



Department of Public Safety and Correctional Services

Office of the Secretary

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STATE OF MARYLAND

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November 1, 2014

The Honorable Edward Kasemeyer
Chairman, Senate Budget and Taxation Committee
3 West, Miller Senate Building
Annapolis, Maryland 21401-1991

The Honorable Norman H. Conway
Chairman, House Committee on Appropriations
Room 121, House Office Building
Annapolis, Maryland 21401-1991

RE: Report on Public Safety Compact

Dear Senator Kasemeyer & Delegate Conway:

According to the language on page 108 of the Joint Chairmen's Report, the Department is required to submit a report on the Public Safety Compact. The language specifically states:

Provided that \$100,000 of this appropriation may not be expended until the Department of Public Safety and Correctional Services submits a report to the budget committees providing continued recidivism data and a cost-benefit analysis of the Public Safety Compact (PSC). The report should also explore other outcome measures for PSC participants relating to their family, substance abuse, and employment status. The report shall be submitted by November 1, 2014, and the budget committees shall have 45 days to review and comment. Funds restricted pending receipt of a report may not be transferred by budget amendment or otherwise to any other purpose and shall revert to the General Fund if the report is not submitted to the budget committees.

A significant amount of data is required in order to fully meet the reporting requirements. Due to the amount of time it takes in collecting and reviewing this information, the Department respectfully requests an extension on the due date of the report until January 15, 2015. I hope that this request meets with your approval.

If I can be of further assistance, please do not hesitate to contact me at 410-339-5005 or Kevin Loeb, Director of Legislative Affairs, at 410-339-5051.

Sincerely,



Gregg L. Hershberger
Secretary

Attachment

- c: Senator Nathaniel McFadden, Vice Chair, Senate Budget and Taxation Committee
- Delegate James Proctor, Vice Chair, House Committee on Appropriations
- Members of the Senate Budget and Taxation Committee
- Members of the House Committee on Appropriations
- Mr. John Griffin, Chief of Staff, Governor's Office
- Ms. Jean Hitchcock, Governor's Chief Legislative and Policy Officer
- Ms. Shanetta Paskel, Governor's Deputy Legislative Officer
- Ms. Hanna Dier, Policy Analyst, Department of Legislative Services
- Mr. Matthew Schmid, Budget Analyst, Department of Budget and Management
- Ms. Chantelle Green, Staff, House Committee on Appropriations
- Mr. Matthew Bennett, Staff, Senate Budget and Taxation Committee
- Ms. Cathy Kramer, Department of Legislative Services
- Ms. Sarah Albert, Department of Legislative Services



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January 15, 2014

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Chairman, Senate Budget and Taxation Committee
3 West, Miller Senate Building
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The Honorable Norman H. Conway
Chairman, House Committee on Appropriations
Room 121, House Office Building
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RE: Report on Public Safety Compact

Dear Senator Kasemeyer & Delegate Conway:

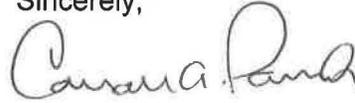
According to the language on page 108 of the Joint Chairmen's Report, the Department is required to submit a report on the Public Safety Compact. The language specifically states:

[P]rovided that \$100,000 of this appropriation may not be expended until the Department of Public Safety and Correctional Services submits a report to the budget committees providing continued recidivism data and a cost-benefit analysis of the Public Safety Compact (PSC). The report should also explore other outcome measures for PSC participants relating to their family, substance abuse, and employment status. The report shall be submitted by November 1, 2014, and the budget committees shall have 45 days to review and comment. Funds restricted pending receipt of a report may not be transferred by budget amendment or otherwise to any other purpose and shall revert to the General Fund if the report is not submitted to the budget committees.

On November 1, 2014 the Department submitted a letter requesting the deadline be extended to January 15, 2015. Choice Research Associated was contracted by Baltimore's Safe & Sound Campaign to conduct an analysis of the Public Safety Compact (PSC). The Department submitted the initial analysis conducted by Choice Research Associates in November 2013. Attached is a brief overview along with a follow-up in-depth analysis conducted by Choice Research Associated that examines the post-release recidivism outcomes for individuals who successfully completed the PSC program ("PSC Participant Outcome Report").

We hope that this report will be informative and helpful to you and your committee members. If the Department can be of further assistance, please do not hesitate to contact me at 410-339-5005 or Kevin Loeb, Director of Legislative Affairs, at 410-339-5051.

Sincerely,



Carroll A. Parrish

c: Mr. John Griffin, Chief of Staff, Governor's Office
Ms. Jean Hitchcok, Governor's Chief Legislative Officer
Ms. Shanetta Paskel, Governor's Deputy Legislative Officer
Ms. Hannah Dier, Policy Analyst, Department of Legislative Services
Mr. Matthew Schmid, Budget Analyst, Dept. of Budget & Management
Ms. Sarah Albert, Department of Legislative Services
Deputy Secretary Patricia Donovan
Acting Deputy Secretary Wayne Webb
Director Kevin C. Loeb, Office of Government, Legislative and Community Affairs



**DEPARTMENT OF PUBLIC SAFETY AND
CORRECTIONAL SERVICES**

Report on Public Safety Compact

January 15, 2015

Governor Martin O'Malley
Lt. Governor Anthony G. Brown
Acting Secretary Carroll Parrish

I. INTRODUCTION

In the 2014 Joint Chairman's Report, in the language on page 108, the Budget Committees made the following request:

[P]rovided that \$100,000 of this appropriation may not be expended until the Department of Public Safety and Correctional Services submits a report to the budget committees providing continued recidivism data and a cost-benefit analysis of the Public Safety Compact (PSC). The report should also explore other outcome measures for PSC participants relating to their family, substance abuse, and employment status. The report shall be submitted by November 1, 2014, and the budget committees shall have 45 days to review and comment. Funds restricted pending receipt of a report may not be transferred by budget amendment or otherwise to any other purpose and shall revert to the General Fund if the report is not submitted to the budget committees.

Explanation: *The Department of Public Safety and Correctional Services (DPSCS) has been engaged in the Public Safety Compact (PSC) for nearly five years. A preliminary analysis of PSC participants reveals positive outcomes with regard to recidivism. As the department considers whether to continue providing these services under the existing model, it would be beneficial to continue to monitor recidivism outcomes and have a better understanding of how participation might impact other social factors. A cost-benefit analysis would also provide valuable assessment of the program from a fiscal perspective.*

II. OVERVIEW

Choice Research Associates was contracted by Baltimore's Safe & Sound Campaign to conduct an analysis of the Public Safety Compact (PSC). The Department submitted the initial analysis conducted by Choice Research Associates to the legislature in November 2013, titled "Maryland Public Safety Compact Recidivism Analysis Final Brief". In that report, Dr. Shawn M. Flower, Consultant, Choice Research Associates, evaluated the Safe and Sound Public Safety Compact (PSC) to determine the effectiveness of services provided to individuals who have been paroled compared to a group of individuals who were paroled, but who have not received services from PSC.

As previously mentioned, the Budget Committees requested continued recidivism data and exploration of other factors for PSC participants relating to their family, substance abuse and employment status. A cost-benefit analysis was also requested from a fiscal perspective.

Attached is an in-depth analysis conducted by Choice Research Associated that examines the post-release recidivism outcomes for individuals who successfully completed the PSC program ("PSC Participant Outcome Report"). This report is the follow-up to the "Maryland Public Safety Compact Recidivism Analysis Final Brief" that was submitted in November 2013. This report examines the post-release recidivism outcomes for individuals who successfully completed the PSC program, the impact of engagement with a case manager, as well as

the potential impact of four key reentry areas, including: (1) housing; (2) employment; (3) benefits; and, (4) post-release substance abuse treatment. Therefore, the Department believes this report fulfills the Budget Committees request for continued recidivism data, as well as the exploration of other factors including substance abuse and employment status.

In regards to the cost-benefit analysis, the Office of the Inspector General (OIG) audits the PSC programs yearly participant days and operating expenditures. Based on these audits, the OIG developed a recommended annual payment to the PSC. To the extent that the program savings exceed the program operating expenses, Baltimore's Safe & Sound Campaign (S & S) and the State of Maryland split the savings with S&S. S&S receives 60% of the excess savings and the State retains 40%. S&S has the ability to appeal the recommended payment if they disagree with the OIG's recommendation.

The State's portion of savings from the PSC program's inception through the end of FY 2014 is approximately \$497,427.88.



Choice Research Associates

What gets measured gets done.

Maryland Public Safety Compact
PSC Participant Outcomes Report

By Shawn M. Flower, Ph.D.
Principal Researcher
Choice Research Associates

March 2014

Points of view or opinions contained within this document are those of the author and do not necessarily represent the official position or policies of Baltimore's Safe & Sound Campaign, or the Maryland Department of Public Safety and Correctional Services. All errors are my own.

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Executive Summary

Choice Research Associates was contracted by Baltimore’s Safe & Sound Campaign to conduct an analysis of the Public Safety Compact (PSC) including a total of 383 individuals engaged in the PSC program between March 2010 and September 2013. Once PSC participants have been approved by the Parole Board to participate in PSC, they are assigned to a vendor who conducts an assessment within a short period of their release, and subsequently provides case management and ancillary services. This report explores the lives of PSC participants through data captured in Shared Village – an online database customized to the requirements of the PSC program, where each vendor can input information about the PSC client. Data from Shared Village is combined with the data provided by the Department of Public Safety and Correctional Services (DPSCS) to explore recidivism outcomes among PSC participants.

This report includes in-depth descriptions of PSC program participants, including demographic information, employment and education history, substance use and criminal justice histories. Then data capturing changes in the lives of PSC participants (e.g., engagement in public welfare benefits, employment, post-release substance treatment, and housing) once they began the program are presented. Significant differences were explored between those who successfully completed the program (graduates) and those who did not succeed (revoked). Logistic regression was then utilized to provide a predicted probability of the outcomes (graduation and recidivism), calculated based on all of the factors in the regression models. Finally, Cox regression survival analysis was conducted to examine time to failure (a post-release event such as an arrest or conviction).

Key findings of this study are as follows:

- ❖ Of the 262 PSC participants, 80 (31%) were arrested post-release. They had an average of 2.46 arrests (ranging from 1 to 7). In addition, 26 (10%) were convicted; and 18 (7%) were incarcerated for one or more days post-release. After controlling for days from release, age of the participant, and a calculated ratio score of the number of prior juvenile and adult arrests divided by current age¹, the overall probability that a PSC participant will be arrested is 26% and the probability of a conviction is 32%.
- ❖ The overall predicted *probability*² of participants graduating from PSC was 82%, controlling for the participant’s length of criminal career (in days), the total number of person charges over their career, and the ratio of prior arrests and age. Those who had a higher number of person charges were more likely to graduate, while ratio of prior arrests and age was negatively related to graduation – those with a higher ratio were significantly *less* likely to graduate from PSC; conversely, those with a lower ratio were significantly *more* likely to graduate.

¹ Provided by Maryland Department of Public Safety and Correctional Services (DPSCS) and derived on the prison intake risk assessment tool data.

² The probability of arrest is not the same as the hazard or risk of arrest. The *probability* of arrest is based on the cumulative, or the overall probability of a situation *occurring*. The *risk* of arrest considers the timing of the arrest, or the relative rate of this person failing given how long they have survived.

- ❖ PSC participants who were engaged with the case manager (as measured by the existence of records in Shared Village in one of the four key reentry areas of housing, employment, social welfare benefits and engagement in post-release treatment) were more likely to graduate. The probability of graduation for those engaged with their case managers was 90% compared to 62% for those who are not engaged.
- ❖ Graduation from PSC has a significant impact on recidivism. Exploring post-release recidivism outcomes among 187 PSC participants with criminal history data (145 PSC graduates and 42 PSC revokees):
 - 20% of PSC graduates were arrested compared to 67% of the revoked group;
 - 5% of PSC graduates were convicted compared to 36% of the revoked group; and
 - 3% PSC graduates were incarcerated compared to 26% of the revoked group.
- ❖ After controlling for days from release, age of the participant, and the ratio of number of arrests by age, graduating from PSC:
 - Reduces the probability of arrest by 43%;
 - Reduces the probability of conviction post-release by 15%; and
 - Reduces the probability of incarceration post-release by 9%.
- ❖ The Cox Regression survival analysis reveals that graduation from PSC reduces the hazard (or risk) of arrest by 73% compared to those who were revoked. One year post-release, 87% of graduates survived without an arrest compared to 37% of the revoked group. Two years post-release, 61% of graduates survived without an arrest compared to 28% of the revoked group.
- ❖ The Cox Regression survival analysis reveals that graduation from PSC reduces the hazard (or *risk* of arrest) for all recidivism outcomes:
 - Those who graduate PSC survive for a significantly longer period of time before a post-release arrest event, compared to those who are revoked.
 - PSC graduates had a 73% lower risk of arrest compared to those revoked;
 - Graduation significantly reduces the risk of having an arrest leading to conviction by 86%; and
 - Those who graduate from PSC have a reduced risk of 87% for an arrest that leads to being incarcerated compared to PSC participants who were revoked.
- ❖ None of the four key reentry areas examined (housing, employment, benefits, and post-release substance abuse treatment) were individually impactful on predicting either revocation from the program or recidivism. However, the scarcity of data and case management notes may be a key reason for this finding. Increased adherence to the quality and quantity of data reported will allow for a more rigorous examination of these factors in the future.

Overall, participation in PSC provides an effective opportunity for formerly incarcerated persons to move away from continued engagement in the criminal justice system.

Introduction

Choice Research Associates was contracted by Baltimore’s Safe & Sound Campaign to conduct an analysis of the Public Safety Compact (PSC) program for those individuals engaged in the PSC from the beginning of the program in March 2010 through September 2013.

The Public Safety Compact (PSC) is a public private partnership focusing on reentry that connects eligible inmates who are in need of substance abuse treatment (or have completed substance abuse treatment) to comprehensive, community-based after care, reentry supports, and community corrections services with a treatment focus—inmates receive and complete substance abuse treatment and cognitive behavioral therapy behind-the-fence. The PSC works with the Maryland Parole Commission (MPC) to secure the appropriate release of eligible participants; MPC approval is required for participation. Upon return to community, participants receive one year of case management and are screened for and referred to appropriate modalities of continued treatment and supportive services. The PSC is now sustained by savings generated by the safer and earlier release of its participants.

Data

This report explores the lives of PSC participants through data captured in Shared Village – an online database customized to the requirements of the PSC program, where each vendor can input information about the PSC client. Then, the data from Shared Village is combined with the data provided by the Department of Public Safety and Correctional Services (DPSCS) to explore recidivism outcomes among PSC participants.³

While this evaluation includes 383 participants in PSC, 23 were engaged in the program after April 2013 – when the State Identification (SID) numbers submitted to the Department of Public Safety and Correctional Services (DPSCS) for a Criminal Justice Information System (CJIS) criminal history data extract. Of the 360 SID numbers submitted, 326 individuals had a criminal record and were matched. Among the initial 360 individuals, 98 were excluded from the analysis. These included 34 PSC participants not in the CJIS data (either were not matched or the SID number submitted was incorrect), 63 who were released after January 11, 2013 -- the last date of any arrest activity in the CJIS data, and 1 cases where upon examination of the Shared Village data was dropped because they were never engaged in PSC. This resulted in a final sample of 262 PSC participants with DPSCS data.

The Shared Village database included not only program history data (e.g., program start and end dates, program completion status) and key information from the assessment conducted by the vendor (e.g., marital and family status, employment and education history, substance use and treatment history, and self-reported criminal history) but also post-release activities including employment, housing, and substance use treatment. The database also includes a rough estimate of treatment “dosage” as measured by the length of time the case manager was involved with the PSC participant and number of the vendor case management notes in the Shared Village system. The Shared Village database was set up to capture not only static information (e.g., demographic data such as gender and race), but also captures dynamic data – such as changes in employment,

³ See [Maryland Public Safety Compact Recidivism Analysis Final Brief](#), March 2014 for recidivism outcomes among PSC participants versus a comparison group selected by propensity score.

residence, and education. For example, if a PSC participant obtains a job shortly after release, but then leaves that job several months later to take a higher paying job, the Case Manager can add this new job information to Shared Village without losing the information about the first job post. The capacity of the database to track these types of changes allows PSC to have a deeper understanding of the challenges and successes of their participants.

In December 2013 the Shared Village database tables were extracted for analysis and there were client records for 596 unique individuals. The database contains not only the records of those who engaged in PSC, but anyone who was referred to the program and considered, including those who were never approved by the Parole Board to participate, were ineligible, or were still pending approval. A total of 213 cases were dropped from this pool for a variety of reasons including they were never approved (N=80); or were pending approval or not yet released (N=108), one individual was designated as a “Violence Prevention Initiative” (VPI) client and subject to enhanced supervision,⁴ and those released after September 30, 2013 (N=24). The final sample consisted of 383 PSC participants included in the overall analysis. Among those 383 participants in the Shared Village database, 163 were still actively engaged in the PSC program, 9 passed away while engaged in the PSC program, 156 graduated (defined as “completing approximately one year in the program, participants who are deemed ready, by both community supervision and case management and are clean and sober”)⁵, and 55 were revoked from PSC. Among the 211 PSC graduates or revokees, 187 had CJIS criminal history data, and were included in the recidivism outcome analysis of comparing those who successfully completed PSC versus those who were revoked. (See Appendix A for an illustration of the participant samples).

Report Overview and Methodology

This study examines a total of 383 individuals paroled and accepted into the PSC program between March 16, 2010 and September 30, 2013. This report includes in-depth descriptions of PSC program participants, including demographic information, employment and education history, substance use and criminal justice histories. Then data capturing changes in the lives of PSC participants (e.g., engagement in public welfare benefits, employment, post-release substance treatment, and housing) once they began the program are presented. The data was then analyzed using differences in means testing (looking for significant differences among the PSC participants among specified groups (e.g., those graduated from PSC vs. revoked)), logistic regression, which provides a predicted probability of the outcome (recidivism) which is calculated based on all of the factors in the regression model. Finally, Cox regression survival analysis was conducted to examine time to failure (a post-release event such as an arrest or conviction). Limitations and recommendations will conclude this report.

Participant Descriptives

Table 1 provides program information about PSC participants, Table 2 details demographic descriptive information, Table 3 provides employment and education history, Table 4 explores substance use history and prior treatment experiences, and Table 5 and Table 6 delves into the participant’s criminal history from two sources – self-report and CJIS official records obtained from DPSCS.

⁴ For more information on VPI see http://www.dpscs.state.md.us/initiatives/kcs/index_KCS_comm-sup.shtml

⁵ Personal communication, Kate Wolfson, March 14, 2014.

Program Participation Descriptives

As evidenced in Table 1, among the 383 PSC program participants, 156 (43%) successfully graduated from the program, 55 (14%) were unsuccessful/revoked, 9 (2%) died while actively engaged in PSC,⁶ and the remaining 163 (43%) are active participants as of September 30, 2013. Jericho was the most utilized vendor for these participants (319 or 83% of the participants), followed by Healthcare for the Homeless (37 or 10%), Alternative Directions (14 or 4%) and Prisoner's Aid Association (13 or 3%). Jericho (which serves male participants) and Alternative Directions (serving female participants) remain active vendors for the project. Prisoners Aid Association ceased their involvement in 2010 and Healthcare for the Homeless in 2011.⁷ Looking at the time period in which all participants were engaged in PSC, on average, participants spent a little over 1 year in the program (381 days), ranging from 1 day (two individuals released and engaged in the program on Sept 30, 2013 – the last day in the evaluation period) to 1,236 days (or over 3 years).⁸ Looking at the length of time in the program by status, those who successfully completed the program were in the program on average for 14 months, ranging from 177 days to approximately 34 months. Unsuccessful clients remained in the program from 57 days to 36 months, with an average stay of 423 days. Clients who passed away were active from 1 to 730 days, averaging 184 days in the PSC program.

A primary focus of the PSC program is on providing case management services to participants. The case management notes consist of a date, the type of contact (phone, meeting, or record note), and a text field to enter information about that contact.⁹ Excluding the 50 Prisoner's Aid Association (PAA) and Healthcare for the Homeless (HCH) participants, of the remaining 333 participants, only 183 (or 54%) have 1 or more case notes recorded in the database. The average number of case notes was 7.2, ranging from 1 to 26 notes. Of those 183 participants with case notes, 182 (or 99%) were assigned to Jericho, and 1 (1%) was assigned to Alternative Directions. Viewed from a total caseload perspective, 182 of 319 (or 57%) cases assigned to Jericho have 1 or more case notes; 1 of 14 cases (7%) assigned to Alternative Directions have a case note. In terms of case notes recorded by program status, 57% of current active clients have 1 or more case notes, as do 49% of those who successfully completed the program, 20% of unsuccessful (revoked) PSC participants and 22% of those who died while participating in PSC.

⁶ Three other PSC program participants died after successfully completing the program. For this report, the recidivism analysis reduces the days survived since release for those who passed away before January 11, 2013 (the most recent date in the CJIS data) to the number of days from release to date of death. For the 3 participants where an adjustment was required, the number of days survived were reduced by 128 days, 104 days, and 1 day. In terms of PSC program activities which calculated periods of time (e.g., length of engagement in the program, length of time in treatment, etc.) the date of death was used as the program end date for those who were still actively in PSC at the time of their death.

⁷ Shared Village data from these vendors is virtually non-existent. Basic program data such as program start and end dates, as well as some warrant data was entered into the system, but there are no case notes, no residency, education, employment data, nor post-release substance treatment information.

⁸ A review of the data of the 13 who were in PSC for longer than 1,000 days, 7 were listed as still active as of 9/30/2013. This may be a data entry issue if the program data has not been updated. Of the 7 active cases, 1 was assigned to Healthcare for the Homeless, 3 were assigned to Prisoner's Aid, and 3 to Jericho.

⁹ Given the sensitive nature of case note records, only the date, amount of time spent (in minutes) during the encounter, and the type of case note were provided to this evaluator.

The total time spent with the client was calculated by summing up the minutes recorded with each case note. Over the course of the client’s participation in PSC, the total time spent averaged 4.35 hours, ranging from 0 to 20.5 hours. These numbers most assuredly underestimates time spent with clients. However, the situation is further clouded by the type of contact classification of the case notes. The majority (83%) of contacts were listed as “Record Note” – a category that is intended for a PSC vendor “staff person to document something in the file that is not a contact” (e.g., a record review with a supervisor).¹⁰ This may be an issue where the vendor staff was not aware of when to use “Record Note” versus “Meeting” or “Phone”, nonetheless, caution should be exercised in interpreting the total time spent as actual face-to-face or phone contact time with the client. Given case notes are the only measure of the PSC vendor interaction with the participant, efforts to systemically record these transactions would result in a greater understanding of the case management services provided.

Descriptives of PSC participants are provided in Table 2. Much of the data are based on the assessment conducted by the PSC vendors. Of 383 participants, assessments were captured in the Shared Village database for 354 (or 92%) of participants. Jericho had the highest percentage of assessments completed (315 of 319 or 99%), followed by Alternative Directions (13 of 14 or 93%), Prisoners Aid (10 of 13 or 77%), and Healthcare for the Homeless (16 of 37 or 43%).

Table 1: PSC Program Participation Descriptives N=383

	N	Freq.	Percent	Range	Mean (SD)¹¹
Program Status	383				
Currently Active		163	43%		
Successfully Completed - Graduated		156	41%		
Unsuccessful – Revoked		55	14%		
Deceased While Active in PSC		9	2%		
PSC Vendor					
Jericho		319	83%		
Alternative Directions		14	4%		
Healthcare for the Homeless		37	10%		
Prisoners Aid		13	3%		
Time in Program (in days)	383			1 to 1236	381.8 (246.0)
<i>Time By Program Status</i>					
Currently Active	163			1 to 1236	320.8 (299.3)
Successfully Completed - Graduated	156			177 to 1055	442.1 (151.2)
Unsuccessful – Revoked	55			57 to 1116	423.3 (233.7)
Deceased While Active in PSC	9			1 to 730	184.5 (241.0)

¹⁰ Personal communication, Justin Reyna, Developer of Shared Village, January 18, 2014.

¹¹SD stands for “Standard Deviation” which indicates how much the responses varied among the individuals – a larger SD means more variation, a smaller SD indicates more consistency or more similar responses.

	N	Freq.	Percent	Range	Mean (SD)¹¹
Case Management Notes	183				
Participants with Case Notes Recoded	183			1 to 26	7.2 (5.8)
Total Time Spent (In Minutes)	183			0 to 1235	261.6 (264.3)
Case Notes By Vendor	183				
Jericho		182	99%		
Alternative Directions		1	1%		
Case Notes by Program Status					
Currently Active	163	93	57%	1 to 26	5.9 (4.9)
Successfully Completed – Graduated	156	77	49%	1 to 25	8.8 (6.2)
Unsuccessful – Revoked	55	11	20%	1 to 20	7.9 (6.9)
Deceased While Engaged in PSC	9	2	22%	1 to 16	8.5 (10.6)
Pre-Release Assessments Completed	383	354	92%		
Assessments By Vendor					
Jericho	319	315	99%		
Alternative Directions	14	13	93%		
Healthcare for the Homeless	37	16	43%		
Prisoners Aid	13	10	77%		

N=Number of those with data available to assess. *May not equal 100% due to rounding

Demographic Descriptives

Table 2 provides demographic and family status information about the PSC participants. As of their program start date, the 383 PSC participants were on average 40 years old, (ranging from 21 to 73), the majority are male (96%), 93% are African American/Hispanic and 7% are Caucasian. Based on assessments conducted by PSC program vendors with PSC participants either before release (or soon thereafter), 78% of PSC participants are single, 77% have one or more children (with on average 2.6 children, ranging from 1 to 10 children); and of those with children, 1.5 children are under 18 years old (ranging from 0 to 7 children under 18). Among those 264 with children, only 42 (16%) report they live with their children,¹² living with an average 1.7 children. Finally, while 26% (64 of 243 participants) report that on average they have 1.7 active child support orders (ranging from 1 to 6 orders), 49 participants report they are paying child support.

¹² The assessment question “does the participant’s children live with him or her?” creates ambiguity as to whether the respondent answered thinking of the circumstance prior to incarceration, or currently, for those whose assessments were conducted directly following release. Likewise, the child support questions are framed in the present tense. PSC may wish to review their assessment tool to ascertain if changes should be made to clarify these questions.

Table 2: PSC Participant Demographic Descriptives N=383

	N	Freq.	Percent	Range	Mean (SD)
Age (as of Program Start Date)	383			21 to 73	39.58 (8.7)
Gender – Male	383		96%	0 to 1	.96 (.20)
Race	383				
African American/Hispanic		355	93%		
White		28	7%		
Marital Status	354				
Single		276	78%		
Married		38	11%		
Divorced/Separated/Widowed		40	11%		
Children					
Has 1 or More Children	354	272	77%	1 to 10	2.6 (1.6)
Number Under 18 Years Old	264			0 to 7	1.5 (1.4)
Custody – Lived with Children	264	42	16%	1 to 6	1.7 (.97)
Pays Child Support	259	49	19%	1 to 4	1.6 (.73)
Has Active Child Support Orders	243	64	26%	1 to 6	1.7 (.93)

N=Number of those with data available to assess. *May not equal 100% due to rounding

Employment, Income and Education History

Table 3 provides employment and educational history, based on the assessment data. The majority of participants (274 or 78%) reported they were not currently working (despite the question including “prison jobs”). Among those working, 54 (15%) were working full time, while 26 (7%) were employed part time. Among those employed, they were engaged in a range of occupations¹³ -- 32 (or 42%) were service workers (e.g., sanitation, cook, housekeeping, car detailing), 16 (21%) were laborers and helpers (e.g., warehouse, construction laborer, produce), 12 (16%) were craft workers (e.g., lead abatement specialist, carpenter, painter, HVAC), 10 (13%) were operatives (truck driver, baker, laundry attendant), 3 (4%) were classified as professionals (vocational aid, tutor), and 1 (<1%) was in administrative and support (school clerk). The remaining 2 (3%) were on the prison road crew.

Respondents were asked to report the longest period when they had a full time job (more than 30 hours) in the community (e.g., not prison work). The majority (303 or 86%) reported they had a full time position at one point and of those, 292 reported they spent an average of 41.7 months (approximately 3.5 years) in that position (ranging from 1 month to 30 years). Participants were also asked how long it had been since they worked for pay – either full or part time – and approximately half (51%) noted they worked for pay within five years prior to the assessment.

Finally, participants reported their income range over the prior 12 months including all wages, disability payments and/or unemployment benefits. (See also Figure 1 for more information on the

¹³ Occupations were categorized in accordance with EEOC-1 Job Classification Codes available at <http://www.eeoc.gov/employers/eo1survey/jobclassguide.cfm>

public benefits received). More than half (57%) reported their annual income at or below the 2013 poverty threshold of \$12,119 for an individual in a single person household, under the age of 65 and without children.¹⁴

In terms of education, the majority (73%) of PSC participants had not completed high school, but 31% later went on to complete a GED or obtain their high school diploma.

Table 3: PSC Participant Employment and Education Descriptives N=354

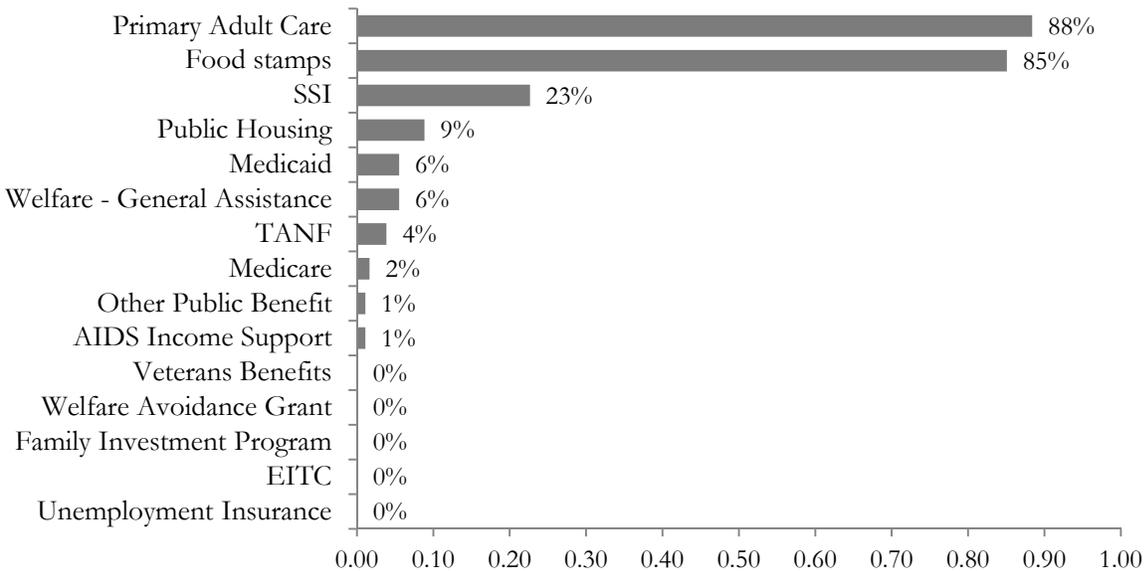
	N	Freq.	Percent	Range	Mean (SD)
Employment Status (Including “prison jobs”)	354				
Not Working		274	78%		
Full Time		54	15%		
Part Time		26	7%		
Occupation	76				
Admin and Support		1	<1%		
Craft Worker		12	16%		
Laborer and Helper		16	21%		
Operatives		10	13%		
Professionals		3	4%		
Service Workers		32	42%		
Other – Prison Road Crew		2	3%		
Community Based Job	354				
Ever Have Full-Time in Community		303	86%		
Months Employed in that Job?	292			1 to 360	41.7 (56.0)
Last Time Worked for Pay (Full or Part Time)	214				
Within the Last Year		8	4%		
Between One and Five Years		100	47%		
Between Five and Six Years		33	15%		
Between Seven to Ten Years		37	17%		
More than Ten Years Ago		36	17%		
Income Last 12 months Including Jobs, Disability or Unemployment	350				
\$5000 or Less		167	48%		
\$5001 - \$10000		33	9%		
\$10001 - \$15000		39	11%		
\$15001 - \$20000		37	10%		
\$20001 - \$25000		45	13%		

¹⁴ U.S. Census (2013) <http://www.census.gov/hhes/www/poverty/data/threshld/index.html>

	N	Freq.	Percent	Range	Mean (SD)
\$25001 - \$35000		16	5%		
Over \$35000		13	4%		
Education – Highest Grade	350				
Some Elementary School (K-6)		9	3%		
Some Middle School (7-8)		29	8%		
Some High School (9-11)		217	62%		
High School		79	23%		
One to two years of college		13	4%		
Three to four years of college		2	1%		
More than 4 years of college		1	<1%		
Education – Highest Degree	347				
High School Diploma		69	20%		
GED or High School Equivalency		109	31%		
2 Year Community College		4	1%		
Vocational School/Occupational Skill		8	2%		
College or University Level (4-Year)		3	1%		
None		154	44%		
Receiving Public Benefits	354	181	51%	1 to 4	2.24 (83)

N=Number of those with data available to assess. *May not equal 100% due to rounding

Among the 354 PSC participants who completed the assessment, 181 (51%) received one or more public assistance benefit. On average, they participated in 2.24 benefits, ranging from 1 to 4. Almost all (88%) noted they received Primary Adult Care (health insurance) and 85% reported receiving food stamps. Almost a quarter received social security income. However, 5 public benefits were not accessed by any PSC participant, including the Earned Income Tax Credit (EITC) or unemployment insurance.

Figure 1: Participation in Public Assistance Benefits N=181

Substance Use and Treatment History

Table 4 and Figure 2 provide information on each PSC participant's drug and alcohol treatment and use history. Among the participants reporting, 336 (96%) said they had been in treatment, including the most recent treatment experience) one or more times. Specifically, 102 report having had at least one alcohol abuse treatment episode, while 329 reported at least one drug abuse treatment intervention. Combined, these 336 PSC participants had between 1 and 20 treatment experiences, averaging 2.63 times.¹⁵

PSC participants also were provided a list of substances to identify which substances "is/are the major problem".¹⁶ Those who only checked "polydrug" or "more than 1" were coded as using at least 2 substances. Among the 354 participants, 339 (96%) identified a major problem with 1 to 4 substances, averaging 1.77 per participant, with 130 (38%) stating they had only one substance type as a problem. Of those 130, 50% note their drug of choice as heroin, for 26% marijuana, 12% cocaine, and 10% report alcohol as their single substance addiction.

¹⁵ A review of the data indicates that it is possible that those responding to the question double counted their treatment experiences – stating they had been in alcohol treatment 10 times, and drug treatment 10 times. Thus, the number of treatment interventions may be overestimated. However, the information is presented as stated as the assessment clearly asks respondents to differentiate between the two. PSC may want to consider revising the assessment tool to either reword the question to combine drug/alcohol treatment or at include an indicator question to ask whether their treatment experience was for drug or alcohol or both. Likewise, as Maryland is in the process of integrating substance abuse and mental health treatment, the assessment tool may also need to include a question to distinguish those in treatment for co-occurring disorders. For more on Maryland Department of Health and Mental Hygiene integration project, see <http://dhmh.maryland.gov/bhd/SitePages/integrationefforts.aspx>

¹⁶ Each substance checkbox was coded as 1 if checked, 0 if not checked to create a total number of problem substances. One of the options was to distinguish between any alcohol use and alcohol use to intoxication. This data was simplified so that either use or intoxication was cataloged as alcohol (generally) as a problem.

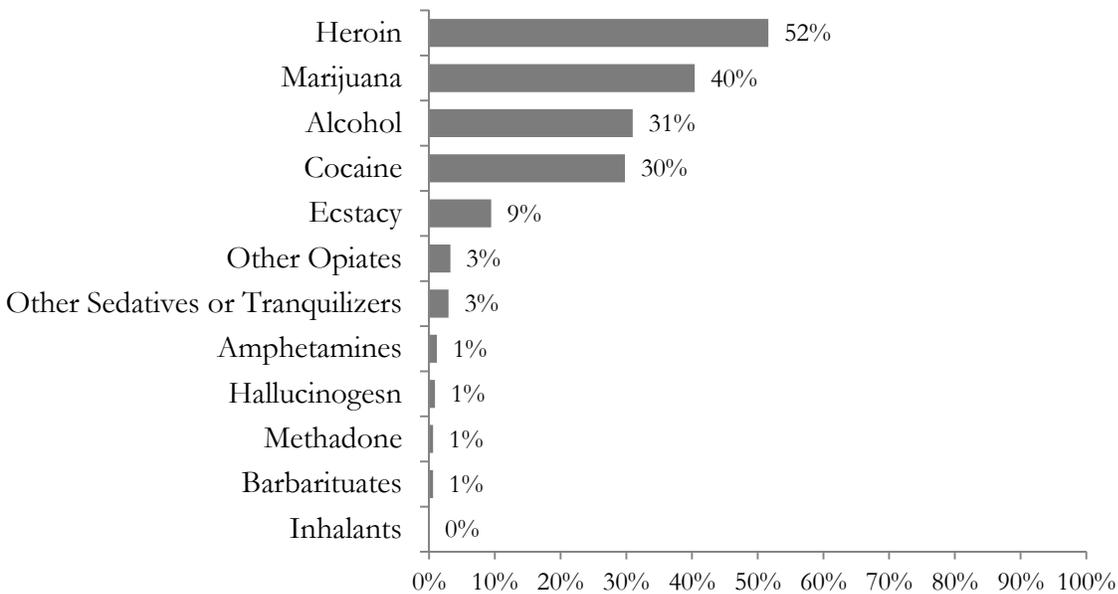
Table 4: PSC Participant Substance Treatment and Use History N=354

	N	Freq.	Percent	Range	Mean (SD)
Treatment Experiences	349				
One or More Times in Treatment		336	96%	1 to 20	2.63 (2.5)
No Substance Treatment Reported		13	4%		
Substance Specific Treatment					
Times Treated for Alcohol Abuse	336	102	30%	1 to 10	1.86 (1.8)
Times Treated for Drug Abuse	336	329	98%	1 to 20	2.11 (1.9)
Identified 1 or More Drug &/or Alcohol Substances as a Problem	354				
Yes		339	96%		
No		15	4%		
Number Problem Substances	339			1 to 4	1.77 (.73)
One		130	38%		
Two		166	49%		
Three		34	10%		
Four		9	3%		

N=Number of those with data available to assess. *May not equal 100% due to rounding

As with those who are single-substance users, heroin, marijuana, alcohol, and cocaine appear to be the substances the full sample regards as a major problem (as illustrated in Figure 2). Ecstasy, other opiates and sedatives or tranquilizers are identified by a small number of PSC participants, while virtually none of the participants used other substances listed.

Figure 2: Substances Identified as a Major Problem N=339



Criminal History

Self Report

As noted in Table 5, PSC participants have a varied history with respect to serving time in juvenile and adult facilities. During the assessment, 116 (34%) participants reported they had served time in a juvenile detention center, reporting on average 2.69 stays, ranging from 1 to 16 times. They also report their age at first arrest as 17.5, ranging from 7 to 45 years old. In terms of time spent in adult prisons, jails, or detention centers as an adult (18 and older), 345 (99%) participants note they had at least one stay – averaging 4.7 times, from a range of 1 to 40 experiences. Overall, these participants spent from 2 months to over 10 years incarcerated, averaging 7 years over their lifetime.

Table 5: PSC Participant Self-Reported Criminal History N=354

	N	Freq.	Percent	Range	Mean (SD)
Juvenile History	339				
Served in Juvenile Detention Center		116	34%	1 to 16	2.69 (2.5)
No		223	66%		
Age at First Arrest	327			7 to 45	17.5 (4.8)
Adult History	349				
Served in Adult Facility		345	99%	1 to 40	4.73 (4.6)
No		4	1%		
Lifetime Months in Adult Facility	340			2 to 127	88.8 (40.1)

N=Number of those with data available to assess. *May not equal 100% due to rounding

CJIS Official Records

Table 6 provides measures of criminal history, based on risk assessment data provided by DPSCS and data summarized from the CJIS criminal history data for those who participated in PSC.

Risk assessment data provided by DPSCS was obtained from the prison intake and included the age of first involvement with crime (as a juvenile or adult) -- averaging 18 years old, from 8 to 44 years old; and number of prior juvenile and adult arrests – 21 on average, ranging from 0 to 68. DPSCS also provided a calculated ratio score which is the number of prior juvenile and adult arrests divided by current age. (For example, a 38 year old with 21 prior arrests would have a ratio score of .55, while a 22 year old with 12 prior arrests would have a calculated ratio of .54). Thus, the offender with a higher ratio score is considered a higher risk offender, either by virtue of their age (younger offenders are higher risk) or involvement in criminal activities (those with more arrests are higher risk). The average ratio score was .56, within a range of 0 to 2.19.

The most current event recorded in the CJIS data was January 11, 2013. As of that date, the PSC participants had been released on average 13.9 months, ranging from less than 1 month to 33.8 months; (in days, they averaged 418 days since release within a range from 1 to 1,014 days). The most common type of offender is a person offender (65%), followed by drug (33%), sex

offender¹⁷ (1%) and property (<1%). Note that this offender class is based on the most serious conviction over their criminal career and not on the most frequent type of crime or most recent offense committed.¹⁸ The length of criminal career was based on the first date of arrest recorded in CJIS, and spanned a range from 435 days to over 33 years and on average, PSC participants had been criminally involved over 17 years.

The prior arrest history reflects this longevity. PSC participants had an average of 18 arrests (ranging from 2 to 62), 9 prior convictions, and an average conviction rate of 51% overall. Among those convictions, approximately 38% were for felony level offenses and the maximum seriousness category averaged 4.27 – a Level IV offense within a range of Level I to Level VII.¹⁹ Level IV offenses include arson, manufacture and/or distribution of controlled dangerous substances, second and third degree burglary, escape from confinement, and robbery.

Table 6 also provides arrest information broken down by charge data. PSC participants had an average of 41 charges (ranging from 4 to 110 charges) in their criminal career, with 13 charges resulting in a conviction (ranging from 1 to 58 charges convicted), thus 30% of all charges resulted in a conviction. Among these charges, 28% were for felony level offenses, and the most serious charge category averaged 3.65, which is a level V offense. Level V offenses include charges such as second degree assault; false statement to law enforcement officer; uttering false document; theft over \$500; motor vehicle theft; possession of controlled dangerous substances (not marijuana); third degree sexual offense; weapons – illegal possession by convicted felon; and obstructing & hindering.

A breakdown by different types of offenses includes both the number of charges overall, within a range, and the number of those charges that lead to a conviction. Note that the offenses listed include person crimes (including weapons charges) and sex crimes (including prostitution). Given that weapons (due to their potential lethality) add a level of seriousness to the offense, and because prostitution is a fundamentally different type of sex offense than commonly thought of when referring to sex crimes (e.g., rape, sexual assault) both weapons and prostitution charges and convictions are provided separately so to present a balanced view.

The final section of Table 6 is incarceration history. Incarceration was defined as sentenced to one or more days.²⁰ On average, those in the PSC program experienced from 1 to 31 periods of

¹⁷ Sex offenders are specifically excluded from participation in PSC. However, prostitution is classified as a sex offense. Upon review of the specific sex offenses committed, we note that, excluding prostitution, all but one offense is a charge, not a conviction. The sole conviction was for a 4th degree sexual offense committed in 1988.

¹⁸ In deciding which was the most serious conviction, person offenses were privileged over drug and property types of offenses. For the purpose of offense seriousness, DUI/DWI offenses, eluding police, etc., although designated as traffic for the offense type, were still considered as person offenses and thus were privileged over property, drug and other types of offenses. Thereafter, seriousness was determined based on the specific charges in accordance with the State of Maryland criminal law statutes.

¹⁹ Each charge was coded by offense seriousness category from I (most serious) to VII (least serious) (which was reverse coded so that a higher value indicated a more serious crime) in accordance with Maryland State statutes. The source for statute classification information was from the [Maryland State Commission on Criminal Sentencing Guidelines Manual Guidelines Offense Table Appendix A](#), updated February 2006, and the 2012 manual.

²⁰ Calculated from sentencing data by subtracting the sentence suspended from sentence imposed. However, there is no ability to discern in the CJIS data those sentences that were served consecutively from those served concurrently, thus these figures likely overestimate the amount of time actually served.

incarceration, on average serving close to 7 times. The total time imposed over the course of the participant's career ranges from 30 days to 82 years, with an average time imposed of 22.7 years. The average sentence per incarceration period is 178 days, but ranges up to 2.8 years.

Table 6: Official Criminal History Descriptives N=262

	N	Freq.	Percent	Range	Mean (SD)
DPSCS Risk Data					
Age at First Involvement with Crime	261			8 to 44	18.32 (4.8)
Number of Juvenile and Adult Arrests	262			0 to 68	21.03 (11.3)
Ratio: Number Prior Arrests/Current Age	262			0 to 2.19	.56 (.30)
CJIS Data					
Time Since Release	262				
Months Since Release				<1 to 33.8	13.9 (9.1)
Days Since Release				1 to 1014	418 (27)
Offender Class (Serious Conviction)	262				
Person		169	65%		
Sex		3	1%		
Drug		88	33%		
Property		2	<1%		
Criminal Career	262				
Length of Career (in months) ²¹				14 to 404	207 (89)
Length of Career (in days)				435 to 12309	6290 (2724)
Arrest, Charge, and Conviction History					
Total Number of Prior Arrests	262			2 to 62	18.54 (9.8)
Total Number Prior Convictions - Arrest	262			1 to 36	8.96 (4.9)
Prior Arrest Conviction Rate	262			.15 to 1	.51 (.15)
Proportion of Prior Felony Convictions	262			0 to 1	.38 (.23)
Most Serious Category - Convictions	262			1 to 6	4.27 (.63)
Total Number of Prior Charges	262			4 to 110	41.25 (20.9)
Total Number Prior Convictions - Charges	262			1 to 58	13.37 (7.3)
Average Charges Per Prior Arrest	262			1 to 8.29	2.36 (.86)
Prior Charges Conviction Rate	262			.03 to .68	.30 (.12)
Proportion of Prior Felony Charges	262			0 to .63	.28 (.11)
Most Serious Category - Charges	262			1 to 6	3.65 (1.1)
Charge & Conviction History By Type of Offense					
<i>Person Offenses (Including Weapons)</i>					
Total Number of Charges	241			1 to 97	11.96 (12.3)
Total Number of Convictions	241			0 to 15	1.98 (2.4)

²¹ Length of criminal career was calculated based on the first date of arrest in the CJIS data to the most recent event. This most recent event was most often a post-release arrest or the date of release.

	N	Freq.	Percent	Range	Mean (SD)
<i>Weapons Only Offenses</i>					
Total Number of Charges	167			1 to 34	3.92 (4.3)
Total Number of Convictions	167			0 to 5	.41 (.74)
<i>Sexual Offenses (Including Prostitution)</i>					
Total Number of Charges	19			1 to 9	2.32 (2.1)
Total Number of Convictions	19			0 to 4	.68 (1.1)
<i>Prostitution Only Offenses</i>					
Total Number of Charges	9			1 to 9	2.78 (2.6)
Total Number of Convictions	9			0 to 4	1.33 (1.4)
<i>Drug Offenses</i>					
Total Number of Charges	253			2 to 85	23.42 (13.5)
Total Number of Convictions	253			0 to 20	6.28 (3.8)
<i>Property Offenses</i>					
Total Number of Charges	243			1 to 57	11.31 (11.0)
Total Number of Convictions	243			0 to 27	2.74 (4.2)
<i>Traffic Offenses</i>					
Total Number of Charges	62			1 to 15	2.52 (2.5)
Total Number of Convictions	62			0 to 3	.34 (.72)
<i>Total "Other" Charges</i>					
Total Number of Charges	84			1 to 11	1.55 (1.3)
Total Number of Convictions	84			0 to 2	.31 (.56)
<i>Total Violation Probation/Parole</i>					
Total Number of Charges	229			1 to 21	3.49 (2.5)
Total Number of Convictions	229			0 to 17	2.88 (2.1)
<i>Incarceration History</i>					
Prior Times Incarcerated	262			1 to 31	6.89 (3.9)
Total Time Imposed (in days)	261			30 to 29930	8334 (5946)
Average Incarceration Sentence (in days)	261			6 to 1045	178 (125)

N=Number of those with data available to assess. *May not equal 100% due to rounding

Reported Life Changes While Engaged in PSC

The assessment conducted prior to release and engagement in PSC provides background information on the lives of PSC participants. Once released, and engaged in PSC, the Shared Village database captures not only case management case notes, but includes modules to record post-release life changes among the PSC participants. Due to the lack of adequate documentation, it is unknown whether these life changes are a direct result of the actions of the case managers; however, it is feasible that at least some of these activities (such as participation in various social welfare benefits) came about as a result of support provided by the case manager and/or interactions with other PSC staff (including those at Baltimore's Safe and Sound Campaign).

While the database has the capacity to capture life changes such as criminal proceedings; mental health assessment, diagnosis, medications and treatment; as well as engagement in education, many of these sections of the database had too few records to report. Thus the following discussion focuses on four areas where there were a minimally sufficient number of records to discuss these changes: 1) housing; 2) employment; 3) receipt of social welfare benefits; and 4) substance abuse treatment. An important caveat is that it is possible that PSC participants may have been employed, housed, received benefits, and/or engaged in treatment post-release, but these actions were not recorded in the database. Thus, these data are likely underreported and should be viewed with caution. For example, although the time housed calculations accounted for time gaps between housing moves, if the participant moved or lost their housing and did not notify their case manager and/or those data were not updated in the database, then the length of time in housing may be overestimated.

Post-Release Housing

There was housing data in Shared Village concerning 145 (or 38%) of PSC participants (Table 7). As of the end of their program involvement (or the end of the evaluation period of September 30, 2013), 139 of those 145 participants with housing records were housed. Most (86%) were at home with family or friends, while 12% were in a group home, and 2% were in a treatment or institutional facility. The number of times PSC participants reported changing residences was on average 1.24 times (ranging from 1 to 3 times), but the majority of participants (81%) had only one housing record. Based on the resident start and end dates, and accounting for any gaps that exist in those records, the number of days housed while in the PSC program was calculated. On average, PSC participants were housed for 318 days, ranging from 8 to 917 days.

Table 7: Post-Release Housing N=145

	N	Freq.	Percent	Range	Mean (SD)
Current Housing Status	383				
Housed		139	36%		
Not Housed		6	1%		
No Housing Data		238	62%		
Type of Housing	139				
Home – with Family, Friends		119	86%		
Group Home		17	12%		
Treatment or Institutional		3	2%		
Number of Homes/Changes	145			1 to 3	1.24 (.54)
One		118	81%		
Two		19	13%		
Three		8	6%		
Length of Time Housed (in Days)	145			8 to 917	318 (175)

N=Number of those with data available to assess. *May not equal 100% due to rounding

Post-Release Employment

Table 8 provides data for the 62 (or 16%) of PSC participants with employment records in the Shared Village database. The first job start date recorded in the data was June 7, 2010, and most recent start date was September 30, 2013. Among these 62, most (86%) are employed full time, with 11% part time, and 3% are hourly. PSC participants work on average 37.4 hours per week, ranging from 20 to 60 hours per week, earning \$10.61 per hour (ranging from \$7.25 to \$20.00 an hour). Weekly and annual salaries were calculated based on reported hours worked and hourly rate. Participants earn \$393.6 per week, ranging from \$145 to \$700, for an annual average salary of \$20,469 (ranging from \$7,540 to \$36,400). Post-release, 54 of the 62 employed participants (87%) earn more than \$12,119 (the 2013 poverty threshold), while 13% remain below the poverty line.

PSC participants are engaged in a variety of industries but include demolition, warehousing, HVAC, construction, automotive, barbering, fast food restaurants, catering, hospitality, retail, and Baltimore city agencies (Public Works and Transportation).²² PSC participants have been employed on average 275 days, ranging from 1 to 585 days.

Table 8: Post-Release Employment N=62

	N	Freq.	Percent	Range	Mean (SD)
Current Employment Status	383				
Employed		62	16%		
Not Employed		0	0%		
No Employment Data		321	84%		
Employment Type	62				
Full Time		53	86%		
Part Time		7	11%		
Hourly		2	3%		
Hours per Week	62			20 to 60	37.4 (7.6)
Salary					
Per Hourly	62			\$7.25 - \$20	\$10.6 (3.1)
Weekly	62			\$145 - \$700	\$393.6 (141.9)
Annual	62			\$7540-\$36400	\$20469 (7380)
Number of Job Changes	62			1 to 3	1.11 (.35)
One		56	90%		
Two		5	8%		
Three		1	2%		
Length of Time Employed (in Days)	62			1 to 585	275.6 (160.9)

N=Number of those with data available to assess. *May not equal 100% due to rounding

²² Note for 9 of 62 (15%) participants, the PSC vendor is listed as the employer. This may be a data entry issue or perhaps the vendor hired the individual.

Post-Release Social Welfare Benefits

Table 9 and Figure 3 illustrate receipt of social welfare benefits for 162 (42%) PSC participants. On average, participants applied for 2.19 benefits, ranging from 1 to 5, and received 2.00 benefits amongst 152 participants. Of those, most received 1 or 2 benefits (35% and 38% respectively), 20% received 3, and 7% 4 benefits. Six participants had benefits pending, while 25 participants had on average 1.68 benefits (ranging from 1 to 4) that had been approved, but ended while the participant was still involved with PSC. In order to calculate a total length of time that the participant received one or more benefits, the data were sorted to capture the earliest benefit date, and for those whose benefits had stopped, the latest end date. For those with benefits that remain active, the program end date or evaluation end date were substituted. As noted below, the 159 participants received at least 1 benefit for 332 days, ranging from 14 to 964 days. Length of time receiving the benefit was calculated for each type of benefit. For example, 135 participants, on average, received food stamps for 311 days, and received \$188 (ranging from \$75 to \$200). A small number (5 participants) received financial housing support – \$367 over 154 days (ranging from 29 to 214 days).

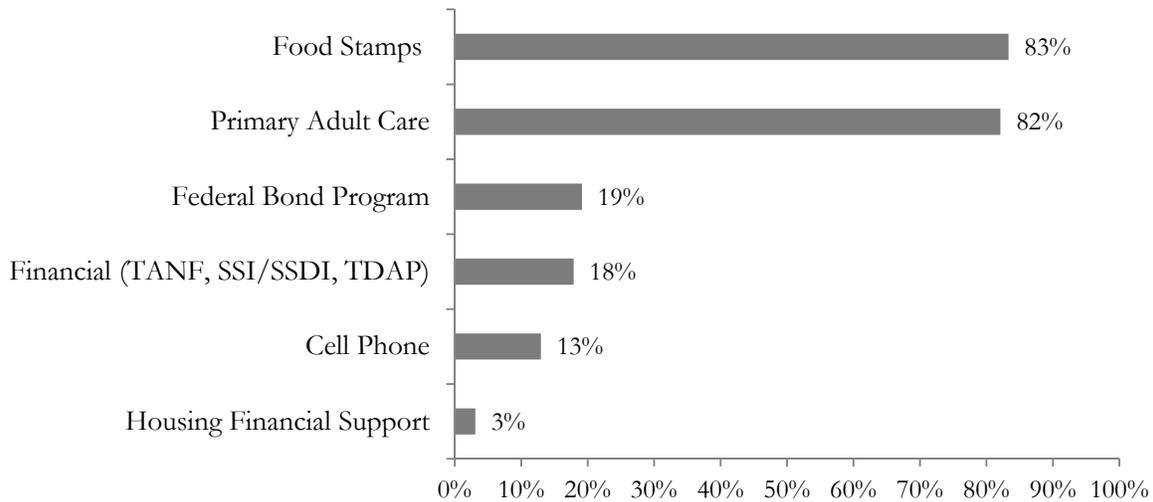
Table 9: Post-Release Social Welfare Benefits N=162

	N	Freq.	Percent	Range	Mean (SD)
Current Benefit Status	383				
Applied or Received 1 or More Benefit		162	42%		
No Benefit Data		221	58%		
Total Benefits Efforts	162			1 to 5	2.19 (.95)
Number of Active Benefits	152			1 to 4	2.00 (.92)
One		53	35%		
Two		57	38%		
Three		31	20%		
Four		11	7%		
Pending Benefits	6			1 to 2	1.33 (.51)
Number of Cancelled Benefits	25			1 to 4	1.68 (.85)
Length of Time Receiving (in days)					
All - First to Most Recent Benefit	159			14 to 964	332.1 (190.1)
Food Stamps	135			14 to 964	311.0 (185.8)
Housing Financial Support	5			29 to 214	154.2 (75.1)
Primary Adult Care	133			21 to 965	340.5 (198.6)
Federal Bond Program	31			31 to 864	406.3 (197.1)
Cell Phone	21			36 to 617	346.2 (170.2)
Other Financial Support (TANF, SSI/SSDI, Temp Disability)	29			12 to 979	295.3 (213.8)
Monetary Support					
Food Stamps	122			\$75 to \$200	\$188.2 (16.2)
Housing Financial Support	5			\$185 to \$500	\$367.0 (115.4)

N=Number of those with data available to assess. *May not equal 100% due to rounding

As evidenced in Figure 3 below, of the 162 PSC participants who received 1 or more benefit over the course of their involvement with PSC, the majority received food stamps (83%), followed by Primary Adult Care medical insurance (82%), with 19% participating in the Federal Bond program and 18% receiving financial support from TANF, SSI/SSDI, or TDAP; 13% received a cell phone and 3% received housing financial support.

Figure 3: Post-Release Social Welfare Benefits Received, by Type N=162



While one may infer from the large number of active benefits that the program is likely having some impact on connecting people to these services, however, the degree to which the PSC Case Manager facilitated these services for the participant is unknown. This is an example where a revision to the Shared Village database case notes that would allow the case manager to precisely indicate what occurred during their contact with the participant would be enhance our understanding.

Post-Release Substance Abuse Treatment

The final descriptive data are provided in Table 10 below, exploring substance abuse treatment for 66 (17%) PSC participants engaged in treatment 1 or more times post-release. They experienced on average 1.3 treatment events (ranging from 1 to 4), spending 237 days in treatment (ranging from 5 to 526 days). (Please note that the number of times in treatment could be the result of a participant changing treatment modality, it is not necessarily an indicator of a participant failing to remain sober and thus requiring a new engagement into treatment). Based on data for 56 PSC participants, most (87%) did not relapse post-release, and of the 7 who did relapse, 3 are now sober.

Table 10: Post-Release Substance Abuse Treatment N=66

	N	Freq.	Percent	Range	Mean (SD)
Treatment Status	383				
Treatment Post-Release		66	17%		
No Treatment Data		317	83%		
Number of Times in Treatment	66			1 to 4	1.3 (.68)
One		52	79%		
Two		10	15%		
Three or Four		4	6%		
Total Days in Treatment	66			5 to 526	237.7 (126.4)
Substance Use Post-Release	56				
No		49	87%		
Yes		7	13%		
Of Those Who Used, Now Sober	7	3	43%		

N=Number of those with data available to assess. *May not equal 100% due to rounding

Research Design

Two methods of analysis were utilized to explore the differences between those who graduated from PSC versus those who were revoked, and the impact of PSC participation and graduation from PSC on three measures of recidivism – re-arrest, reconviction, and reincarceration. CJIS criminal history data were analyzed with two principal statistical methods – logistic regression and Cox Regression (or survival/hazard modeling).

While the recidivism analysis in the first report²³ utilized a comparison group selected using a quasi-experimental statistical methodology of propensity score matching, (thus omitting the need to include additional variables to control for factors that could explain the recidivism results), the current effort does not have that advantage. Thus, where appropriate, the present analysis includes measures to control for relevant factors.

The first method discussed is logistic regression which assesses outcomes of successful completion of the PSC program (graduated/revoked), and recidivism (arrest/no arrest; conviction/no conviction; incarceration/no incarceration). Results are reported as odds ratio and predicted probabilities. An odds ratio is a measure of association, which captures the likelihood that a PSC participant will fall into one outcome category versus the other (e.g., graduated or revoked; arrested or not arrested). An odds ratio higher than 1 indicates a positive relationship and increases the chances that an event will occur, while an odds ratio of less than 1 indicates a decrease in the odds.²⁴

²³ Maryland Public Safety Compact Recidivism Analysis Final Brief, March 2014.

²⁴ Menard S. (1995). *Applied Logistic Regression Analysis*. Sage University Paper Series on Quantitative Applications in Social Sciences, Newbury Park, California: Sage Publications.

Another model measures at recidivism including whether the individual graduated, in order to assess the impact of graduation on recidivism specifically. These statistical models will account for competing explanations (e.g., older offenders are less likely to recidivate, thus one would want to “control” for age in the analytic model, those who have been released for a longer period of time have greater opportunities to recidivate, so days from release are included in the model).

The next method employed was Cox Regression – also referred to as survival analysis. This method allows one to explore the timing of events, including the time for an individual to “fail” (in this case arrested or convicted). This analysis is useful because it allows one to account for different starting points (e.g., subjects are not artificially eliminated because they were released either before or after an observation period).²⁵ For this analysis, those who graduated were compared to those who were revoked to ascertain whether successfully completing the PSC program helped participants to survive without a new arrest or conviction longer than those who were revoked.

Note that the probability of arrest -- derived from the logistic regression analysis -- is not the same as the hazard or risk of arrest. The **probability** of arrest is based on the cumulative, or the overall likelihood of a situation occurring. The **risk** of arrest, obtained in the survival analysis, considers the timing of the arrest, or the relative rate of this person failing given how long they have survived.

The following discussion describes the post-release criminal activities among PSC participants, then to explore how engagement in PSC influenced graduation and recidivism.

Outcome Analysis

Post-Release Criminal Activity Descriptives

Table 11 provides descriptives of post-release arrest, charge, conviction and incarceration details. These post-release measures, summarized from the CJIS criminal history records, were calculated identically to the prior criminal history data contained in Table 6.

Two cautionary notes: first, given the small number of cases involved (particularly when exploring conviction, type of offense, and incarceration) data should be viewed primarily as informational. Second, when considering the prior history to post-release activity, caution should be exercised in regarding these events as precisely comparable because PSC participants had a substantially longer period of time to accrue their prior history compared to the length of time in the post-release period. Specifically, the prior period spanned a range from 435 days to over 33 years, averaging over 17 years. Post-release, the average length of time post-release was 418 days, (within a range from 1 to 1,014 days). Nonetheless, these data help to paint a picture of post-release criminal activity among PSC participants.

The most common type of post-release offender is a drug offender (81%), followed by property (11%), person (4%) and other²⁶ crime (4%). Of the 262 PSC participants, 80 (31%) were arrested post-release. They had an average of 2.46 arrests (ranging from 1 to 7), with an overall conviction

²⁵ Allison, P. (1995) *Survival Analysis Using SAS: A Practical Guide* Cary: SAS Institute, Inc.

²⁶ “Other” crimes are principally nuisance or quality of life type offenses such as rogue and vagabond, pandering, urination in public, trespassing, and consuming alcohol in public.

rate of 17%. Among those convictions, approximately 29% were for felony level offenses, and the most serious conviction category averaged 2.7 – a Level VI offense, within a range of Level I to Level VII (where Level I is the most serious and Level VII is least serious). Level VI offenses generally include resisting arrest; unauthorized removal of property; possession/delivery of contraband; and animal cruelty/dog fighting.

Post-release charge information is also provided. PSC participants had an average of 4.5 charges (ranging from 1 to 28), with 11% of all charges resulting in a conviction. Among these charges, 21% were felony level offenses, and the most serious charge category averaged 3.41 – a Level V offense. Level V offenses include possession of controlled dangerous substances (not marijuana); second degree assault; reckless endangerment; false statement to law enforcement officer; uttering false document; theft over \$500; motor vehicle theft; weapons – illegal possession by convicted felon; and obstructing & hindering.

A breakdown by different types of offenses includes both the number of charges overall, within a range, and the number of those charges that lead to a conviction. Note that the offenses listed include person crimes (including weapons charges) and sex crimes (including prostitution). None of the PSC participants were arrested for sexual offenses, prostitution, or violation of probation. Most were charged with drug offenses – averaging 3 charges (from 1 to 12 charges), a third were charged with at least 1 person offense (ranging from 1 to 9 charges), and a third were charged with a property crime (ranging from 1 to 25 charges).

The final section is incarceration post-release – defined as sentenced to one or more days. On average, those in the PSC program were incarcerated 1 to 2 times, on average serving once. The total time imposed ranges from 1 day to 25 years, with an average time imposed of 41 months. The average sentence per incarceration period is 133 days, but ranges up to 2.5 years.

Table 11: Post-Release Criminal History Descriptives N=262

	N	Freq.	Percent	Range	Mean (SD)
Time Since Release	262				
Months Since Release				<1 to 33.8	13.9 (9.12)
Days Since Release				1 to 1014	418 (272)
Offender Class (Serious Post-Conviction)	27				
Person		1	4%		
Sex		0	0%		
Drug		22	81%		
Property		3	11%		
Other		1	4%		
Post-Release Outcomes - Summary					
Arrested Post-Release	262			0 to 1	.31 (.46)
Convicted Post-Release	262			0 to 1	.10 (.30)
Incarcerated Post-Release	262			0 to 1	.07 (.25)
Post-Release Arrest, Charge, and Conviction					
Total Number of Post-Release Arrests	80			1 to 7	2.46 (1.4)
Post-Release Arrest Conviction Rate	80			0 to 1	.17 (.29)
Proportion of Post Felony Convictions	27			0 to 1	.29 (.44)

	N	Freq.	Percent	Range	Mean (SD)
Most Serious Category – Post Convictions	27			1 to 5	2.7 (1.7)
Total Number of Post-Release Charges	80			1 to 28	4.51 (4.0)
Total Number Post Convictions - Charges	80			0 to 2	.42 (.65)
Average Charges Per Post-Release Arrest	80			1 to 12	2.80 (1.9)
Post Charges Conviction Rate	80			0 to 1	.11 (.21)
Proportion of Post-Release Felony Charges	80			0 to 1	.21 (.24)
Most Serious Category - Post Charges	80			1 to 5	3.41 (1.5)
Charge & Conviction History By Type of Offense					
<i>Person Offenses (Including Weapons)</i>					
Total Number of Charges	28			1 to 9	2.21 (1.7)
Total Number of Convictions	28			0 to 1	.04 (.19)
<i>Weapons Only Offenses</i>					
Total Number of Charges	5			1 to 6	2.80 (2.0)
Total Number of Convictions	5			0 to 1	.20 (.44)
<i>Sexual Offenses (Including Prostitution)</i>					
Total Number of Charges	0			---	--- (---)
Total Number of Convictions	0			---	--- (---)
<i>Prostitution Only Offenses</i>					
Total Number of Charges	0			---	--- (---)
Total Number of Convictions	0			---	--- (---)
<i>Drug Offenses</i>					
Total Number of Charges	59			1 to 12	3.47 (2.6)
Total Number of Convictions	59			0 to 2	.42 (.59)
<i>Property Offenses</i>					
Total Number of Charges	26			1 to 25	3.0 (4.8)
Total Number of Convictions	26			0 to 2	.19 (.49)
<i>Traffic Offenses</i>					
Total Number of Charges	3			1 to 4	2.0 (1.7)
Total Number of Convictions	3			0 to 1	.33 (.57)
<i>Total “Other” Charges</i>					
Total Number of Charges	2			1 to 4	2.5 (2.1)
Total Number of Convictions	2			0 to 2	1.0 (1.41)
<i>Total Violation Probation/Parole</i>					
Total Number of Charges	0			---	--- (---)
Total Number of Convictions	0			---	--- (---)
Incarceration History					
Post Release Times Incarcerated	18			1 to 2	1.05 (.23)
Total Time Imposed (in days)	18			1 to 9125	1268 (2191)
Average Incarceration Sentence (in days)	18			1 to 912	133 (222)

As noted above, Table 11 provides the overall recidivism rates of PSC participants – (e.g., 31% arrested), however these baseline numbers do not simultaneously take into account the number of

days from release or any measures of prior criminal history . An analysis of the recidivism outcomes using multivariate logistic regression analysis follows.

Results: Logistic Regression – PSC Participation Impact on Recidivism

As evidenced in Table 12, the significant factors that influence recidivism for arrest for those who participate in PSC are the days from release and the calculated ratio of number of prior arrests and age.²⁷ Days from release, while statistically significant for all three measures of recidivism – arrest, conviction and incarceration, had an odds ratio ranging from of 1.003 to 1.005, indicating very little influence on arrest, conviction or incarceration for PSC participants. The ratio of prior arrests to current age had a substantial influence on the likelihood of arrest, with those having a higher ratio being much more likely to be arrested. Ratio was not a significant factor for conviction or incarceration among PSC participants. Age of the participant was not significant for arrest, but younger PSC participants had a greater likelihood of both conviction and incarceration. After controlling for these factors, the probability of arrest for PSC participants is 27%, conviction is 4%, and incarceration is 3%.

Table 12: Logistic Regression: Recidivism Overall Among PSC Participants

	Logistic Odds Ratios and z Statistic		
	(1) Arrest	(2) Conviction	(3) Incarceration
Days From Release	1.003 (5.39)**	1.005 (4.86)**	1.005 (4.05)**
Age of Participant	0.988 (0.65)	0.918 (2.76)**	0.921 (2.31)*
Ratio of Age and Number of Prior Arrests	4.358 (2.97)**	3.236 (1.81)	2.361 (1.17)
Observations (N)	262	262	262
Pseudo R-Square	.139	.249	.211
Log Likelihood	-138.70	-65.26	-51.70

* Significant at $p < .05$ ** Significant at $p < .01$

The next step was to explore how demographic and historical factors impact the two primary outcomes examined in this report. The first outcome was whether a participant successfully completed PSC (“Graduated”) (N=156) versus those who were unsuccessful (“Revoked”) (N=55).²⁸ The second outcome was recidivism measured by post-release arrest, conviction and incarceration.

²⁷ The length of the participant’s criminal career was a significant factor, however, when diagnostic tests were run, this measure rendered the model biased. For this reason, length of criminal career was omitted from the outcome analysis, and the ratio of number of arrests and age was substituted to account for the participant’s criminal history.

²⁸ Six graduates of PSC were subsequently revoked. As the measure assessed herein is *graduation* from PSC, these six individuals remained in the “graduated” group. Had we included these individuals in the “revoked” group – rather than retaining them in the “graduated” group – the analysis would have resulted in slightly better outcomes for the graduate group with fewer of the graduates arrested and convicted. However, the impact was minimal.

To do this, t-tests (means testing) were employed to ascertain significant differences across PSC participants as well as to assess if the impact of measures from the four key reentry areas (housing, employment, benefits, and substance treatment) on these outcomes were statistically significant. In addition, for this comparison, a variable was created to capture whether the individual had one or more records in Shared Village related to the big four reentry issues – housing, employment, benefits, and post-release substance abuse treatment. Given the scarcity of the data overall, this was an effort to create a proxy to represent those cases where the individual was more engaged with their PSC case manager.²⁹

Graduation vs. Revoked: Analysis and Results

Table 13 sets out the areas in which those who graduated from PSC differ significantly from those who were revoked. Again, caution should be exercised in overstating these results as the numbers became substantially small -- particularly among the group who were revoked and with respect to the four key reentry areas. Nonetheless, while there are no statistically significant demographic differences among those who graduated versus those who were revoked (they were approximately the same age, race, gender, and had the same number of children on average), there were differences among these PSC participants with respect to several measures of economic, social welfare and criminal histories.

Looking at employment history, graduates earned substantially more money (a difference of \$896.00/month) than those who were revoked. In addition, graduates were more likely to receive SSI/SSDI (33% compared to 9%) and were more likely to live in public housing (13% vs. 0%) than those who were revoked. However, 100% of those who were revoked had received food stamps in the past, compared to 81% of the graduates.

In terms of criminal histories, based on self-reported data, PSC graduates had fewer experiences in juvenile detention facilities than those who were revoked – on average, graduates had less than one experience (.84) compared to 1.91 experiences among the revoked group. In addition, graduates spent fewer months in an adult facility than revokees – (84 vs. 102 months, respectively) – a difference of 17 months. This is consistent with the risk data provided DPSCS, where the graduate group had 4.6 fewer juvenile and adult arrests than those who were revoked. DPSCS also provided a calculated ratio score which is the number of prior juvenile and adult arrests divided by current age and those in the graduate group had a lower ratio by .15 than those who were revoked. As overall these participants did not differ significantly by age, this difference likely reflects that those revoked had a more extensive juvenile and/or adult arrest history than those who graduated.

With respect to CJIS criminal history records, the graduates differed from those revoked in four measures. Graduates, while having fewer arrests overall, had a higher number of prior charges (2.43 vs. 2.21) than the revoked group. In addition, graduates were more likely to be charged with a

²⁹ Alternatively, this could be indicative of a particular vendor, however, most of these recorded transactions were from Jericho (216 of 222 records or 97%) and the remaining were recorded by Alternative Directions (6 records or 7%). (As noted earlier in the report, there was no data in Shared Village beyond basic program data (e.g., program start date) from Prisoner's Aid or Healthcare for the Homeless.) Another possibility is that these records could be indicative of newer cases since the Shared Village database was launched after the beginning of the program. However, the program start and end dates were reviewed and the dates among those who had records versus those who did not were similar. Finally, this variable could be a proxy of a case manager who was more diligent than other case managers in recording information in Shared Village. However, there is no data available to assess that possibility.

person offense, and to be convicted of a person offense, and to have more convictions for person offenses than those in the revoked group (11.90 charges and 1.86 convictions compared to 7.55 charges and 1.17 convictions). Finally, those in the graduated group had significantly more traffic convictions than those in the revoked group (who had no traffic convictions).

The graduates and those who were revoked were also compared on all program participation measures and the four key post-release reentry areas of housing, employment, benefits, and substance use treatment (Table 13). There were a few differences. Among those who graduated, 82% had one or more reported life changes in Shared Village, compared to 51% of those revoked from PSC – a statistically significant difference of 31%.

Among the four reentry areas, 100% of graduates were reportedly housed, compared to 71% of those revoked; graduates also received food stamps benefits for a shorter time than those revoked (113 fewer days); and graduates participated in treatment for 91 more days than those in the revocation group. In terms of employment post-release, while 43 graduates had a job while in PSC, this could not be statistically compared to the revocation group as there was only 1 individual among those revoked with a record of employment in the Shared Village database.

Table 13: Graduated vs. Revoked: Historical and Program Differences N=211

	Graduated			Revoked			Significant Difference
	N	Mean	SD	N	Mean	SD	
Assessment (Pre-Release)							
<i>Employment History</i>							
Salary Per Month	45	\$1023	\$1077	11	\$127	196	\$896***
<i>Social Welfare Benefit History</i>							
SSI/SSDI	84	.33	.47	22	.09	.29	.24**
Food Stamps	84	.81	.39	22	1.00	.00	-.19***
Public Housing	84	.13	.33	22	.00	.00	.13**
<i>Criminal History - Self-Report</i>							
Juvenile - Number of Times Served in Detention Center	131	.84	1.83	44	1.91	2.62	-.79*
Lifetime Months in Adult Facility	140	84.81	41.6	42	102.21	38.8	-17.4*
DPSCS Risk Data							
Number Juvenile and Adult Arrests	150	19.64	10.9	44	24.32	10.9	-4.68*
Ratio: Number of Prior Arrests/Current Age	145	.51	.29	42	.66	.28	-.15**
Criminal History – Official Records							
Total Number of Prior Charges	145	2.43	.89	42	2.21	.51	.22*
Total Number Person Charges	145	11.90	13.0	42	7.55	8.2	4.35*
Total Number Person Convictions	145	1.86	2.3	42	1.17	1.2	.69*
Total Number Traffic Convictions	145	.10	.44	42	.00	.00	.10*

	Graduated			Revoked			Significant Difference
	N	Mean	SD	N	Mean	SD	
Data Recorded in Shared Village (Post-Program Engagement)							
Has 1 or more records in a Key Reentry Area	130	.82	.39	39	.51	.50	.31***
<i>Housing</i>							
Currently Housed	73	1.00	.00	14	.71	.47	.29***
<i>Social Welfare Benefits</i>							
Days Receiving Food Stamps	64	311	142	16	424	213	-113+
<i>Substance Abuse Treatment</i>							
Total Days in Treatment	36	250	124	8	159	141	91+

+Significant at $p < .10$ *Significant at $p < .05$ **Significant at $p < .01$ ***Significant $p < .000$

Results: Logistic Regression - Graduated vs. Revoked

Table 14 provides the outcome results looking at PSC participants who graduated from the program versus those who were revoked after controlling for explanatory variables. The first model looks at the likelihood of graduation considering the length of time since the participant's release, their age, length of criminal career (in days), the ratio of prior arrests and age and the total number of person charges over their career. Those who had a higher number of person charges were more likely to graduate, while ratio of prior arrests and age was negatively related to graduation – those with a higher ratio were significantly *less* likely to graduate from PSC; conversely, those with a lower ratio were significantly *more* likely to graduate. The overall predicted probability of graduation was 82%.

Model 2 includes the proxy measure of engagement with their case manager (as measured by the existence of records in Shared Village in one of the four key reentry areas of housing, employment, social welfare benefits and engagement in post-release treatment). Those who were engaged were significantly more likely to graduate. The overall probability of a participant graduating from PSC when considering engagement with their case manager is 85%. Exploring the differences in graduation by proxy measure of engagement more specifically, the probability of graduation was 90% for those engaged with their case managers compared to 62% for those who are not engaged.³⁰

³⁰ Probabilities were calculated based on output values (the calculation worksheet is provided in Appendix A).

Table 14: Logistic Regression: Graduated vs. Revoked

	Logistic Odds Ratios and z Statistic	
	(1) Graduated	(2) Graduated
Days From Release	0.999 (1.62)	0.999 (0.80)
Age of Participant	1.056 (1.28)	1.023 (0.51)
Criminal Career in Days	1.000 (1.06)	1.000 (0.59)
Ratio of Age and Number of Prior Arrests	0.120 (2.94)**	0.073 (2.93)**
Total Number Person Charges	1.076 (2.86)**	1.069 (2.45)*
Proxy of Engagement with Case Manager (Yes=1, No=0)		5.511 (3.60)**
Observations (N)	187	155
Pseudo R-Square	.1181	.1673
Log Likelihood	-87.84	-64.58

* Significant at $p < .05$ ** Significant at $p < .01$

Exploring the relationship between PSC graduation on post-release arrest, conviction, and incarceration follows.

Recidivism outcomes comparing the graduate and revocation groups are provided in Table 15. Being arrested is one of the reasons why participants can be revoked,³¹ however, of the 29 graduates arrested, 20 were arrested *prior* to graduation from PSC, and of those, 4 were convicted and 2 were incarcerated to one or more days. Nonetheless, across the spectrum – arrest, conviction, and incarceration, those who graduated from PSC fared better than those who were revoked. Specifically, 20% of graduates were arrested, compared to 67% of those who were revoked; 5% of graduates were convicted compared to 36% of those revoked; and 3% of graduates were incarcerated post-release compared to 26% of those revoked from PSC.

Among those arrested, graduates had fewer arrests (2.07 vs. 2.86) and fewer charges (2.09 vs. 5.32) than those revoked. Among those convicted, graduates were convicted of fewer charges (.27 vs. .75); and among those returned to incarceration for one or more days post release, graduates received a sentence of 21 days, serving 5 days on average; for the revoked group, they received a sentence of 1,493 days, serving 204 days on average. The differences in these sentences are largely driven by the crimes committed. Looking at the specific offenses, among the 4 graduates with a

³¹ In short, not all those revoked were arrested; and not all of those arrested were revoked. However, arrest and conviction are significant factors in whether or not a participant is revoked. Specifically, if a participant is arrested, the probability that they will be revoked is increased by 25%; among those convicted, the probability that they will be revoked is increased by 41%. (Results not shown, but are available upon request).

post-release arrest, conviction and incarcerated to one or more days post-release, convictions were all misdemeanor drug possession. Three of 4 sentences ranged from 1 to 6 days, the remaining was for a non-marijuana possession charge and was for 75 days. In contrast, among the 11 who were revoked post-release, they were sentenced for more serious crimes including conspiracy drug distribution – narcotics (sentenced to 8 years); first degree burglary (sentenced 20 years); firearm possession with felony conviction (5 years) and so on.

It is important to note that when looking at post-release conviction and incarceration outcomes focused only on the subgroup of those arrested, convicted and incarcerated, the sample sizes are small – among the 29 PSC graduates arrested, only 7 individuals were convicted (compared to 15 of those who were revoked). While the overall arrest, conviction and incarceration differences are promising, when looking only at those who were arrested, convicted, and incarcerated, the small sample size demands one view these explorations as informational, and caution against overstating these results.

Table 15: Graduated vs. Revoked: Recidivism Outcomes T-Test N=187

	Graduated			Revoked			Significant Difference
	N	Mean	SD	N	Mean	SD	
Arrested Post-Release	145	.20	.40	42	.67	.47	-.47***
Convicted Post-Release	145	.05	.21	42	.36	.48	-.31***
Incarcerated 1 or More Days	145	.03	.16	42	.26	.44	-.23***
Among those Arrested							
Number of Arrests	29	2.07	1.33	28	2.86	1.45	-.79*
Number of Charges	29	3.13	2.09	28	5.32	3.49	-2.19**
Among Those Convicted							
Number of Charges Convicted	7	.27	.53	15	.75	.80	-.48*
Among Those Incarcerated							
Total Time Imposed In Days	4	21	36	11	1493	2129	-1472*
Average Sentence Imposed In Days	4	5	8	11	204	264	-199*

+Significant at $p < .10$ *Significant at $p < .05$ **Significant at $p < .01$ ***Significant $p < .000$

Results: Logistic Regression - Impact of Graduation on Recidivism

Next we explore differences between the successful and unsuccessful PSC participants using multivariate analysis to account for competing factors that could explain the impact of graduating from PSC on recidivism, measured as arrest, conviction, and incarceration post-release.

PSC participants who graduated were significantly less likely to be arrested, convicted and incarcerated post-release than those who were revoked from the program, after controlling for days

from release, age of the participant, and the ratio of number of arrests by age.³² The overall probability that a PSC participant will be arrested is 26%; the probability of a conviction is 3%; and the probability of incarceration is 2%.

For PSC graduates, the probability they will be arrested is reduced by 43%³³ -- with those revoked having an overall probability of arrest of 61% compared to graduates with a probability of arrest of 18%. While the length of time from release was significantly related to arrest, the impact was negligible.

In terms of conviction, PSC graduates were also significantly less likely to be convicted post release. Overall, the probability that PSC graduates will be convicted is reduced by 15% -- with those revoked having a probability of conviction of 17% and graduates of 2%. Age of the participant and days from release, while both statistically significant, were negligibly impactful.

Similarly, PSC graduates were also significantly less likely to be incarcerated post release. The probability that a PSC graduate is incarcerated reduced by 9% -- with those revoked having a probability of post-release incarceration of 10% and graduates of 1%. As with conviction, age of the participant and days from release, while statistically significant, had minimal impact.

Table 16: Logistic Regression: Impact of Graduation on Recidivism

	Logistic Odds Ratios and z Statistic		
	(1) Arrest	(2) Conviction	(3) Incarceration
Graduated from PSC	0.139 (4.71)**	0.106 (3.77)**	0.112 (3.17)**
Days From Release	1.003 (3.87)**	1.006 (3.86)**	1.005 (3.13)**
Age of Participant	0.997 (0.11)	0.910 (2.50)*	0.914 (2.19)*
Ratio of Age and Number of Prior Arrests	2.329 (1.37)	1.650 (0.52)	1.574 (0.41)
Observations (N)	187	187	187
Pseudo R-Square	.220	.380	.356
Log Likelihood	-89.62	-41.97	-33.63

* Significant at $p < .05$ ** Significant at $p < .01$

³² The length of the participant's criminal career was initially included in the model, however, when diagnostic tests were run, this measure rendered the model biased. For this reason, length of criminal career was omitted from the outcome analysis, and the ratio of number of arrests and age was substituted to account for the participant's criminal history.

³³ Probabilities were calculated based on output values (the calculation worksheet is provided in Appendix C).

Results: Cox Regression (Survival Analysis) - PSC Graduates vs. Revoked

The next analysis was to observe if there was a difference in the two groups with respect to the amount of time to a recidivism event. CJIS data provides the offender's history including all dates of arrest, the outcome of that arrest, and sentencing data. The period between the date of release and the date of the first arrest was calculated to create a "days to event", which was the outcome measure. The same process was used to identify the days to the first arrest that lead to a conviction post-release, and the days to the first arrest that lead to a sentence of incarceration for one or more days post-release.

Table 17 reveals that those who graduated from PSC had a lower hazard (or risk) of re-arrest than those who were revoked. The estimated hazard ratio was .268, indicating that those who graduated had 73% lower risk³⁴ compared to those revoked – ranging from as large as a 85% reduction in risk to as small as 55%. This was the case even after controlling for the factors in the model discussed in Table 16.

Graduating from PSC also significantly reduces the risk of having an arrest leading to conviction by 86% (ranging from 63% to 94%), compared to those who are revoked, as indicated in the second column of Table 17. Likewise, Column 3 indicates that those who graduate in PSC have a significantly reduced risk of 87% for an arrest that leads to being reincarcerated – (ranging from 96% to 58%) compared to those who are revoked.

Table 17: Survival Analysis PSC Graduates on Time to Failure

	Cox Regression Coefficient and z Statistic		
	(1) Time to Re-Arrest	(2) Time to Reconviction	(3) Time to Reincarceration
PSC Graduate	-1.318 (4.83)**	-1.940 (4.07)**	-2.063 (3.42)**
Age of Participant	-0.004 (0.29)	-0.046 (1.85)	-0.046 (1.51)
Ratio of Age and Number of Prior Arrests	0.503 (1.15)	0.253 (0.36)	0.375 (0.46)
Observations (N)	187	187	187
Log Likelihood	-246.71		

*Significant at $p < .05$ **Significant at $p < .01$ ***Significant $p < .000$

³⁴ Calculation worksheets for conversion of hazard rate into relative risk are provided in Appendix D. Range of risk is calculated by 1 minus the confidence interval values.

PSC graduates also had a statistically significant ($p < .000$) longer period of time before their first post-release arrest than those who were revoked. They also survived in the community longer than the comparison group before their first arrest leading to a conviction and before their first arrest leading to incarceration (both also significant $p < .000$).

The difference between the PSC graduate and revoked groups on these recidivism outcomes are also illustrated in the survival plots provided in Figure 4, Figure 5, and Figure 6. On the vertical axis is the cumulative survival rate, or the overall rate of those who have survived – or not re-arrested, reconvicted, or reincarcerated. These graphs were calculated including the variables contained in the Cox regression model in Table 17.

At 365 days post release, 88% of the PSC graduates survived in the community without being arrested, with 79 individuals remaining to include in the calculation of the recidivism rate. In contrast, 38% of the comparison group survived, with 12 individuals remaining to be considered in the analysis. As evidenced in Figure 4, the gap between the graduate and the revocation groups begins to widen around 60 days (2 months), and the graduate group continues to survive at higher rates than the revoked group until approximately 600 days (1 year, 8 months). At that point, 69% of the graduates survived (with 29 individuals remaining in the analysis) compared to 29% of the revoked group (with only 6 individuals remaining).

It is important to note that as time passes, the number of individuals in the revoked group included in the analysis becomes very small, because the majority of failed within the first year. For example, only 20 PSC participants who were revoked were still at risk for arrest at 220 days (7 months) from release, compared to 99 graduate group members. Thus, caution should be exercised in overstating these results.

Figure 4: Survival Plot: Days to First Arrest N=187

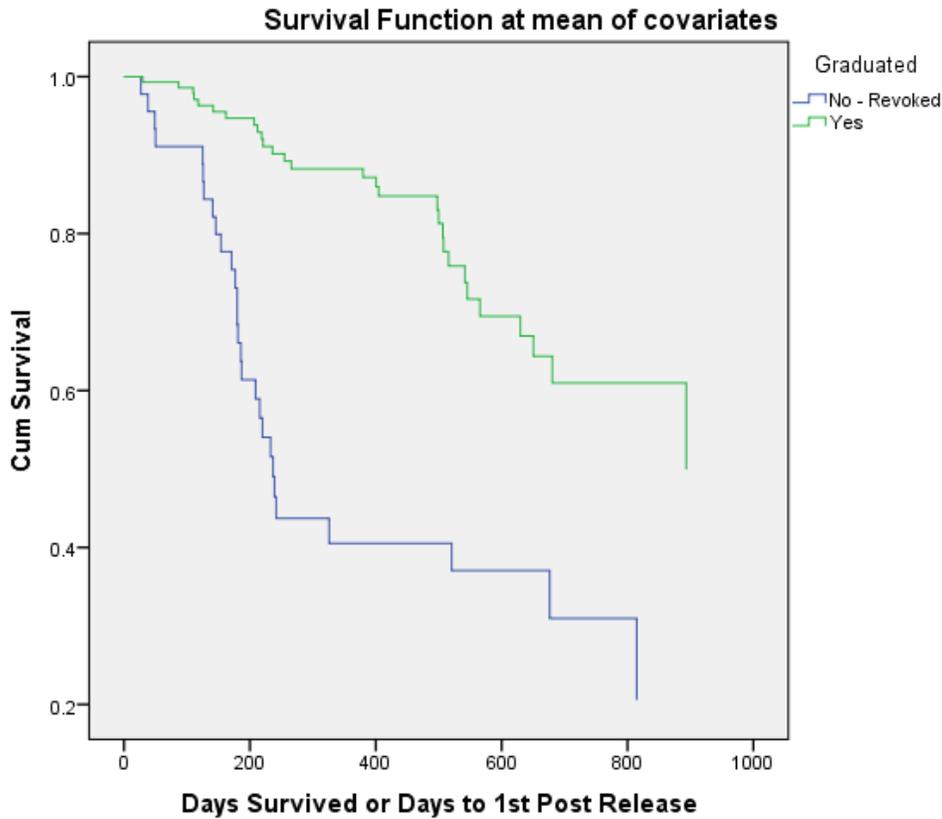
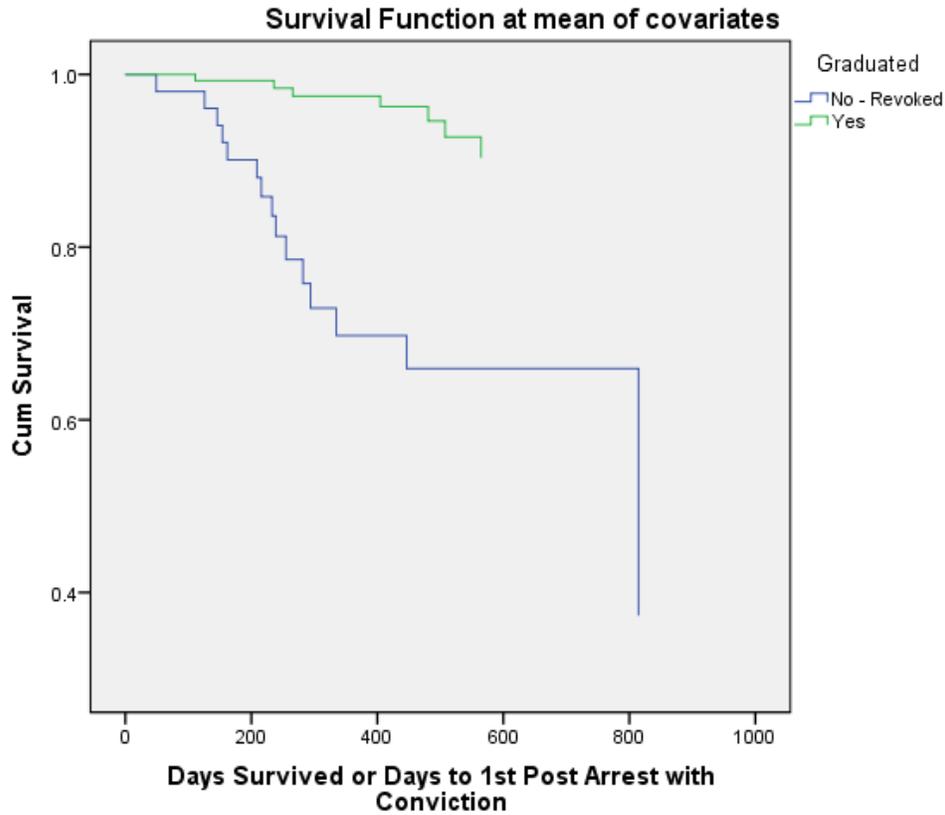


Figure 5 explores survival to the first arrest leading to a conviction. Here again, those who graduated PSC fared better than those who were revoked. At 365 days (1 year) post release, 99% of the PSC graduates survived in the community without being arrested for a charge that lead to a conviction, with 88 individuals remaining to include in the calculation of the recidivism rate. For the revoked group, 73% survived, with 21 individuals remaining to be considered in the analysis.

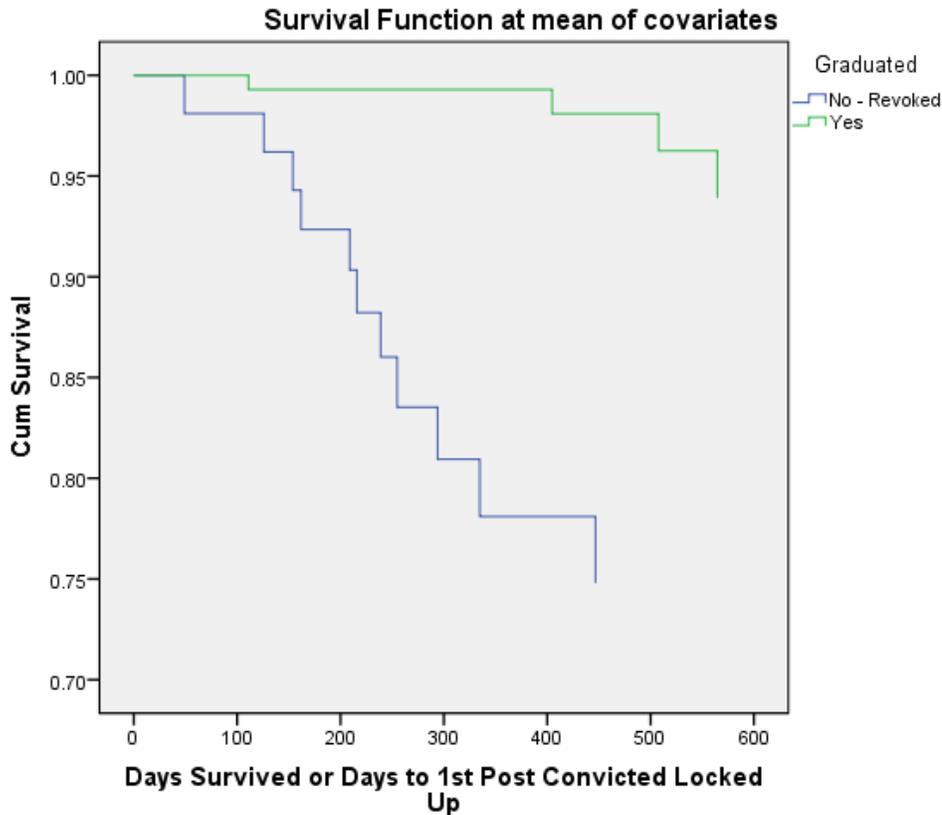
The gap between the graduate and revoked PSC participants is evident around 200 days (6 months), and the graduate group continues to survive at higher rates than the revoked group until about 500 days (approx 16 months). At that juncture, 98% of PSC graduates survive, with 54 remaining were in the analysis; in contrast, 69% of the revoked group survived, with 16 revokees remaining.

Figure 5: Survival Plot: Days to First Arrest Leading to Conviction N=187



Finally, the graduate group survives at a higher rate than the comparison group with respect to the length of time to experiencing an arrest that leads to being incarcerated post-release (Figure 6). At 365 days (1 year), 99% of the graduate group had not been arrested for a charge that resulted in incarceration post-release (with 88 PSC graduates remaining in the analysis); compared to 73% of the revoked group (with 21 PSC participants remaining).

Figure 6: Survival Plot: Days to First Arrest Leading to Incarceration N=187



This report concludes with a discussion of the limitations of the study, as well as recommendations for the future.

Limitations & Recommendations

Data Limitations – Shared Village

With respect to the Shared Village data utilized for this report, there are several important caveats to these data. First, with respect to the completeness of the data, the Shared Village database was implemented while the program was in development, thus there are gaps in the data. Some of these gaps are related to former vendors who were never involved in the Shared Village process (e.g., Prisoner’s Aid) and/or records were not completely updated to include all past and information/interactions once Shared Village was implemented. Further, these data are based on information reported to the vendor and/or to Safe and Sound staff – either directly from the PSC participant or from someone engaged in their case (e.g., an employer or Community Supervision Officer); thus, Shared Village data are *not* based on official records. Therefore, if a PSC participant had no contact with PSC staff, the vendor, or other stakeholder, and/or the information was not reported, then situational changes and related outcomes may be missing.

A second caveat is related to the quality of the data entered. Through the data analysis process, inconsistencies within the data were observed (e.g., events entered into Shared Village as occurring *prior* to release – such as a change in residence which could only occur *after* release). While efforts were made to correct for these inconsistencies, in many cases the only option was to omit the event from consideration in this analysis. Consequently, the level of participant engagement in PSC and related outcomes are likely underestimated. For example, individuals may have had a change in their employment status – either employed or unemployed – and the data may not reflect that change.

Given these data issues, the post-release activities were either summarized or in some cases, excluded entirely from the analysis. For example, there were only 2 records in the Shared Village mental health treatment table. It is unclear if this is because only 2 PSC participants received mental health services post-release, or if this is a missing data issue. Areas with likewise small numbers of records include education (there were 14 records reflecting activities among 13 PSC participants); employment (of 73 records, 66 were unique PSC participants); and residence data (of 273 records, 160 PSC participants).

Another issue with respect to understanding the program impact on participants is that the only measure of treatment dosage was the existence of case management notes in Shared Village. The case management notes consist of a date, the type of contact (phone, meeting, or record note), and a text field to enter information about that contact. The issue is that it is not feasible to systematically categorize and analyze a text only field. In November 2013, the Shared Village developer added “labels” to the case notes to allow the Case Manager to catalog what occurred in the interaction (e.g., provided a referral). In the future, utilization of these labels will allow for a more robust examination of the treatment dosage provided to PSC participants.

Other data related recommendations include adding data checking notations to certain fields to ensure that data entered makes sense (e.g., for a PSC participant’s employment record, a confirmation alert if the hourly rate is entered at \$175.00 when it should be \$17.50); alerts to the system to ensure that data are updated on a regular basis; and providing additional training for vendors on the Shared Village system once these updates are made. A data entry manual may also be helpful in guiding vendors in their data recording efforts and training. These actions will likely improve both the quality and completeness of the data.

Data Limitations – CJIS

In addition, in terms of the recidivism outcomes among the PSC participants, the analysis does not account for time that the individual may not have been “at risk” due to a post-release incarceration. While the CJIS criminal history data provides whether an individual has been re-arrested, and reconvicted, as well as sentencing information indicating if an individual was sentenced to confinement, the data contains neither dates of release nor dates of incarceration.

A related issue with these data pertains to violations of parole or probation. It is not entirely clear how CJIS data captures the events for an individual on parole who is charged with a new arrest, and returns to prison on a violation of parole triggered by that new arrest, rather than on the new charge.

Another limitation is that the CJIS data does not appear to contain any event past January 11, 2013. Thus those in the sample who were released in summer and fall of 2012 did not have as long of a time to “fail” as those released in prior periods. However, days from release were included in the

logistic regression models and while we utilized survival analysis to control for varying times to arrest, this limitation remains.

Conclusions

In summary, successfully completing PSC has a strong impact on post-release recidivism outcomes. Specifically, 20% of graduates were arrested, compared to 67% of those who were revoked; 5% of graduates were convicted compared to 36% of those revoked; and 3% of graduates were incarcerated post-release compared to 26% of those revoked from PSC. Controlling for other factors that may explain these outcomes, we find that graduating from PSC reduces the probability of arrest by 43%; the probability of conviction post-release by 15%; and probability of incarceration post-release by 9%.

In addition, analysis reveals that those who graduate PSC survive for a significantly longer period of time before a post-release arrest event, compared to those who are revoked. The risk of arrest for those who graduated from PSC is reduced by 73% compared to those who were revoked; the risk of an arrest leading to a conviction for those who graduated is reduced by 86%; and the risk of an arrest leading to being reincarcerated post-release is reduced by 87%.

This report also reviewed the impact of engagement with the PSC case manager on the probability that a participant would graduate or be revoked from PSC. Those who engaged with their case manager are substantially more likely to graduate with an increased probability of 29% over those who do not engage with their case manager.

In terms of the four key reentry areas (housing, employment, benefits, and post-release substance abuse treatment) none were individually impactful on predicting either revocation from the program or recidivism. However, the scarcity of data in these areas and case management notes may be a key reason for this finding. Increased adherence to the quality and quantity of data reported will allow for a more rigorous examination of these factors in the future.

Overall, participation in PSC provides an opportunity for formerly incarcerated persons to move away from continued engagement in the criminal justice system.

Appendix A: Participant Sample by Data Source

596 Unique Individuals recorded in Shared Village Database
80 Removed/Ineligible
1 Violence Prevention Initiative (VPI)
108 Pending/Not Yet Released
24 Released after September 30, 2013
Total = **383** PSC Participants March 2010 to September 2013

Criminal History CJIS Data

Shared Village Program Data

Of 383, **23** Engaged After April 2013, when CJIS Criminal History Data Request Submitted
360 SID Numbers Submitted CJIS Data:
34 Not Matched in CJIS data
Total = 326 Matched in CJIS

Of 383 PSC Participants
163 Actively Engaged in PSC
9 Deceased While Engaged in PSC
156 Graduated from PSC
55 Revoked from PSC
Total = 211 in Graduate vs. Revoked Analysis

Of 326 Matched in CJIS,
63 Released after 1/11/2013
(Last Date of CJIS activity)
1 Never Engaged in PSC
Total = 262 in Recidivism Analysis

Of 211 PSC Graduates or Revokees,
187 in Recidivism Analysis
145 PSC Graduates
42 PSC Revoked
Total = 187 in Graduate vs. Revoked Recidivism Analysis

Of **262** in Recidivism Analysis,
75 Still Active in PSC
145 PSC Graduates
42 PSC Revoked
Total = 187 in Graduate vs. Revoked Recidivism Analysis

Appendix B: Conversion of Odds Ratio to Probability Worksheet - Graduation

Graduated	Odds Ratio	Reduction In Odds	Change from 0 (Not Engaged) to 1 (Engaged)	Change into %	
Case Manager Engaged	5.51	451%	0.28	28%	The probability that those who are engaged with their Case Manager will graduate is increased by 28%.
Career Days	0.999	0%	0.00	0%	
Days from Release	1.023	2%	0.00	0%	
Age	0.999	0%	0.00	0%	observations 155
Ratio: Prior Arrest/Age	0.073	-93%	-.33	-33%	LL --64.58
Person Sum	1.068	7%	0.01	1%	pseudo r2 0.1673

Probability of Graduation – Engaged vs. Not Engaged for full model³⁵

Engaged with Case Manager	90%
Not Engaged	62%

³⁵ Calculated by running the regression model separately by restricting it to only those who were engaged with the case manager (using the proxy measure of data in the Shared Village database) then for those who were not engaged.

Appendix C: Conversion of Odds Ratio to Probability Worksheet - Recidivism

<u>Arrest</u>	Odds Ratio	Reduction In Odds	Change from 0 (Revoked) to 1 (Graduated)	Change into %	
Graduated	0.139	-86%	-0.433	-43%	The probability that those who graduate PSC will be arrested is reduced by 43%. observations 187 LL -89.62 pseudo r2 0.2206
Days from Release	1.002	0%	0.000	0%	
Age	0.997	0%	0.000	0%	
Ratio: Prior Arrest/Age	2.329	133%	0.15	15%	

Probability of Arrest – Graduated vs. Revoked for full model³⁶

Graduated	18%
Revoked	61%

<u>Conviction</u>	Odds Ratio	Reduction In Odds	Change from 0 (Revoked) to 1 (Graduated)	Change into %	
Graduated	0.106	-89%	-0.148	-15%	The probability that those who graduate PSC are convicted reduced by 15%. observations 187 LL -41.977 pseudo r2 0.3803
Days from Release	1.006	1%	0.000	0%	
Age	0.910	-9%	-0.022	-2%	
Ratio: Prior Arrest/Age	1.650	65%	0.016	2%	

Probability of Conviction – Graduated vs. Revoked for full model³⁶

Graduated	2%
Revoked	17%

³⁶ Calculated by running the regression model separately by restricting it to only those cases that graduated PSC and then for those that were revoked.

<u>Incarceration</u>	Odds Ratio	Reduction In Odds	Change from 0 (Revoked) to 1 (Graduated)	Change into %		
Graduated	0.112	-89%	-0.094	-9%	The probability PSC graduates are incarcerated is reduced by 9%.	
Days from Release	1.005	1%	0.000	0%		
Age	0.914	-9%	-0.022	-2%	observations	187
Ratio: Prior Arrest/Age	1.574	57%	0.010	1%	LL	-33.637
					pseudo r2	0.356

Probability of Conviction – Graduated vs. Revoked for full model³⁶

Graduated	1%
Revoked	10%

Appendix D: Conversion of Hazard Rates to Relative Risk Worksheet

<u>Arrest</u>	Exp(B) Hazard Rate	Relative Risk	95% Confidence Interval	
Graduated from PSC	0.268	0.73	.156 - .456	The risk of arrest for those who graduated from PSC is reduced by 73% compared to those who were revoked, with all other values held constant.
Age	0.996	0.00		
Ratio: Prior Arrest/Age	1.653	-0.65		

<u>Conviction</u>	Exp(B) Hazard Rate	Relative Risk	95% Confidence Interval	
Graduated from PSC	0.144	0.86	.057 - .366	The risk of conviction for those who graduated from PSC is reduced by 86% compared to those who were revoked, with all other values held constant.
Age	0.955	0.05		
Ratio: Prior Arrest/Age	1.288	-0.29		

<u>Incarceration</u>	Exp(B) Hazard Rate	Relative Risk	95% Confidence Interval	
Graduated from PSC	0.127	0.87	.038 - .414	The risk of incarceration for those who graduated from PSC is reduced by 87% compared to those who were revoked, with all other values held constant.
Age	0.955	0.05		
Ratio: Prior Arrest/Age	1.455	-0.45		