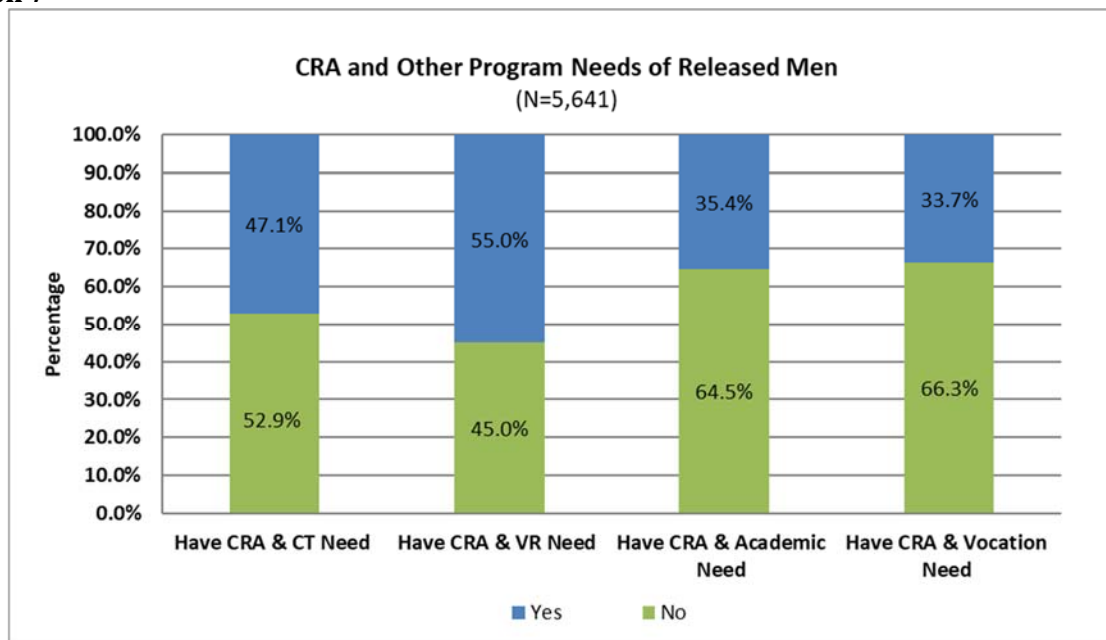
To break down the “Need Not Met” category in Table 3 into participation and non-participation groups, Table 4 highlights the importance of meeting program needs to lower the rate of recidivism. In five out of six programs, participating in but not completing a program was not associated with a lower rate of recidivism when compared to incarcerated individuals in the non-participation groups.

Descriptive Analysis of Risk Reduction Programs

The CRA program was the only exception where 14.4% of incarcerated individuals in the participation group recidivated compared with 16.0% 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 VR need, a CT need, an academic need, or a vacation need. As shown, most incarcerated individuals were identified as having both a CRA and a VR need (55.0%), close to one-half of incarcerated individuals as having a combined CRA and CT need (47.1%), and about one-third of incarcerated individuals as having both a CRA and an academic need (35.4%), and both a CRA need and a vocation need (33.7%). It should be noted that the findings shown in Graph 10 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**	6.8%	811	7.8%	320	16.3%	789	18.0%	735	12.8%	2,655
Have Need for both CRA and VR**	7.6%	937	7.1%	435	15.0%	917	18.9%	813	12.7%	3,102
Have Need for both CRA and Academic**	8.6%	187	6.7%	581	14.7%	245	15.1%	985	12.0%	1,998
Have Need for both CRA and Vocation**	6.4%	202	7.6%	720	9.6%	177	17.2%	801	11.7%	1,900

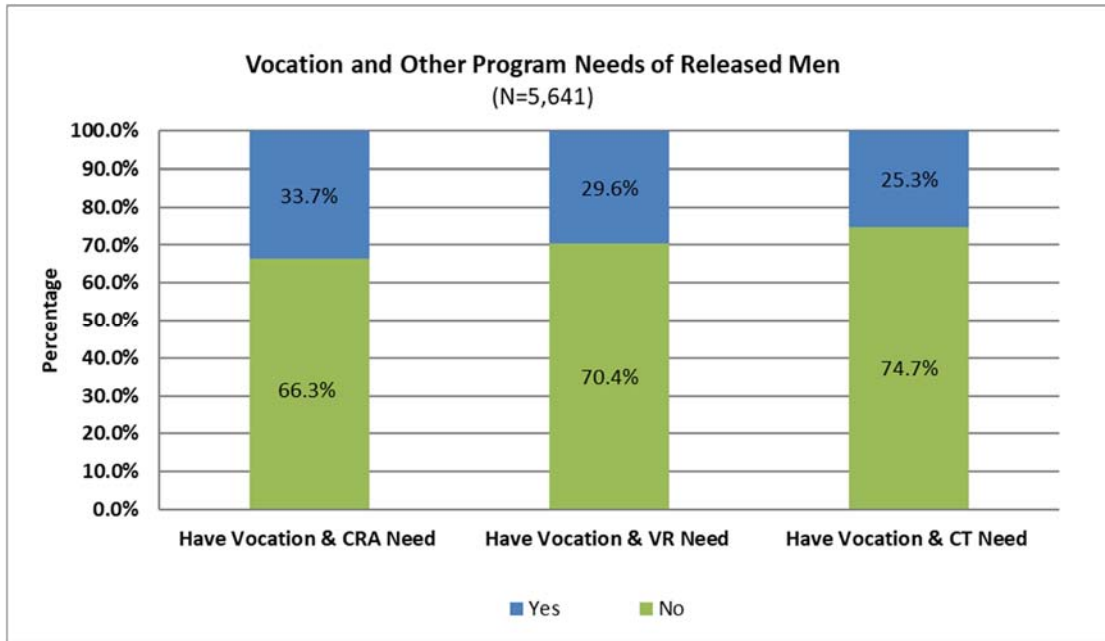
** denotes p <.01

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 or CT need was associated with the lowest rate of recidivism of 6.4% and 6.8% respectively 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 6.7% and 7.1% 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.

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 3.9% and 7.6%, 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 VR need, a CT need, and a CRA need. As shown, one-third of incarcerated individuals were identified as having both a vocation and a CRA need (33.7%), and about one-quarter of incarcerated individuals as having a combined vocation and VR need (29.6%), or a combined vocation and CT need (25.3%).

Table 6

One-Year Recidivism Rates of Released Men 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 Both Vocation & CRA**	6.4%	202	9.6%	177	7.6%	720	17.2%	801	11.7%	1,900
Have Need for Both Vocation & VR**	6.6%	258	12.9%	85	11.6%	818	13.6%	509	11.5%	1,670
Have Need for Both Vocation & CT**	7.6%	223	6.8%	73	11.7%	712	15.8%	417	12.0%	1,425

** 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 6.4% and 6.6%, 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 6.8%. Meeting both vocation and CT need was identified with the second lowest rate of recidivism of 7.6%.

Summary

In summary, most incarcerated women released from the MA DOC between 2017 and 2020 had a Pathway Programming need. About a quarter of them had an academic or GPS program need, and about one in five had a vocational program need. Of the incarcerated individuals with a program need, two out of five individuals completed GPS program, 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 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 2020 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 need an academic or vocation program. When it comes to meeting these needs, substantial differences existed. About one-half of the incarcerated individuals met their CT, VR, and CRA program needs, about one in four of them met their vocation and academic program needs, and only a handful of them met their PTR program need.

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. Though not a subject of discussion for this report, MA DOC's regression analysis using program completion together with other predictor variables including total risk score, release security level, supervision after release, years in incarceration, crime type, race, and age at the time of release confirmed that completion of CRA, VR and vocation programs had an impact on lowering the rate of recidivism when compared with incarcerated individuals who did not complete these programs.

Descriptive Analysis of Risk Reduction Programs

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	Recidivism**	4.4%	225	15.3%	511	12.0%	736
Recidivism Risk Score	High*	4.1%	74	18.8%	255	15.5%	329
	Moderate	2.2%	45	8.3%	96	6.4%	141
	Low	1.1%	95	4.2%	120	2.8%	215
Release Institution Security Level	ELMO/Pre-release	5.6%	89	9.5%	21	6.4%	110
	Minimum*	1.3%	80	13.3%	248	10.4%	328
	Medium*	7.1%	56	17.8%	242	15.8%	298
Post Release Supervision	Non-supervised*	8.9%	45	22.4%	219	20.1%	264
	Supervised*	3.3%	180	9.9%	292	7.4%	472
Time Served	Less than 3 yrs*	5.9%	153	15.4%	495	13.1%	648
	3 to less than 6 yrs	1.9%	53	15.4%	13	4.5%	66
	6 or more yrs	0.0%	19	0.0%	3	0.0%	22
Governing Offense Type	Drug	2.0%	49	9.4%	96	6.9%	145
	Person*	4.6%	108	13.4%	149	9.7%	257
	Property*	7.9%	38	23.6%	157	20.5%	195
	Sex	0.0%	9	0.0%	8	0.0%	17
	Other Crimes	4.8%	21	11.9%	101	10.7%	122
Governing Offense	Non-violent*	4.6%	108	16.4%	354	13.6%	462
	Violent*	4.3%	117	12.7%	157	9.1%	274
Race/Ethnicity	White**	2.9%	140	15.9%	389	12.5%	529
	Black/African American	8.1%	37	18.9%	53	14.4%	90
	Hispanic	0.0%	24	5.6%	36	3.3%	60
	Other^[1]	12.5%	24	12.1%	33	12.3%	57
Age at Release	Less than 35*	4.6%	87	16.2%	259	13.3%	346
	35 or more*	4.3%	138	14.3%	252	10.8%	390

* 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 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	6.9%	58	14.5%	249	13.0%	307
Recidivism Risk Score	High	0.0%	28	16.5%	103	13.0%	131
	Moderate	7.7%	13	10.9%	46	10.2%	59
	Low	0.0%	8	3.0%	67	2.7%	75
Release Institution Security Level	ELMO/Pre-release	11.1%	9	3.4%	29	5.3%	38
	Minimum	4.2%	24	11.0%	100	9.7%	124
	Medium	8.0%	25	20.0%	120	17.9%	145
Post Release Supervision	Non-supervised*	5.9%	17	24.6%	114	22.1%	131
	Supervised*	7.3%	41	5.9%	135	6.3%	176
Time Served	Less than 3 yrs	9.5%	42	15.2%	231	14.3%	273
	3 to less than 6 yrs	0.0%	12	6.3%	16	3.6%	28
	6 or more yrs	0.0%	4	0.0%	2	0.0%	6
Governing Offense Type	Drug	7.1%	14	8.2%	61	8.0%	75
	Person	9.4%	32	15.2%	79	13.5%	111
	Property	0.0%	6	18.0%	61	16.4%	67
	Sex	0.0%	1	0.0%	3	0.0%	4
	Other Crimes	0.0%	5	17.8%	45	16.0%	50
Governing Offense	Non-violent	4.0%	25	14.4%	167	13.0%	192
	Violent	9.1%	33	14.6%	82	13.0%	115
Race/Ethnicity	White	8.3%	36	15.8%	152	14.4%	188
	Black/African American	0.0%	9	16.7%	36	13.3%	45
	Hispanic	0.0%	4	6.3%	32	5.6%	36
	Other^[1]	11.1%	9	13.8%	29	13.2%	38
Age at Release	Less than 35	8.3%	36	18.8%	112	16.2%	148
	35 or more	4.5%	22	10.9%	137	10.1%	159

* 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 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%	48	10.0%	201	8.0%	249
Recidivism Risk Score	High	0.0%	20	15.5%	116	13.2%	136
	Moderate	0.0%	13	3.1%	32	2.6%	39
	Low	0.0%	19	0.0%	45	0.0%	64
Release Institution Security Level	ELMO/Pre-release	0.0%	13	7.1%	28	4.9%	41
	Minimum	0.0%	18	6.8%	73	5.5%	91
	Medium	0.0%	17	13.0%	100	11.1%	117
Post Release Supervision	Non-supervised	0.0%	7	16.2%	74	14.8%	81
	Supervised*	0.0%	41	6.3%	127	4.8%	168
Time Served	Less than 3 yrs	0.0%	15	10.8%	176	9.9%	191
	3 to less than 6 yrs	0.0%	24	5.6%	18	2.4%	42
	6 or more yrs	0.0%	9	0.0%	7	0.0%	16
Governing Offense Type	Drug	0.0%	5	6.3%	32	5.4%	37
	Person	0.0%	32	8.2%	97	6.2%	129
	Property	0.0%	3	17.6%	51	16.7%	54
	Sex	0.0%	6	0.0%	6	0.0%	12
	Other Crimes	0.0%	2	6.7%	15	5.9%	17
Governing Offense	Non-violent	0.0%	10	12.2%	98	11.1%	108
	Violent	0.0%	38	7.8%	103	5.7%	141
Race/Ethnicity	White	0.0%	24	9.3%	150	8.0%	174
	Black/African American	0.0%	11	12.0%	25	8.3%	36
	Hispanic	0.0%	5	7.7%	13	5.6%	18
	Other^[1]	0.0%	8	15.4%	13	9.5%	21
Age at Release	Less than 35	0.0%	25	8.9%	101	7.1%	126
	35 or more	0.0%	23	11.0%	100	8.9%	123

* 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 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	10.9%	128	8.9%	179	9.8%	307
Recidivism Risk Score	High	8.7%	69	10.7%	28	9.3%	97
	Moderate	5.0%	20	8.3%	12	6.3%	32
	Low	5.0%	20	4.8%	21	4.9%	41
Release Institution Security Level	ELMO/Pre-release	0.0%	4	0.0%	4	0.0%	8
	Minimum	0.0%	34	11.9%	59	7.5%	93
	Medium	15.6%	90	7.8%	116	11.2%	206
Post Release Supervision	Non-supervised*	20.8%	53	7.9%	89	12.7%	142
	Supervised	4.0%	75	10.0%	90	7.3%	165
Time Served	Less than 3 yrs	10.8%	120	9.1%	176	9.8%	296
	3 to less than 6 yrs	16.7%	6	0.0%	2	12.5%	8
	6 or more yrs	0.0%	2	0.0%	1	0.0%	3
Governing Offense Type	Drug	15.8%	19	9.5%	42	11.5%	61
	Person	4.1%	49	5.9%	34	4.8%	83
	Property	14.8%	27	10.6%	47	12.2%	74
	Sex	0.0%	1	0.0%	2	0.0%	3
	Other Crimes	15.6%	32	9.3%	54	11.6%	86
Governing Offense	Non-violent	15.4%	78	9.8%	143	11.8%	221
	Violent	4.0%	50	5.6%	36	4.7%	86
Race/Ethnicity	White	12.0%	92	9.1%	143	10.2%	235
	Black/African American	7.1%	14	11.8%	17	9.7%	31
	Hispanic	0.0%	14	8.3%	12	3.8%	26
	Other^[1]	25.0%	8	0.0%	7	13.3%	15
Age at Release	Less than 35	9.7%	72	12.1%	91	11.0%	163
	35 or more	12.5%	56	5.7%	88	8.3%	144

* 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 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**	7.6%	1,920	15.4%	2,494	12.0%	4,414
Recidivism Risk Score	High**	9.9%	1,157	19.1%	1,729	15.5%	2,886
	Moderate*	4.2%	471	7.5%	492	5.9%	963
	Low	2.8%	286	3.4%	263	3.1%	549
Release Institution Security Level	ELMO/Pre-release	5.0%	542	5.2%	135	5.0%	677
	Minimum	6.6%	577	8.3%	303	7.2%	880
	Medium**	10.1%	751	15.1%	1,479	13.5%	2,230
	Maximum*	10.0%	50	22.0%	577	21.1%	627
Post Release Supervision	Non-supervised**	9.0%	558	17.6%	981	14.5%	1,539
	Supervised**	7.0%	1,284	13.9%	1,469	10.7%	2,753
Time Served	Less than 3 yrs**	7.9%	948	16.4%	1,533	13.1%	2,481
	3 to less than 6 yrs**	8.3%	613	14.3%	663	11.4%	1,276
	6 or more yrs*	5.6%	359	12.4%	298	8.7%	657
Governing Offense Type	Drug*	6.7%	584	10.8%	520	8.6%	1,104
	Person**	7.4%	784	16.2%	1,141	12.6%	1,925
	Property**	12.0%	217	23.8%	344	19.3%	561
	Sex	9.8%	61	11.3%	168	10.9%	229
	Other Crimes*	6.2%	274	12.8%	321	9.7%	595
Governing Offense	Non-violent**	7.6%	1,075	15.1%	1,185	11.5%	2,260
	Violent**	7.6%	845	15.6%	1,309	12.4%	2,154
Race/Ethnicity	White**	8.2%	758	16.4%	1,115	13.1%	1,873
	Black/African American**	6.7%	582	17.1%	633	12.1%	1,215
	Hispanic*	7.7%	556	12.6%	721	10.5%	1,277
	Other^[1]	8.3%	24	4.0%	25	6.1%	49
Age at Release	Less than 35**	7.9%	675	16.6%	1,263	13.6%	1,938
	35 or more**	7.5%	1,245	14.1%	1,231	10.7%	2,476

* 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 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*	11.5%	1,817	14.2%	1,178	12.6%	2,995
Recidivism Risk Score	High*	13.9%	1,314	17.5%	868	15.4%	2,182
	Moderate	5.4%	386	5.4%	242	5.4%	628
	Low	2.6%	115	1.5%	65	2.2%	180
Release Institution Security Level	ELMO/Pre-release	3.6%	249	3.2%	124	3.5%	373
	Minimum	6.7%	330	8.3%	192	7.3%	522
	Medium*	12.4%	1,002	16.0%	564	13.7%	1,566
Post Release Supervision	Maximum	22.9%	236	19.1%	298	20.8%	534
	Non-supervised	14.3%	594	16.7%	443	15.3%	1,037
Time Served	Supervised	10.0%	1,167	12.7%	717	11.0%	1,884
	Less than 3 yrs	12.6%	849	15.7%	714	14.0%	1,563
	3 to less than 6 yrs	12.0%	584	12.3%	334	12.1%	918
Governing Offense Type	6 or more yrs	8.3%	384	10.8%	130	8.9%	514
	Drug	10.4%	385	9.3%	269	9.9%	654
	Person	12.3%	881	15.5%	515	13.5%	1,396
	Property	14.9%	194	20.6%	160	17.5%	354
	Sex	9.6%	73	14.3%	56	11.6%	129
Governing Offense	Other Crimes	8.8%	284	11.8%	178	10.0%	462
	Non-violent	10.9%	863	13.0%	607	11.8%	1,470
Race/Ethnicity	Violent	12.1%	954	15.4%	571	13.3%	1,525
	White	12.8%	625	14.7%	498	13.6%	1,123
	Black/African American*	11.0%	648	17.0%	330	13.0%	978
	Hispanic	10.7%	521	11.0%	337	10.8%	858
Age at Release	Other^[1]	8.7%	23	7.7%	13	8.3%	36
	Less than 35	12.5%	854	15.8%	622	13.9%	1,476
	35 or more	10.6%	963	12.4%	556	11.3%	1,519

* 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 G: 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	Recidivism*	10.9%	2,117	14.5%	1,413	12.4%	3,530
Recidivism Risk Score	High*	13.5%	1,513	17.9%	1,023	15.3%	2,536
	Moderate	3.8%	445	6.7%	313	5.0%	758
	Low	3.2%	154	0.0%	74	2.2%	228
Release Institution Security Level	ELMO/Pre-release	3.4%	296	5.2%	194	4.1%	490
	Minimum	6.4%	409	9.5%	263	7.6%	672
	Medium*	12.9%	1,167	15.2%	625	13.7%	1,792
	Maximum	18.0%	245	22.7%	331	20.7%	576
Post Release Supervision	Non-supervised*	13.0%	667	18.9%	534	15.7%	1,201
	Supervised	9.8%	1,384	12.2%	855	10.7%	2,239
Time Served	Less than 3 yrs	12.1%	983	14.7%	904	13.4%	1,887
	3 to less than 6 yrs*	10.6%	716	14.9%	369	12.1%	1,085
	6 or more yrs	8.6%	418	12.1%	140	9.5%	558
Governing Offense Type	Drug	8.4%	419	10.9%	349	9.5%	768
	Person**	10.4%	1,050	16.6%	614	12.7%	1,664
	Property	20.8%	240	22.2%	162	21.4%	402
	Sex	6.8%	73	13.7%	73	10.3%	146
	Other Crimes	9.6%	335	8.8%	215	9.3%	550
Governing Offense	Non-violent	11.8%	994	12.8%	726	12.2%	1,720
	Violent**	10.2%	1,123	16.3%	687	12.5%	1,810
Race/Ethnicity	White*	12.1%	787	16.2%	592	13.9%	1,379
	Black/African American*	10.4%	710	15.1%	403	12.1%	1,113
	Hispanic	10.2%	591	11.8%	406	10.8%	997
	Other^[1]	6.9%	29	0.0%	12	4.9%	41
Age at Release	Less than 35*	12.0%	964	16.2%	698	13.8%	1,662
	35 or more	10.0%	1,153	12.9%	715	11.1%	1,868

* 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 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	9.8%	579	11.7%	2,029	11.3%	2,608
Recidivism Risk Score	High	14.7%	347	15.8%	1,247	15.6%	1,594
	Moderate	4.7%	106	5.5%	365	5.3%	471
	Low	0.8%	122	3.0%	366	2.5%	488
Release Institution Security Level	ELMO/Pre-release	4.3%	93	3.9%	308	4.0%	401
	Minimum	6.8%	117	5.9%	426	6.1%	543
	Medium	11.3%	302	13.4%	976	12.9%	1,278
	Maximum	16.4%	67	21.9%	319	21.0%	386
Post Release Supervision	Non-supervised	11.1%	162	13.7%	754	13.2%	916
	Supervised	9.3%	400	10.9%	1,227	10.5%	1,627
Time Served	Less than 3 yrs	15.1%	139	12.4%	1,326	12.7%	1,465
	3 to less than 6 yrs	11.7%	222	10.5%	488	10.8%	710
	6 or more yrs*	4.6%	218	10.2%	215	7.4%	433
Governing Offense Type	Drug	10.2%	108	7.5%	651	7.9%	759
	Person**	10.4%	299	14.4%	741	13.3%	1,040
	Property	9.7%	31	19.8%	227	18.6%	258
	Sex	3.0%	66	9.6%	125	7.3%	191
	Other Crimes	13.3%	75	8.8%	285	9.7%	360
Governing Offense	Non-violent	11.2%	214	10.2%	1,163	10.4%	1,377
	Violent*	9.0%	365	13.7%	866	12.3%	1,231
Race/Ethnicity	White*	10.2%	166	12.6%	609	12.1%	775
	Black/African American*	10.1%	188	15.0%	513	13.7%	701
	Hispanic	10.1%	208	9.5%	885	9.6%	1093
	Other^[1]	0.0%	17	0.0%	22	0.0%	39
Age at Release	Less than 35*	13.3%	270	14.3%	896	14.1%	1,166
	35 or more	6.8%	309	9.7%	1,133	9.1%	1,442

* 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: 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**	6.2%	551	11.8%	1,768	10.4%	2,319
Recidivism Risk Score	High*	10.0%	289	15.0%	1,205	14.1%	1,494
	Moderate	3.8%	104	6.3%	348	5.8%	452
	Low	0.6%	158	1.9%	212	1.4%	370
Release Institution Security Level	ELMO/Pre-release	4.8%	84	5.5%	255	5.3%	339
	Minimum	3.3%	92	5.4%	295	4.9%	387
	Medium**	6.0%	335	13.5%	950	11.5%	1,285
	Maximum	17.5%	40	18.7%	268	18.5%	308
Post Release Supervision	Non-supervised*	6.5%	155	14.4%	597	12.8%	752
	Supervised*	5.2%	364	10.3%	1,131	9.1%	1,495
Time Served	Less than 3 yrs	6.5%	107	12.8%	939	12.1%	1,046
	3 to less than 6 yrs	6.9%	203	11.6%	560	10.4%	763
	6 or more yrs	5.4%	241	8.6%	269	7.1%	510
Governing Offense Type	Drug	7.0%	71	8.3%	422	8.1%	493
	Person*	7.6%	238	12.7%	738	11.5%	976
	Property	9.1%	33	20.0%	225	18.6%	258
	Sex	3.4%	148	8.4%	107	5.5%	255
	Other Crimes	4.9%	61	9.1%	276	8.3%	337
Governing Offense	Non-violent	6.7%	165	11.4%	923	10.7%	1,088
	Violent**	6.0%	386	12.2%	845	10.2%	1,231
Race/Ethnicity	White*	7.1%	252	13.0%	813	11.6%	1,065
	Black/African American	6.2%	178	10.3%	533	9.3%	711
	Hispanic*	4.5%	110	11.0%	399	9.6%	509
	Other^[1]	0.0%	11	13.0%	23	8.8%	34
Age at Release	Less than 35*	5.7%	209	12.5%	792	11.1%	1,001
	35 or more*	6.4%	342	11.2%	976	9.9%	1,318

* 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: 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	11.3%	124	12.1%	4,124	12.1%	4,248
Recidivism Risk Score	High	16.0%	75	15.6%	2,720	15.6%	2,795
	Moderate	6.9%	29	5.6%	895	5.6%	924
	Low	0.0%	20	2.8%	459	2.7%	479
Release Institution Security Level	ELMO/Pre-release	0.0%	1	5.4%	631	5.4%	632
	Minimum	0.0%	6	7.5%	817	7.4%	823
	Medium	12.1%	116	13.3%	2,050	13.2%	2,166
	Maximum	0.0%	1	20.9%	626	20.9%	627
Post Release Supervision	Non-supervised	12.8%	47	14.5%	1,424	14.5%	1,471
	Supervised*	9.9%	71	10.9%	2,575	10.8%	2,646
Time Served	Less than 3 yrs	15.9%	63	13.0%	2,380	13.1%	2,443
	3 to less than 6 yrs	3.3%	30	11.6%	1,190	11.4%	1,220
	6 or more yrs	9.7%	31	9.0%	554	9.1%	585
Governing Offense Type	Drug	20.0%	10	8.7%	1,047	8.8%	1,057
	Person	10.0%	40	12.8%	1,810	12.7%	1,850
	Property	37.5%	8	18.8%	532	19.1%	540
	Sex	8.9%	56	10.7%	169	10.2%	225
	Other Crimes	0.0%	10	10.2%	566	10.1%	576
Governing Offense	Non-violent	17.9%	28	11.6%	2,145	11.7%	2,173
	Violent	9.4%	96	12.6%	1,979	12.4%	2,075
Race/Ethnicity	White	7.6%	66	13.2%	1,776	13.0%	1,842
	Black/African American*	24.1%	29	11.9%	1,116	12.2%	1,145
	Hispanic	7.4%	27	10.8%	1,187	10.7%	1,214
	Other^[1]	0.0%	2	6.7%	45	6.4%	47
Age at Release	Less than 35	5.6%	36	13.8%	1,844	13.6%	1,880
	35 or more	13.6%	88	10.7%	2,280	10.8%	2,368

* denotes $p < .05$

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