Measuring Recidivism in the District of Columbia

Final Report

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Executive Summary

Recidivism is one of the most important concepts in criminal justice; it is a key outcome variable for determining the extent to which an agency has been able to effectively respond to the offender populations it serves, identifying the needs for more effective programs, communicating the need for increased resources, and demonstrating accountability to the public and to legislators. Despite its importance, recidivism is often defined and measured differently by different agencies, and the lack of consistency can result in difficulties in coordinating efforts across agencies to assess and respond to the issue of recidivism. To address this challenge, this study explores the possibility of standardizing the definition and measurements of recidivism. This is done by examining the recidivism of those released from the Department of Corrections (DOC) in the District of Columbia (DC) in FY07 and identifying key factors that affect their recidivism measured in three different ways – rearrest, reconviction, and reincarceration. The results show that several factors are consistent predictors of recidivism regardless of the type of recidivism event. Race, age at release, certain incarceration charges, and criminal history are associated with the recidivism among the DOC releasees. Based on these findings, this study recommends that those predictors should form the basis for developing a standardized definition and measure of recidivism, and the data on those predictors should be collected by relevant agencies and linked with a common offender identifier. Based on the study findings as well as the responses to a survey that was administered to gather information about the current recidivism measurements used by DC agencies, it can also be recommended that the definition and measurement of recidivism should be sufficiently comprehensive to accommodate diverse interests of relevant agencies. The study concludes with a discussion on future research that can

facilitate further understanding of recidivism in DC and can help develop and evaluate reentry programs.

Introduction

Recidivism is "one of the most fundamental concepts in criminal justice" and relevant in understanding the core functions of the criminal justice system such as incapacitation, deterrence, and rehabilitation (National Institute of Justice, 2010). Within criminal justice agencies, the level of recidivism is an important outcome variable that provides the basis for determining the extent to which an agency has been able to effectively intervene in the criminality of the offender populations it serves, identifying the needs for more effective programs, communicating the need for increased resources, and demonstrating accountability to the public and to legislators (Council of Juvenile Correctional Administrators, 2009).

In a given jurisdiction, the process of tracking recidivism is likely to involve multiple criminal justice agencies. Typically, we are most interested in tracking recidivism for those who are released from facilities that are operated by correctional departments (prisons, jails). Many of the released individuals are likely to be placed under some form of supervision (e.g., parole). If the releasees commit a new offense, they may be arrested by the police, and they may subsequently be convicted by the courts and possibly sentenced back to correctional facilities. The fact that the process of tracking recidivism involves input from multiple agencies indicates a need for a common platform on which agencies can share data, coordinate efforts to analyze data, and act on the findings.

It is also clear that systematic analysis of recidivism is valuable to many agencies. Clearly, the agencies responsible for post-release supervision should be informed of the patterns

of recidivism, not only for those they supervise but also for those who are not under their supervision. Such information can shed light on the consequences of the supervision, in terms of the releasees' criminal activity (indicated by arrests) as well as the technical violations that may or may not indicate criminal activity but nonetheless can result in reincarceration. Agencies that govern correctional institutions are interested in knowing whether the experience of incarceration and programs/treatments affect recidivism through deterrence or rehabilitation. Courts are perhaps interested in the relationship between the types and length of sentences and recidivism. Also, police may be interested in understanding the likelihood of crime for those who are released from prisons or jails. In order to generate comprehensive information about recidivism that is useful to the agencies, it is important that the definitions and measurements of recidivism are standardized.

Relevant factors in recidivism

Recidivism can be measured in a variety of ways, and it is important to recognize that different information can be obtained depending on the choice of recidivism measure. Typically, the performance of a reentry or treatment program is discussed in terms of reductions in the rate of recidivism (e.g., the program participants were 20 percent less likely to recidivate).

The reductions in recidivism indicate that the rate of returning to crime was lower for program participants (than non-participants). However, the phenomenon of "returning to crime" can be measured in a variety of ways, and thus, there is much operational ambiguity in what recidivism really means. It is important to understand how recidivism is measured, especially in the context of comparing the effectiveness of different reentry programs or simply comparing and communicating the prevalence of recidivism across agencies.

There are several factors that affect the measurement of recidivism, which are important in understanding whether recidivism rates from different agencies or different studies are comparable.

Base Population: Depending on the base population of offenders, the recidivism rate can vary significantly. The base population, the population of individuals whose recidivism is monitored, can be defined as those who are arrested, charged, convicted but not incarcerated (probation, fine, etc.), and convicted and incarcerated (jail, prison). The choice of the base population has important implications. For example, since being sentenced to incarceration indicates a judgment at the sentencing stage that the offender has a higher risk of reoffending, those who are incarcerated are likely to show a higher recidivism rate than those who are convicted, but not sentenced to prison or jail (given that they are convicted of a similar offense of similar seriousness). Even among those who are incarcerated, it is important to distinguish those with and without a prior incarceration experience. Research on recidivism of released prisoners informs us that the presence of prior incarceration increases the likelihood of recidivism (Beck and Shipley, 1997; Harer, 1994; Hoffman and Stone-Meierhoefer, 1979; Kitchener, Schmidt, and Glaser, 1977; Langan and Levin, 2002; Rosenfeld et al., 2005). In general, criminal history is identified as one of the most powerful predictors of recidivism (Gendreau, Little, and Goggin, 1996). In evaluating the effectiveness of after-prison reentry programs, Rosenfeld (2008) points out an important but often ignored distinction among released prisoners, comparing first-timers, those who were released from prison for the first time and veterans, those who have a prior incarceration experience. The first-timers and the veterans are different in that the veterans have a higher chance of recidivism than the first-timers (see also Tonry, 2004).

Recidivism event: Second, it is important to understand what constitutes a recidivism event (Maltz, 1984). In a follow-up study of released prisoners, those who are *rearrested* constitute the widest definition of recidivists, and those who are *reconvicted* are, by definition, a subset of the rearrested, and those who are *reincarcerated* are a subset of the reconvicted, and thus represent the narrowest definition of recidivists.[1] Using two different indicators of a recidivism event can produce very different pictures of the prevalence of recidivism. For example, in the 2002 BJS study, the 3-year recidivism rate based on reincarceration is 25 percent, while the recidivism rate based on rearrest is 67 percent (Langan and Levin, 2002).

The choice of the recidivism indicator should involve considering two types of error. Using rearrests as indicators of recidivism probably involves some errors of commission (false positives) because of false arrests; using only reconvictions or reincarceration is more likely to involve errors of omission (false negatives) (Blumstein et al., 1986). In adjudicating specific individuals, of course, presumption of innocence makes the error of commission unacceptable. In assessing the validity of data for research purposes, however, there must be a relative weighting of these two types of error. Reports by criminal justice practitioners indicate that the errors of commission associated with using arrest records are far smaller than the error of omission that would occur if only convictions were used. This is because reconviction and reincarceration as an indicator of recidivism are influenced by policy choices and decision making of courts and community supervision enforcement (Braga et al., 2009). For these reasons, studies on recidivism by researchers tend to use rearrest to measure the incidence of recidivism (Braga et al, 2009; Green and Winik, 2010; Ulmer, 2001; Kubrin and Stewart, 2006; Visher et al., 1991).

[1] One can also measure recidivism as a violation of technical conditions for supervised release, parole, or probation.

Based on the publicly available reports, criminal and juvenile justice agencies in the District seem to employ different indicators of recidivism, though they acknowledge that the different indicators have advantages and disadvantages and convey different types of information. For example, the Department of Youth Rehabilitation Services (DYRS) uses reconviction as the indicator of recidivism (DYRS, 2008).[2] On the other hand, the D.C. Department of Corrections (DOC) presents reincarceration rates as the indicator of recidivism (DOC, 2011). Following the way in which BJS measures recidivism (Beck and Shipley, 1997; Langan and Levin, 2002), CSOSA presents recidivism rates based on rearrest, reconviction, and reincarceration (CSOSA, 2011).

Follow-up time: Third, the overall recidivism rate (cumulative proportion of offenders who recidivate), which is often used as a measure of recidivism risk, may not be as informative as one might assume in examining the level of recidivism risk. The recidivism rate varies as a function of the length of the follow-up. More specifically, the longer the follow-up, the higher the recidivism rate becomes because there is more time for the offenders to commit a new crime. In recidivism studies such as the ones conducted by BJS (Beck and Shipley, 1997; Langan and Levin, 2002), not surprisingly, the cumulative recidivism rate is higher at later time points during the follow-up.[3] The recidivism (re-arrest) rate for offenders released from state prisons in 1994

[2] They reason that reconviction is more appropriate than rearrest or reincarceration because rearrest is influenced by policing priorities and limited by the possibility of false arrests (DYRS, 2008).

[3] The recidivism rate is also influenced by the nature of community supervision on which offenders are placed. For example, in the District of Columbia CSOSA's Community Supervision Program provides supervision to offenders on probation, parole, and supervised release (CSOSA, 2011). There is evidence that tighter supervision can increase the likelihood that violations or criminal behaviors are detected (Petersilia and Turner, 1993).

(Langan and Levin, 2002) was 30 percent, 44 percent, 59 percent, and 67 percent after 6 months, 1, 2, and 3 years.

What is more interesting and possibly more important than the increasing recidivating proportions in Langan and Levin (2002) is that the *changes* in the proportions are smaller as time passes (44, 15, and 8 percent). This suggests that the longer the released prisoners stayed without re-arrest, the lower their risk of recidivism becomes. This echoes the findings of many recidivism studies, which demonstrate that those who have offended in the past will have the highest probability of reoffending within several years, and the probability will decline steadily afterwards (Gottfredson, 1999; Maltz, 1984; Schmidt and Witte, 1988; Visher et al., 1991). More recently, this association between the length of "time clean" and the reduction in recidivism risk has been highlighted in studies which explore the timing at which the recidivism risk becomes sufficiently low (Blumstein and Nakamura, 2009; Kurlychek et al., 2006, 2007; Bushway et al., 2011). The rate of eventual recidivism cannot adequately characterize the recidivism risk of those who have stayed crime free during the first year or two since release from prison, and it is important to examine the *conditional* recidivism risk as a function of the law-abiding period.

Geographic coverage: Either in addressing the length of time until the recidivism event or in simply calculating the cumulative recidivism rates, it is important to consider whether all possible recidivism events are captured by the data source (database) being used. For example, it is possible that an individual who stayed crime free in the District may have recidivated in another state (Virginia, Maryland, or elsewhere). Thus, the recidivism rates calculated based solely on the D.C. criminal justice data are lower bounds on the actual recidivism rate. One study on the recidivism of released prisoners estimated that 7.6 percent of the released prisoners were

rearrested out-of-state (Langan and Levin, 2002). Another finds that, among the prisoners who were released from eleven state prisons in 1983, roughly 10 percent of them have out-of-state arrests within three years of their release (Orsagh, 1992). The presence of geographic mobility has also been shown in a study that analyzes the effect of prisons in other states on crimes within a state (Marvell and Moody, 1998). Geerken (1994) showed that not taking into account the extent of out-of-state arrests would bias the relationship between arrest rates and demographic variables such as age and race.

Possibility of Standardization

In order to compare and communicate recidivism rates across agencies in a meaningful way, there is need for some type of standardization of recidivism definitions and measures. The definitions and measures of recidivism can be standardized based on the factors identified above and the factors that may emerge as something relevant agencies consider important and think should be taken into account. It should be clear that the standardization process does not have to result in a single definition and measure of recidivism that all agencies should adopt. Due to its unique needs and objectives, each agency may value a given measure of recidivism differently from one another. What may be a sensible approach of standardization is to adopt several different measures of recidivism (e.g., rearrest, reconviction, reincarceration) and clearly describe and document all the relevant factors that affect the measures (e.g., a population of parolees with an average of 2 prior convictions followed for 3 years). Regardless of the number of such measures, measuring recidivism in a standardized manner will increase the agencies' capacity to evaluate the performance of their own programs as well as to learn about effective

programs from other agencies. Collectively, all agencies that are involved in the standardization process should benefit from improved information sharing.

Despite the need for coordinated efforts to track recidivism and the importance of standardized information about recidivism to various criminal justice agencies, the task of coordinating interagency efforts and information sharing is often challenging. In particular, the District of Columbia (DC) faces unique challenges with regard to data sharing and inter-agency collaboration, primarily because the criminal and juvenile justice systems in DC are governed across District and Federal agencies. One agency that is in a position suitable to address the issues surrounding the definitions and measurements of recidivism is the Criminal Justice Coordinating Council (CJCC). CJCC is an independent agency that is dedicated to improving the administration of criminal justice operations in DC by identifying issues that require interagency efforts and by facilitating such efforts to produce solutions.

Project Developments

Initial meetings

Our initial meeting between the principal investigator and the key CJCC personnel took place on June 27, 2011 to discuss the scope of the project. Based on the discussion at this initial meeting, it was established that the primary objective of this project is to produce guidelines for the standardization of the definitions and measurements of recidivism in the District. Our second meeting took place on July 7, 2011. The participants of this meeting were representatives from the research and evaluation divisions of the following agencies: Metropolitan Police Department (MPD), Department of Youth Rehabilitation Services (DYRS), Pretrial Services Agency (PSA),

Court Services and Offender Supervision Agency (CSOSA), and Department of Corrections (DOC).

Based on the second meeting, we learned that it is likely that DOC would be able to provide us with a cohort of those who were released from the DOC facilities; we will track and examine recidivism for this cohort.

While the initial cohorts of releasees may be from DOC, tracking their recidivism requires data from other agencies as well. For example, the information on subsequent arrests should come from MPD, the information on convictions should come from the Superior Court, and the information on incarceration comes from CSOSA.[4] It is also important to consider criminal history of the cohorts since criminological literature on recidivism has established that prior criminal history is one of the most robust predictors of recidivism.

Recidivism survey

At the meeting, we also provided all five agency representatives with a survey which asks questions about their current practices in defining and measuring recidivism. The survey instrument can be found in Appendix C. The survey was designed to discover the similarities and differences in the definitions and measurements of recidivism used by the agencies, which reflect the agencies' primary mandate, the level of resources allocated to examine recidivism, and their general interests in the issue of recidivism. Since the goal of this project is to produce District-wide guidance for the definitions and measures of recidivism, the survey should help ensure that the resulting guidance will be relevant and useful to the agencies.

[4] Although the information about the recidivism of those released from the Federal Bureau of Prisons (BOP) facilities is of potential importance to the guidelines, we learned that the process of requesting from the BOP will take longer than permitted project timeline. For this reason, we have made a decision not to pursue data of a releasee cohort from BOP. This BOP cohort may still be of interest to a potential future project.

The responses of the surveys can be summarized as follows: all five agencies either stated that they are tracking recidivism or expressed interest in tracking/understanding recidivism. Among those that currently track recidivism, there is large variability in the extent to which recidivism is examined. The variability can be explained by several factors.

First, it is important whether the agency is committed to providing programs, treatments, and services to suppress recidivism. For example, CSOSA conducts the most detailed analysis of recidivism, indicated by the types of recidivism events (arrests, convictions, technical violations, etc.) and the types of special populations (sex offender, domestic violence, etc.) it considers, and the multiple time points at which recidivism is evaluated. This is not surprising given that CSOSA provides programming that is aimed to suppress recidivism, and clearly recidivism is central to CSOSA's responsibility: monitoring recidivism of those who are placed under its supervision. Similarly, DYRS conducts fairly detailed examination of recidivism of juveniles, most likely because it (and its partners) provides programs and services that are aimed to help juveniles lead law-abiding life (i.e. to prevent recidivism). The lack of programs also explains the reason why MPD does not track recidivism on a regular basis. The main reason for the relationship between the provision of programs and services and examination of recidivism may be that the agencies are interested in whether the programming is effective in reducing recidivism.

Related, but a separate factor that can explain the variability is the length of time that agencies are responsible for the populations for whom recidivism can be tracked. For instance, DOC tracks recidivism but in a relatively limited manner (e.g., only one recidivism event, reincarceration) possibly due to the limited length of time its population serves time in jails, which thus results in difficulty in providing systematic programs to suppress recidivism.

Similarly, PSA is only responsible for its population for a short pretrial period, and thus it only tracks rearrest as the recidivism event.

It is also important to note that whether the agencies track recidivism is likely to be determined by whether resources are allocated to the analysis of recidivism. More than one agency expressed lack of resources as the reason for not collecting recidivism data. This issue is clearly related to whether the agencies are responsible for providing programs to suppress recidivism.

It should also be mentioned that what is considered a recidivism event by the agencies depends on the populations they serve. For example, PSA and MPD consider rearrest as the recidivism event, DOC considers reincarceration (jail), while CSOSA tracks a variety of events to measure recidivism including rearrest, reconviction, reincarcration, and technical violation. DYRS considers reconviction as the indicator of recidivism, although it also tracks rearrest.

Given the large variability in the ways in which recidivism is defined and measured by the agencies, it is important that we seek a data set that can allow us to generate a reasonably comprehensive set of definitions and measures of recidivism so that every agency can learn the relevant aspects of recidivism. Based on the willingness of DOC to provide us with data, we received data of a cohort of those who were sentenced and released into the community from DOC facilities in FY07. In this project, we measure recidivism by tracking rearrest, reconviction, reincarceration for 36 months. The source of rearrest data will be CJCC's JUSTIS[5] database (verified by MPD), the source of reconviction data will be JUSTIS (verified by the Superior Court), and the incarceration history and the reincarceration will be from DOC and CSOSA. The data for the prior arrest history will be from MPD. We collected data on releasees' demographic

[5] Justice Information System or JUSTIS is a portal allowing for the sharing of criminal justice information across various agencies simultaneously. The database includes voluntary contribution of information from law enforcement and criminal justice agencies.

information (from DOC, MPD) and whether they were placed under some form of supervision (from CSOSA).

Jail recidivism

Even though there may be a consensus among criminal justice agencies and policy makers that the measurement of recidivism is important, it is often difficult to systematically measure recidivism. This is especially true for jail administrators. Unlike state prison systems (or the federal system, the BOP in the case of District of Columbia), local correctional agencies do not have the capacity in terms of staff and data systems to regularly track recidivism. Jails serve as receiving institutions of diverse populations through the actions and decisions of criminal justice players including police, judges, probation and parole agencies, and immigration officials (Lyman and LoBuglio 2007). Consequently, jail administrators focus their resources on maintaining safe, secure, and humane facilities that are necessary for all the diverse populations. Also, unlike prisons, which manage individuals who largely come into the institutions to serve time post-conviction and have more orderly plans of release, jails hold individuals for a variety of reasons, from holding individuals pretrial, to holding individuals awaiting transfer to a state or federal agencies (the BOP in the case of District of Columbia), to incarcerating sentenced offenders. Typically, in jails the sentenced offenders serve only up to a year, and they move in and out of institutions in a very short period of time.[6]

Despite the difficulties with measuring recidivism of those who go through jails, it is important to keep in mind the sheer number of individuals who go through jails each year. Between June 2009 and June 2010, the nation's jails admitted nearly 13 million persons (Minton,

[6] Although the jail time is relatively short, the length varies across jurisdictions; for example, Massachusetts incarcerates sentenced offenders up to 30 months (Massachusetts Sentencing Commission, 2011).

2011). In comparison, just over 700,000 individuals were admitted to the nation's federal and state prisons (Guerino et al., 2011). Since the number of individuals that go through jails is significant, there should be more attention paid to the level of recidivism among jail inmates and there is important potential to intervene in some way to lower the recidivism and support successful reentry.

BJS recidivism studies

Even though prison and jail populations differ in many respects, a large number of studies on recidivism of prisoners provide useful insights into the patterns and predictors of recidivism (Uchida et al., 2009). Here, a set of most well-referenced recidivism studies by the Bureau of Justice Statistics (BJS) is reviewed. Beck and Shipley (1997) track those who were released from prisons in 11 states in 1983 and measures recidivism in the form of rearrest, reconviction, and reincarceration. Similarly, Langan and Levin (2002) track recidivism of those who were released from prisons in 15 states in 1994. The recidivism rates of the 1983 and 1994 prison releasees are summarized in Table 1. For the 1983 prisoner cohort, they find that 25%, 39%, 56%, and 63% are rearrested within the first 6 months, 1 year, 2 years, and 3 years, respectively. Similarly, for the same cohort, 11%, 23%, 38%, 47% are reconvicted at the same four intervals. Lastly, 8%, 19%, 33%, and 41% are reincarcerated at the same intervals. Two observations warrant our attention. One is that the patterns of recidivism, especially those of rearrest, are similar in those two studies: approximately two thirds of released prisoners are rearrested within 3 years. The other observation is that most recidivism occurs early on: over a half of those who are rearrested within 3 years are rearrested in the first year. Although the recidivism rates (especially the reincarceration rates) are different in the two prisoner cohorts, the

two observations hold true for both. These patterns will be compared with the patterns observed in the recidivism of the DOC releasee cohort.

Table 1. Recidivism rates from the two BJS studies

	Cumulative percent of released prisoners who were:					
	Rearrested		Reconvicted		Reincarcerated	
Time after release	1983	1994	1983	1994	1983	1994
6 months	25.0%	29.9%	11.3%	10.6%	8.4%	5.0%
1 year	39.3	44.1	23.1	21.5	18.6	10.4
2 years	54.5	59.2	38.3	36.4	32.8	18.8
3 years	62.5	67.5	46.8	46.9	41.4	25.4

Source: Bureau of Justice Statistics (Beck and Shipley, 1997; Langan and Levin, 2002)

Data

Master file construction

The original data used to construct the master file was provided in six separate files: cohort, arrest (MPD), incarceration, conviction, sentence, and CSOSA supervision. A set of standardized offense categories were developed to compare offense type information across the different datasets. The offense-type categorization was based on the most parsimonious categorization available in the datasets. In this case, this was the offense categorization in the MPD which divided offense types up into 26 different categories.

The prior arrest history is defined as the total number of times the releasee was arrested before the arrest leading to their instant incarceration.

Initial rearrest was defined as the first arrest for an offense that occurred after the FY07 release date. Time to rearrest was calculated as the number of days between the FY07 release date and the first rearrest date from the MPD arrest file.[7] The master file contains the first rearrest date, the number of days between FY07 release and rearrest date, the most serious charge for which the individual was rearrested, and the severity level of that charge.

Initial reconviction was defined using two standards. The first standard defines initial reconviction as the case disposition date associated with the first rearrest date for an offense occurring post FY07 release. In the event the rearrest date was missing from the conviction file, offense date in the conviction file was used as a proxy. The second standard defines initial reconviction as the initial case disposition date that occurred post FY07 release. This second standard was used in the event that the reconviction was for an arrest that occurred prior to the FY07 release date. The rationale for using these two standards is to account for the processing time in the criminal justice system between arrest (or offense) and conviction.

Since an offender may be convicted of multiple charges on the same occasion, it became necessary to create a severity scale so that only the most serious charge is indicated. Due to the lack of a uniform offense severity classification for different agencies, the current study uses the offense severity scale provided by DOC, and the master file includes the most serious reconviction offense using the DOD scale.[8]

The time until reconviction was defined as the number of days between the FY07 release date and the two respective case definition dates. Any charges in the conviction file that did not result in a conviction were dropped. In the event an offender was convicted of multiple charges

[7] The data provided by MPD contain one charge per arrest.

[8] The severity rankings based on DOC and MPD are displayed in Appendix D. The order of offenses according to severity are the same in the two rankings.

on the same date, the most serious reconviction charge was selected. The most serious reconviction charge was determined using the two severity scales described above. The master file includes the following reconviction information: the reconviction date, most serious offense type, offense severity level, and time until reconviction. The master file includes this information for the two different standards described above.

Initial reincarceration was defined using the first recommitment date that occurred following the FY07 release date. Time to reincarceration was defined as the number of days between the FY07 release date and the first commitment date that occurred following the FY07 release date. Any reincarcerations for which an offender was not sentenced for a new conviction were dropped. The master file includes the first recommitment date, the time until reincarceration, and the charge for which an offender was reincarcerated.[9]

Lastly, the post-release CSOSA supervision (probation, supervised release, parole) indicates whether the offenders were under CSOSA supervision upon release.

Analysis and Results

Cohort characteristics

The basic descriptive statistics of the DOC release cohort based on the master data file are presented in Figures A1-A7 in Appendix A. Figure A1 shows the distribution of the age at release. The mean and median age is 37. Figure A2 displays the proportions of male and female releasees. Not surprisingly, most (81%) releasees are male. Figure A3 shows the distribution of race categories. Nearly 90% of the releasee cohort is black, and whites and Hispanics make up only 5% and 4% of the cohort respectively. Figure A4 shows the distribution of the number of

[9] The data provided by DOC contain one charge per incarceration.

prior arrests.[10] The distribution is skewed to the right, indicating that most releasees have a small number of prior arrests (one half of the releasees have 4 prior arrests or less). Figure A5 displays the average proportions of prior arrest charges, which are based on the arrest charges of five most recent arrests before the commitment to DOC, providing one way to characterize an average profile of types of crimes that offenders entering DOC were arrested for.[11] For example, if an offender has one arrest for a property crime and four arrests for drug crimes, then the proportion of property crime in the offender's last five arrests is 20%. Other than the arrest charges for Other, drug charges seem to be the most common crime in the offenders' most recent arrest history. Figure A6 shows the distribution of prior DOC incarcerations.[12] The distribution of prior incarcerations is skewed even more to the right than that of the number of prior arrests, reflecting the fact that not all those who are arrested are incarcerated. Approximately, 35% of the releasee cohort has no prior DOC incarceration. Figures A7a-b display the distributions of age at release depending on whether the instant DOC release is their first release. The first-time releasees are appreciably younger than non-first-time releasees (the median age of first-time releases is 33, while the median age of non-first-time releasees is 49). Figure A8a shows the incarceration charge types. Aside from the "other" category, which includes miscellaneous felony and misdemeanor offenses, drug offenses represent the most common incarceration

[10] The arrest history goes back as far as 1995, meaning that the number of prior arrests is the number of arrests between the instant DOC commitment date and January 1, 1995.

[11] Violent offenses include homicide, manslaughter, robbery, assault, rape, sex abuse, sex crimes. Property offenses include burglary, larceny, fraud, stolen property, theft, and unauthorized use of a motor vehicle (UUV) crimes. Drug offenses include all drug-related crimes. Public order offenses include disorderly conduct, alcohol, vandalism, arson, gambling, prostitution, and weapon crimes. Other offenses include crimes against family members, other felony and misdemeanor offenses, traffic, and release violation crimes.

[12] It is important to note that the number of incarcerations in this study is limited to the number of times the releasees have been incarcerated in the facilities of the Department of Corrections, not including the incarcerations in the BOP facilities. The DOC incarceration history goes back as far as 1971.

charge. Figure A8b further breaks down the "other" category. It is clear that the other category mostly consists of Other Misdemeanors and Release Violations/Fugitive (for the frequency table of the original disaggregated incarceration charge categories, see Appendix B; for the charge aggregation chart across MPD, DOC and Conviction data, see Appendix C). Figure A9 presents the distribution of the length of time served in DOC. Over 95% served less than a year with the mean number of days being 93 days and the median being 39 days. Lastly, Figure A10 shows the proportion of the releasees who are supervised in some way by CSOSA. CSOSA supervises a small portion (11%) of those who are released from DOC.

Recidivism

Figures 1a-1b show the rearrest rate of the DOC cohort over the 36 month follow-up period. Among those who were released from DOC in FY07, approximately 62% experience a rearrest within 3 years. It is interesting to note that this rearrest rate is almost identical to the rearrest rate of the BJS's 1983 prisoner cohort, while it is slightly lower than the 1994 cohort. As evident from Figure 1a, the likelihood of rearrest is not equal across the follow up – the likelihood of rearrest is higher in the beginning and gradually declines over time. The declining probability of recidivism is also evident in Figure 1b where the cumulative proportion of those with a rearrest among those who experience a rearrest is plotted against the time since release. Approximately 50% of those with a rearrest are rearrested within the first year. As discussed above, there have been numerous studies showing that recidivism occurs relatively quickly, and this rearrest pattern is consistent with prior recidivism studies (Beck and Shipley, 1997; Gottfredson, 1999; Langan and Levin, 2002; Maltz, 1984; Schmidt and Witte, 1988; Visher et al., 1991).

Figure 1a. Rearrest rate (n = 3,786)

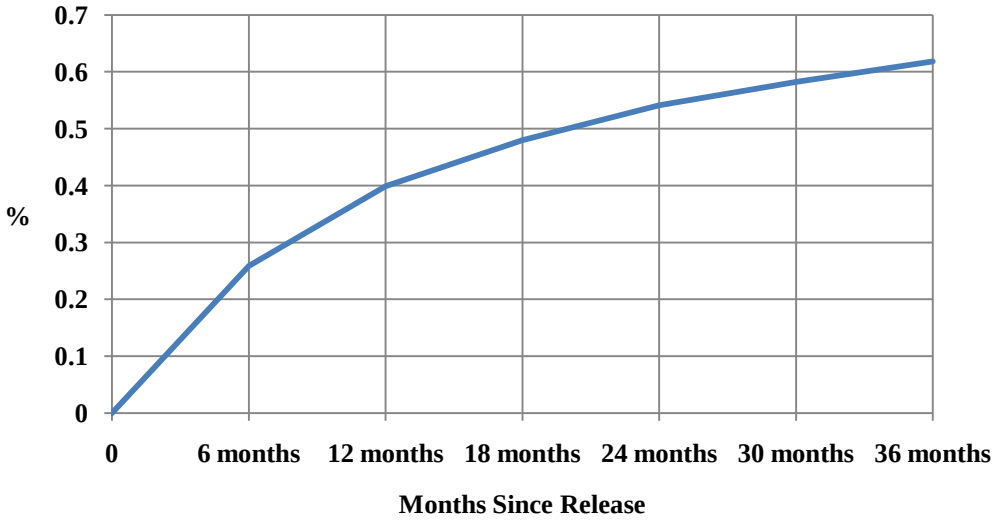
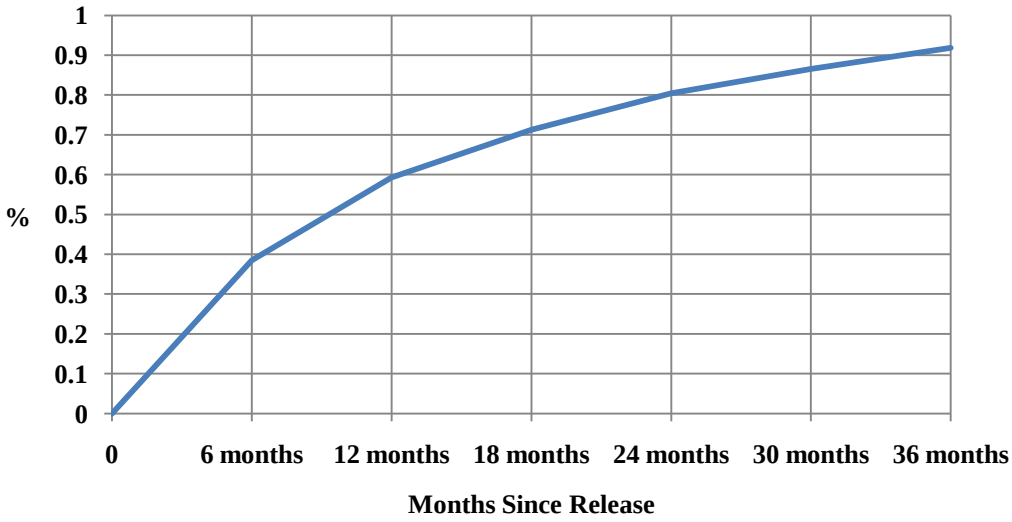


Figure 1b. Rearrest rate among those who experience a rearrest (n = 2,548)



The reconviction rate is displayed in Figures 2a-2b. Here, the time of reconviction is based on the date of disposition. Approximately 36% of the releasee cohort is reconvicted during the 3 year follow-up period. First, it is important to note that the reconviction rate is lower than the rearest rate because not all of those who are rearrested are reconvicted. Unlike the pattern of rearrest rate, the reconviction rate increases in a relatively linear manner. This could be due to

the fact that disposition dates do not necessarily represent the time of reoffense (or rearrest) and there is usually a varying time lag between an actual recidivism event (reoffense) and the time of conviction. Figure 2b shows the reconviction rate based on the date of reoffense or rearrest associated with the reconviction. The pattern of recidivism in this cumulative reconviction rate is more similar to the rearrest rate, which increases more sharply in the beginning.

Figure 2a. Reconviction rate based on disposition dates (n = 3,786)

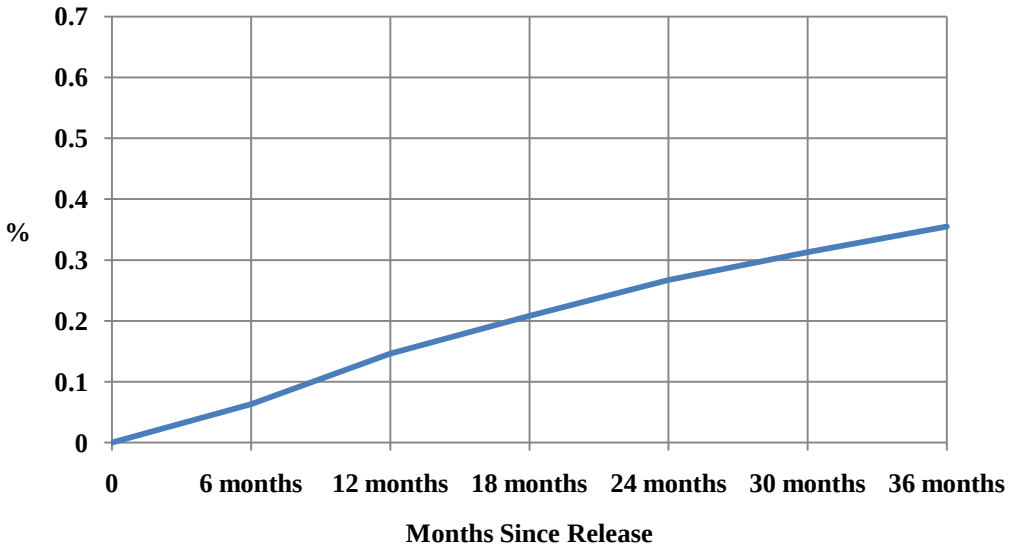


Figure 2b. Reconviction rate based on reoffense/rearrest dates (n = 3,786)

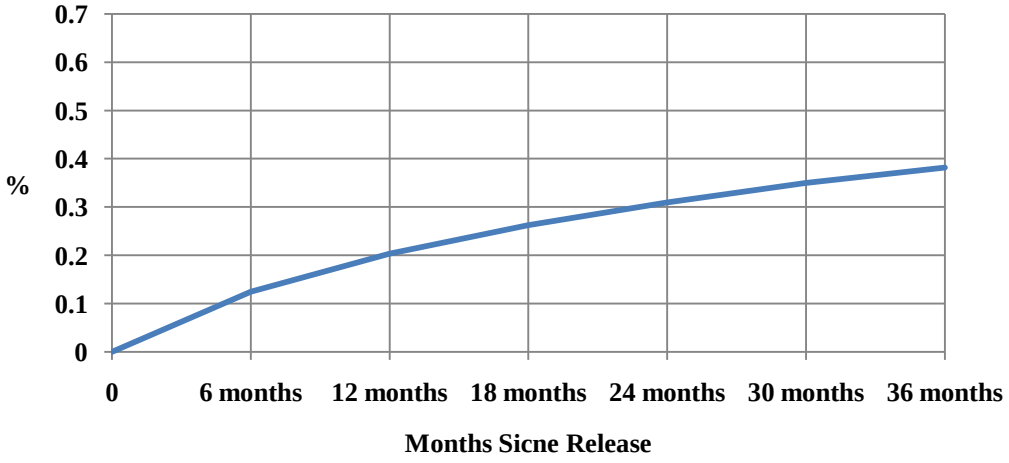
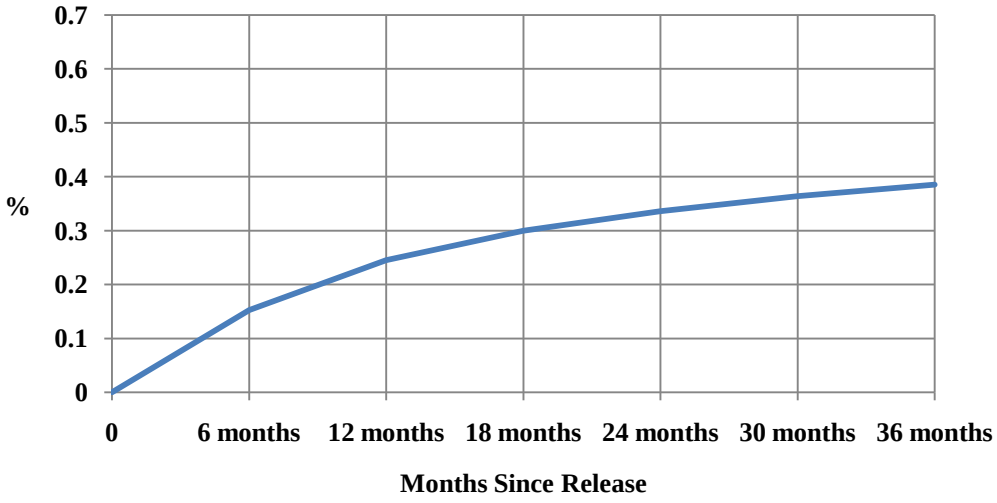


Figure 3 shows the reincarceration rate. It is important to observe that the reincarceration rate at the 36th month (3 years) is almost identical to the cumulative reconviction rate at that time point, reflecting the possibility that the releasees can be reincarcerated without being reconvicted for reasons including a violation of post-release supervision conditions.[13]

Figure 3. Recincarceration rate (n = 3,786)



Recidivism patterns by key categorical variables

The cumulative proportions of recidivists shown above provide an important picture of the likelihood of recidivism among those who are released from DOC. However, the DOC releasees do not constitute a homogeneous group in terms of their risk of recidivism. Previous studies on recidivism have identified a number of variables that help predict those who tend to have a higher level of recidivism. The predictors range from variables that are static in nature (e.g., demographics, criminal history) (e.g., Langan and Levin, 2002) to variables that are

[13] In general, those who are rearrested constitute a subset of those who are reconvicted, which in turn constitute a subset of those who are reincarcerated.

dynamic and can be changed through treatment/program interventions (i.e., criminogenic needs), including substance abuse, antisocial cognition, employment, and education (e.g., Gendreau et al., 1996). In addition to those mostly individual characteristics, it has also been shown that the characteristics of neighborhoods where returning prisoners reside also matter to the risk of recidivism (e.g., Hipp et al., 2010; Kubrin and Stewart, 2006). The current study focuses on the demographic and criminal history predictors of recidivism.

Figure 4 displays the survival probability of rearrest stratified by sex. Survival probability is 1 – the cumulative proportion of those who recidivate. It is visually clear from the figure that the rearrest experience of male and female DOC releasees are quite similar over time. Figure 5 shows the survival probability by race. Blacks clearly have the lowest survival probability (i.e., most likely to be rearrested). Those of other racial groups (whites, Hispanics, and others) show similar rearrest patterns. Figure 6 shows the survival probability by discrete categories of age at release. Figure 7 compares the survival probability of those whose instant DOC release is their first release and the survival probability of those who have at least one DOC release prior to the instant release. Clearly, the first-time releasees have a higher survival probability (i.e., less likely to be rearrested) than those who have gone through DOC before. Figure 8 shows the survival probability by the number of prior arrests. For illustrative purposes, the median number of prior arrests (= 4) is used to construct two discrete categories. The figure illustrates that those with more prior arrests have a lower survival probability. Finally, Figure 9 shows the survival probability by whether the offender was under CSOSA supervision. The difference seems to be quite small, but supervised offenders tend to have a slightly higher survival probability than those who are not supervised.

Figure 4. Survival probability by sex (n = 3,786)

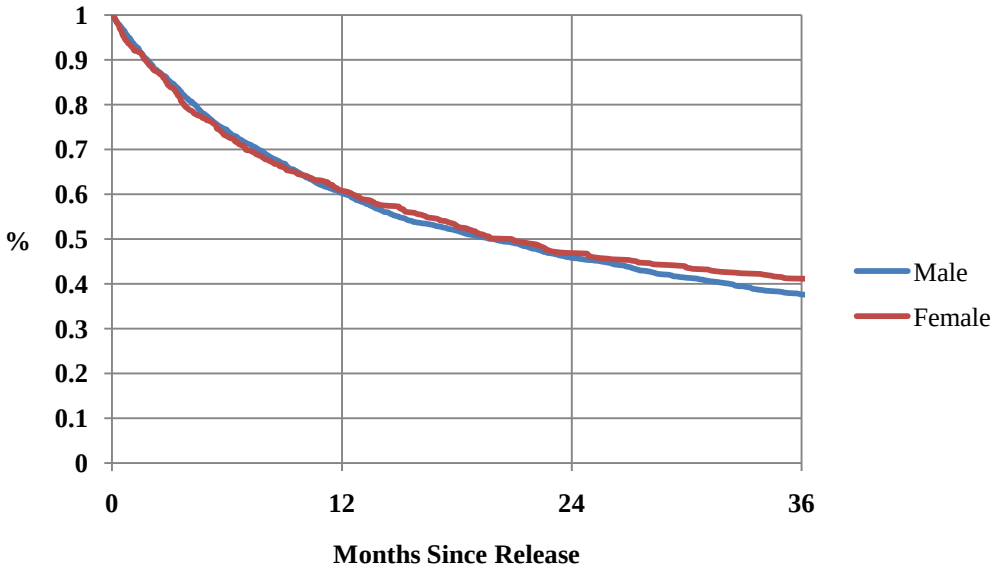


Figure 5. Survival probability by race

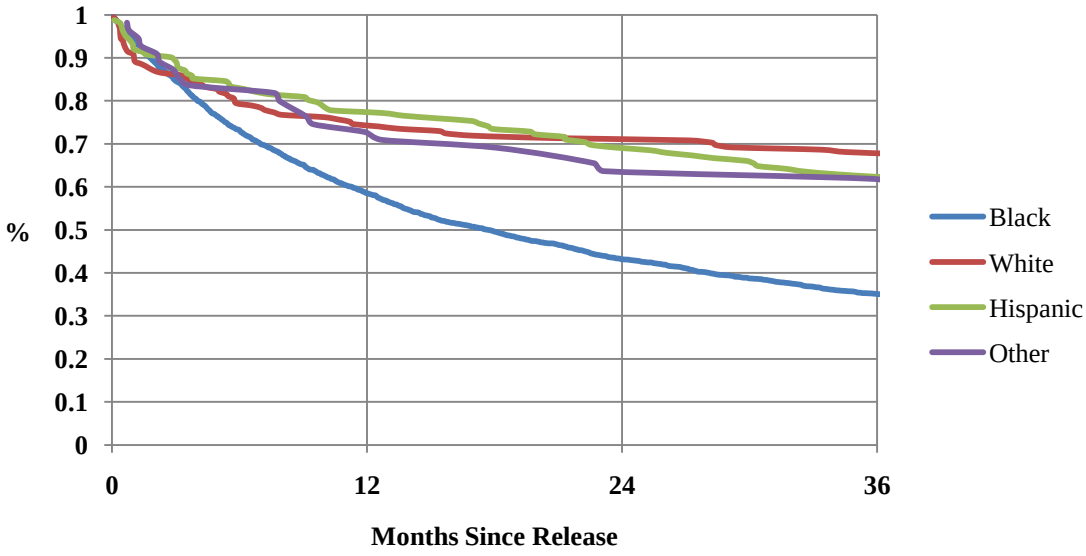


Figure 6. Survival probability by age at release

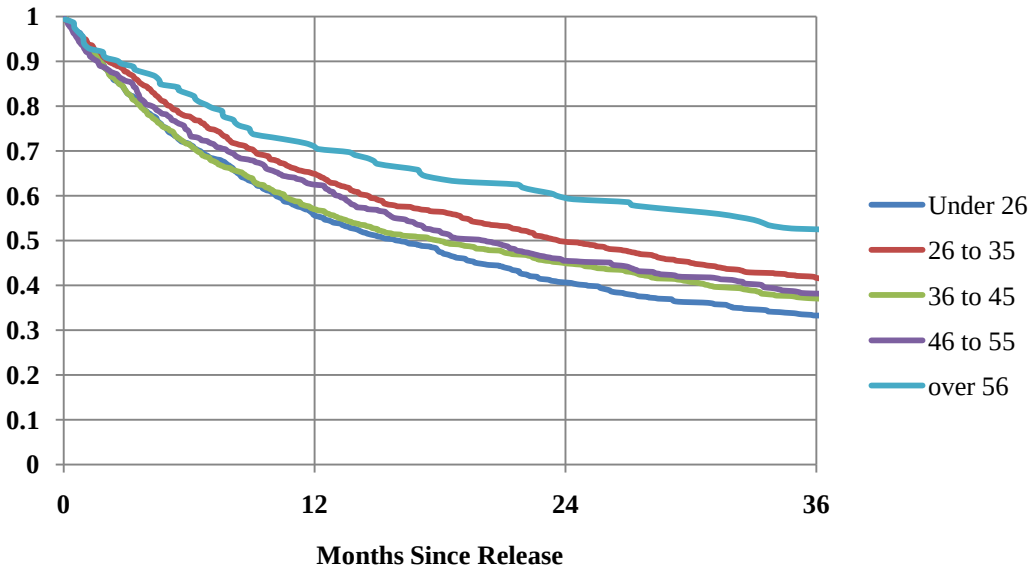


Figure 7. Survival probability by whether the instant release is their first release

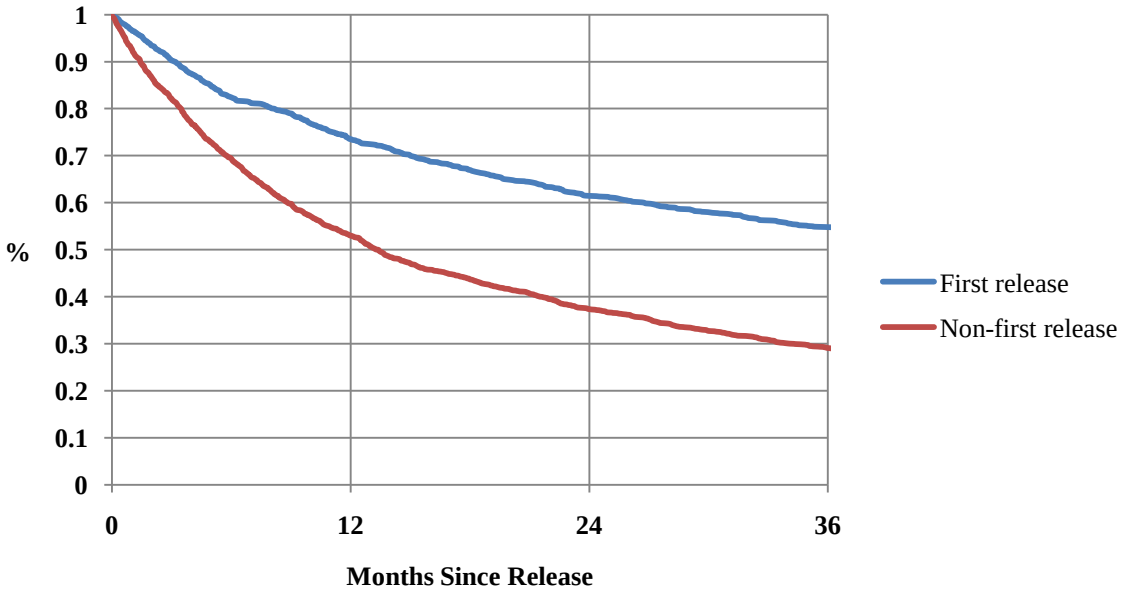


Figure 8. Survival probability by the number of prior arrests (cut-off = median)

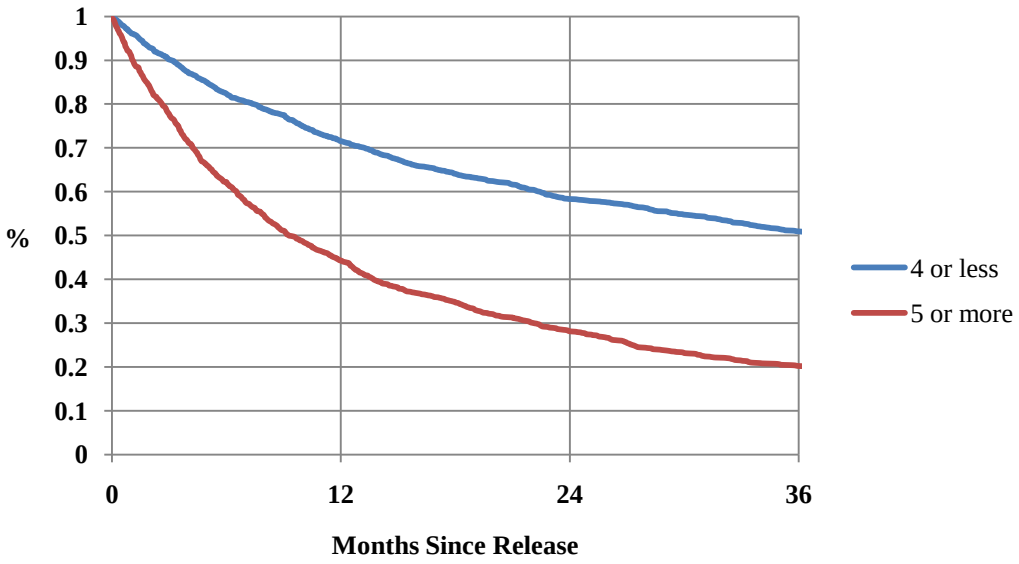
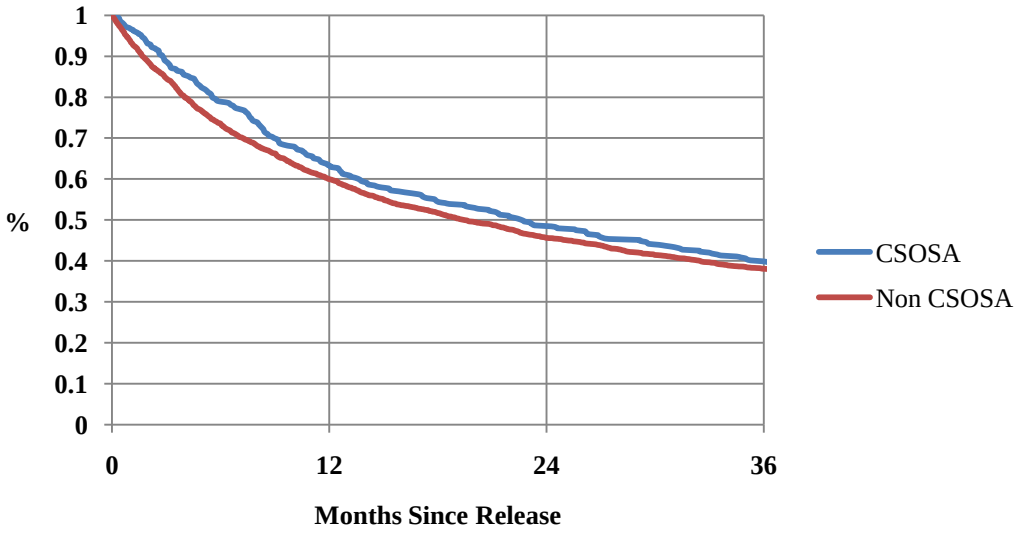


Figure 9. Survival probability by CSOSA supervision



Regression analysis

The comparison of survival probabilities across some key categorical variables above are informative, but the observed differences in the survival probabilities may not represent statistically significant differences and may be due to chance variation or the influence of other factors that are not accounted for. One way to identify statistically significant predictors of recidivism while controlling for other variables including categorical (e.g., race, sex) as well as continuous variables (e.g., age, number of prior arrests) is to use Cox's proportional hazards model. (Cox, 1972). For simplicity, let us consider a Cox model with a single covariate x:

$$h(t \mid x) = h_0(t)\exp(\beta x).$$

The hazard function h(t) can approximate the conditional probability of having a recidivism event at time t given surviving without the recidivism event until time t. The function $h_0(t)$ is the baseline hazard function, and it is the hazard function for an individual for whom the value of the covariate x is zero.[14] The fundamental assumption of the Cox model is that the hazard ratio of two groups is constant *in time*, and so the hazard rates are proportional. In other words, the effect of a change in a covariate is to shift the hazard by a factor of proportionality, and the magnitude of the shift remains the same over time. As an illustration, if we look at two groups with covariate values x_1 and x_2, the ratio of their hazards is

$$\text{hazard ratio} = \frac{h(t \mid x = x_1)}{h(t \mid x = x_2)} = \frac{h_0(t)\exp(\beta x_1)}{h_0(t)\exp(\beta x_2)} = \exp[\beta(x_1 - x_2)].$$

[14] The baseline hazard is treated nonparametrically. The Cox model is called a semi-parametric model because a parametric form is only assumed for the covariate effect (exp(βx)).

and so the hazard *ratio* is constant with regard to time. In the case of binary covariates (i.e., x_1 = 1 and x_2 = 0), the hazard ratio is $\exp(\beta)$. Thus, the hazard ratio, $h(t \mid x = 1) / h(t \mid x = 0)$, can be estimated by exponentiating the parameter estimate from the Cox regression, $\hat{\beta}$.

Table 2 shows the estimated ratios of rearrest hazards from a Cox proportional hazards model with the following predictors:[15] Female (1 if female, 0 if male), White (1 if white, 0 otherwise), Hispanic (1 if Hispanic, 0 otherwise), and Other (1 if the race category is other, 0 otherwise), Age at Release, (Age at Release)^2 (the quadratic age term), Violent (1 if the incarceration charge is violent, 0 otherwise), Property (1 if the incarceration charge is property, 0 otherwise), Drug (1 if the incarceration charge is drug, 0 otherwise), and Public order (1 if the incarceration charge is public order, 0 otherwise), Number of prior arrests, First release (1 if the instant DOC release is the first release, 0 otherwise), and CSOSA supervision (1 if supervised by CSOSA, 0 otherwise). The hazard ratio estimates have the interpretation of the ratio of the hazards for a 1-unit change in the corresponding covariate. The reference categories are Male, Black, and Incarceration charge = Other.

The estimates mostly mirror the visual patterns observed in the survival probability curves shown above. For instance, white and Hispanic releasees have a lower rearrest hazard than blacks (whites have a hazard that is 48% lower than blacks). The coefficients on Age at Release and its squared term suggest that older releasees tend to have a lower hazard, but this age effect diminishes as the age increases. Compared to those with "other" incarceration charges,

[15] The proportionality assumption of the Cox model was tested using the Schoenfeld residuals (Grambsch and Therneau, 1994; Schoenfeld, 1982). The race variable and the CSOSA supervision indicator were found to be violating the proportionality assumption. The Cox model was refit after it was stratified by the two non-proportional variables. The coefficients of the remaining variables remain very similar.

property and public order offenders tend to have a higher rearrest hazard.[16] The criminal history variables have reasonably strong effects on the rearrest hazard. Every additional prior arrest can increase the hazard by 6%. The first-time releasees have a hazard that is 36% lower than those with at least one prior incarceration experience. Those who are supervised by CSOSA tend to have a lower hazard than those who are not, consistent to Figure 9.

Table 2. Rearrest Hazard Ratio Estimates from the Cox Proportional Hazards Model (n = 3,751)

	Hazard Ratio	Std. Err.	95% Confidence Interval	
Female	0.929	0.050	0.836	1.033
White	0.525**	0.070	0.405	0.681
Hispanic	0.668**	0.084	0.521	0.855
Other	0.508**	0.109	0.333	0.775
Age at Release	0.943**	0.012	0.920	0.966
(Age at Release)^2	1.001**	0.000	1.000	1.001
Incarceration charge: Violent	0.989	0.063	0.873	1.122
Property	1.289**	0.101	1.106	1.503
Drug	1.006	0.051	0.910	1.111
Public Order	1.245**	0.083	1.093	1.418
Number of prior arrests	1.059**	0.003	1.053	1.066
First release	0.641**	0.034	0.578	0.712
CSOSA supervision	0.847**	0.055	0.746	0.961

Note: ** indicates $p < .05$ (two tailed).

Table 3 shows the reincarceration hazard ratio estimates. While the patterns of the ratio estimates are similar to those from the rearrest hazard model above, a few differences should be noted.

[16] Those whose incarceration charge is property or public order offense tend to have a larger number of prior incarcerations (for Incarceration Charge = Violence, median number of prior incarcerations = 1, for Property, the median = 3, for Drug, the median = 2, for Public Order, the median = 4, and for Other, the median = 2).

First, the age at release seems to have a linear effect on the reincarceration hazard.[17] Second, every additional prior incarceration experience can result in a 4.6% increase in the hazard.[18] Third, the presence of CSOSA supervision does not seem to matter to the reincarceration hazard. Table 4 shows the reconviction hazard ratio estimates.[19] The patterns are similar to those in the reincarceration hazard ratio estimates.[20]

Table 3. Reincarceration Hazard Ratio Estimates from the Cox Proportional Hazards Model (n = 3,695)

	Hazard Ratio	Std. Err.	95% Confidence Interval	
Female	0.912	0.063	0.796	1.045
White	0.405**	0.076	0.280	0.586
Hispanic	0.610**	0.100	0.442	0.841
Other	0.563**	0.151	0.332	0.954
Age at Release	0.982**	0.002	0.977	0.987
Incarceration charge: Violent	0.968	0.081	0.821	1.141
Property	1.365**	0.133	1.127	1.653
Drug	1.068	0.070	0.940	1.214
Public Order	1.246**	0.103	1.059	1.466
Number of prior arrests	1.013**	0.004	1.005	1.022
Number of prior incarcerations	1.046**	0.002	1.041	1.050
CSOSA supervision	0.946	0.077	0.806	1.110

Note: ** indicates $p < .05$ (two tailed).

[17] The quadratic term is not statistically significant and not included in the model shown in Table 3.

[18] It should be noted that first-time releasees have a lower hazard than non-first-time releases, a pattern observed in the rearrest hazard model.

[19] The race variable was found to be violating the proportionality assumption. The Cox model was refit after stratified by the non-proportional variable. The coefficients of the remaining variables remain very similar.

[20] These models can be further extended by including other higher-order terms and other interactions between the predictors. Another model extension is to allow the effect of some of the predictors to vary with time.

Table 4. Reconviction Hazard Ratio Estimates from the Cox Proportional Hazards Model (n = 3,695)

	Hazard Ratio	Std. Err.	95% Confidence Interval	
Female	1.078	0.072	0.946	1.229
White	0.439**	0.079	0.309	0.623
Hispanic	0.594**	0.097	0.431	0.819
Other	0.783	0.186	0.491	1.248
Age at Release	0.983**	0.002	0.978	0.987
Incarceration charge: Violent	0.932	0.076	0.794	1.093
Property	1.300**	0.125	1.077	1.570
Drug	0.942	0.062	0.829	1.071
Public Order	1.185**	0.097	1.009	1.391
Number of prior arrests	1.061**	0.004	1.053	1.069
Number of prior incarcerations	1.013**	0.003	1.007	1.019
CSOSA supervision	0.881	0.074	0.748	1.039

Note: ** indicates $p < .05$ (two tailed).

Conclusions, Recommendations, and Future Research

Based on the analysis of survival probabilities and Cox hazard models, this study identified a set of variables that are significant predictors of recidivism. It was found that those predictors tend to predict recidivism, regardless of the type of recidivism event (rearrest, reconviction, reincarceration). Race, age at release, certain incarceration charges, and criminal history (prior arrests and prior incarcerations) are significantly associated with the level of recidivism among the DOC release cohort. Based on this observation and the process of compiling the master data file, we make the following recommendations:

- Those significant predictors of recidivism should form the basis for developing a standardized definition and measure of recidivism, and the data on those predictors should be collected by relevant agencies.[21]
- The definition and measurement of recidivism should accommodate diverse interests of relevant agencies. This translates to measuring different recidivism events, including not only those that have been considered here rearrest, reconviction, reincarceration), but also others such as technical violations of release conditions and rearraignment, which may be of interest to certain agencies. Recidivism should be measured at multiple time points, at least two time points so changes in recidivism can be observed. The determination of the recidivism events and the follow-up length and the number of measurement time points should be based on the base populations (releasees from DOC, BOP, those on probation, parole, pretrial, etc.).
- As discussed in this report, the measurement of recidivism involves data from multiple agencies. Different agencies tend to use difference individual identifiers, which makes it challenging to construct a dataset that captures information about a given individual at different stages in the criminal justice system. For this reason, standardizing the identifier across relevant agencies greatly facilitates assessments of recidivism, and CJCC may occupy a unique position in the District's criminal justice system to take a lead on the standardization initiative.

[21] It is important to note that the variables we find as significant predictors of recidivism may not be relevant for the recidivism of populations that are not covered by DOC (most notably, those who are released from BOP facilities).

Future Research

The current project constitutes the first phase of a comprehensive assessment of recidivism in the District of Columbia. The most important population that has yet to be studied and should be studied in the next phase is those who are released from BOP facilities. Those who are coming back to the community from BOP facilities are in great need of reentry transition support since they have spent significant amount of time away from family, employment, and other means to be part of the larger society.

Another issue that the current study did not address is mobility of the releasees. The master data file only captures recidivism events that occur within the boundary of the District of Columbia. There are several ways in which we can address this concern about mobility. First, it is possible to contact the FBI and obtain the national criminal records of the D.C. offenders we follow for their recidivism.[22] It is also possible to obtain criminal history records from states that are physically proximate to the District, such as Maryland, Virginia, Pennsylvania, and Delaware.[23]

The third issue that hasn't been addressed is the crime type of recidivism events. Not all recidivism events are treated equal in a sense that violent crimes are of greater concern than minor property crimes. Thus, it is important to identify predictors of recidivism for certain crime types.

The fourth issue that should be addressed in future research is the evaluation of reentry treatments and programs that exist in the District. In the context of those who served time in jails, reentry is defined as the process of leaving jail and returning to society. Practically all jail

[22] FBI maintains a national index of rap-sheet records in the Interstate Identification Index (III).

[23] Annual recidivism statistics reported by CSOSA account for recidivism events (rearrests) in Maryland and Virginia (CSOSA, 2011).

inmates experience reentry. Successful reentry would mean gains in public safety, through the reduced recidivism and the reintegration of those who are released from jails. Successful reintegration can be indicated by increased participation in social institutions such as the labor force, families, communities, schools, and religious institutions. Thus, there are financial and social benefits associated with both public safety and reintegration improvements. Thus, it is important to first identify the existing programs in the District that facilitate successful reentry and then to assess whether the existing programs achieve the desired goals.

Appendix A: Figures for Cohort Characteristics

Figure A1. Distribution of Age at Release (n = 3,786)

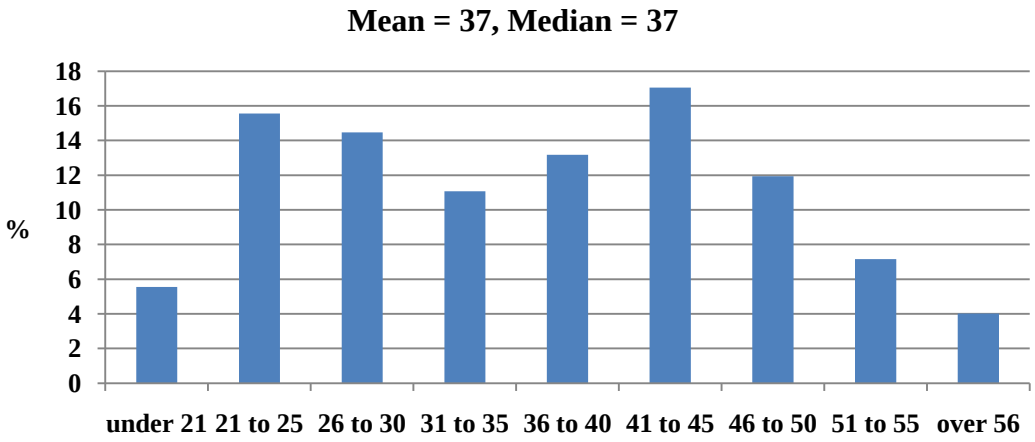


Figure A2. Proportions of males and females (n = 3,786)

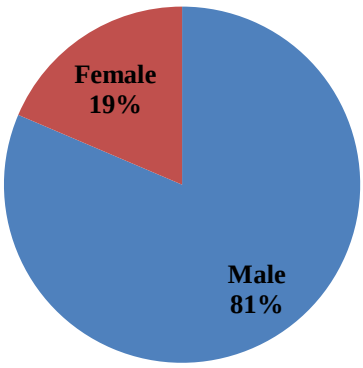


Figure A3. Distribution of race (n = 3, 779)

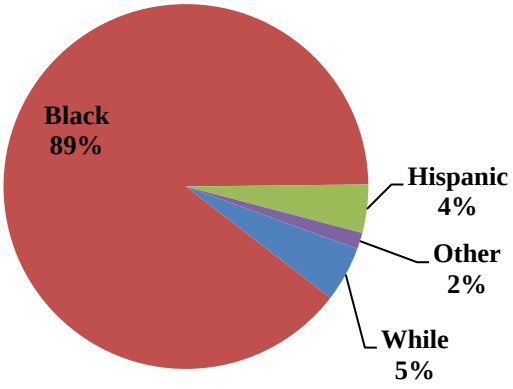


Figure A4. Distribution of the number of prior arrests (n = 3,757)

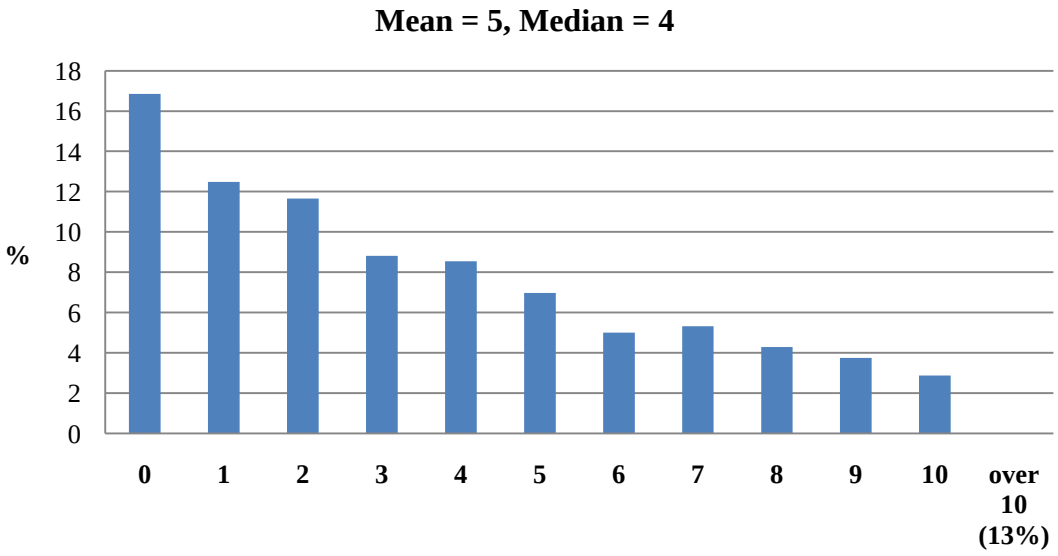


Figure A5. Average proportion of prior arrest charges (n = 3,703)

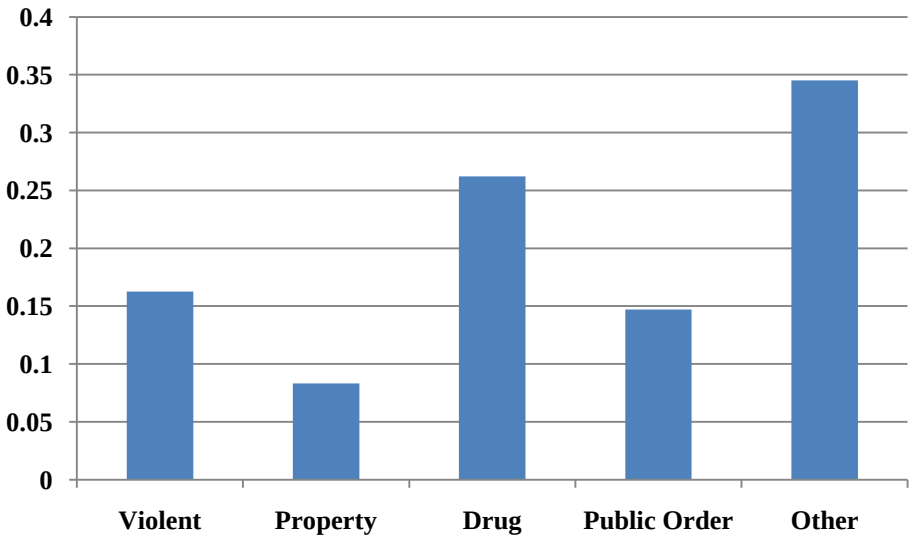


Figure A6. Distribution of the number of prior DOC incarcerations (n = 3,728)

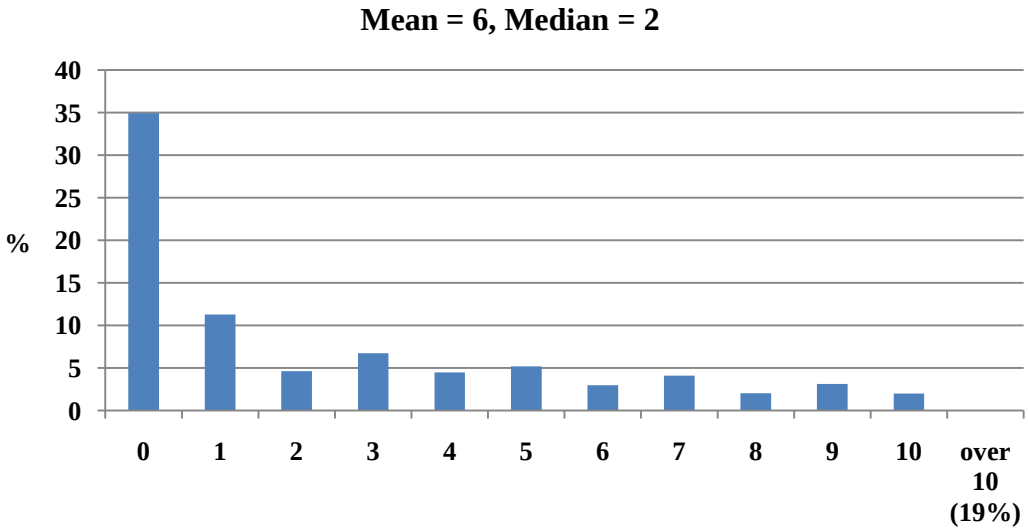


Figure A7a. Distribution of Age at Release for first-time releasees (n = 1,355)

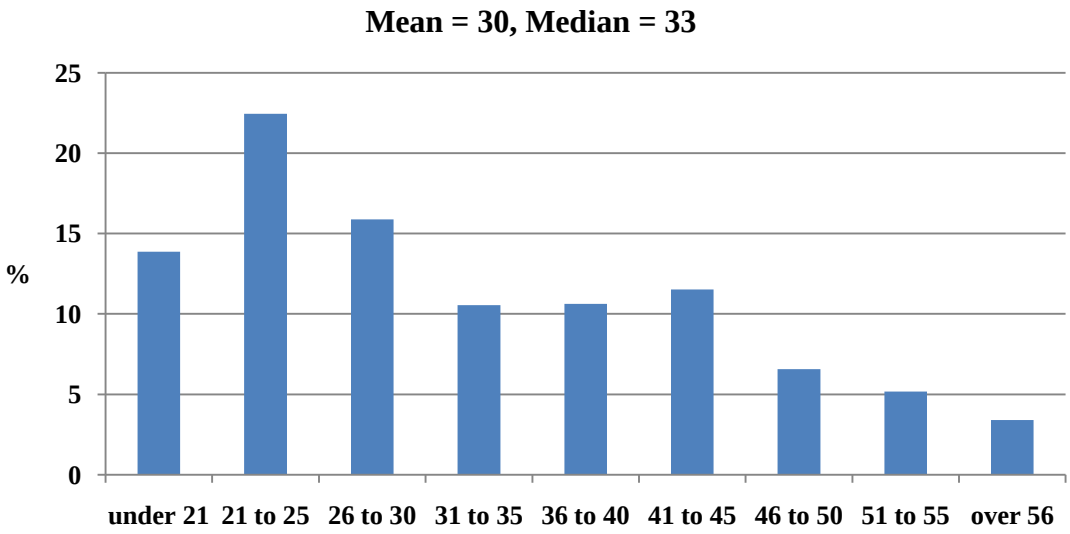


Figure A7b. Distribution of Age at Release for non-first-time releasees (n = 2,431)

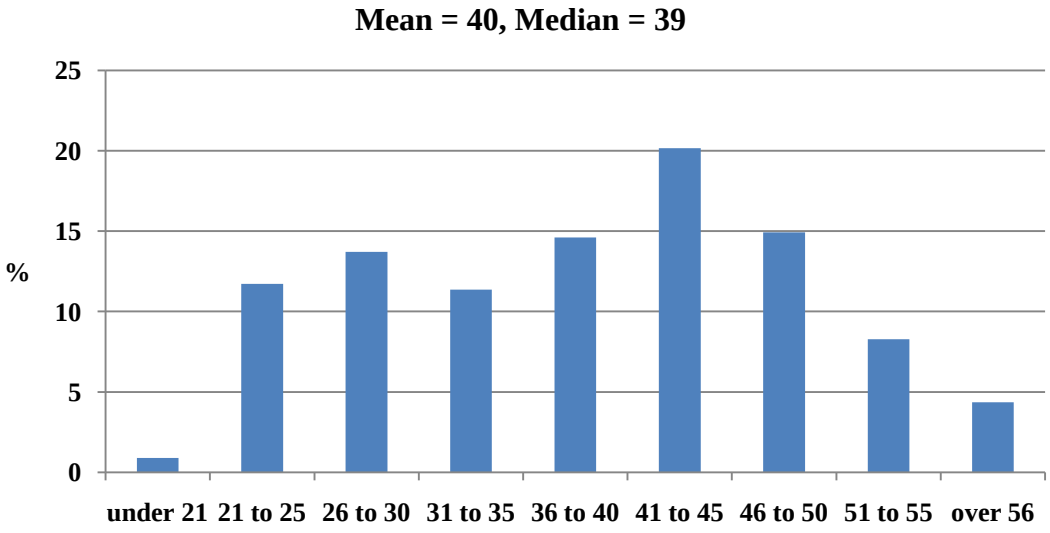


Figure A8a. Incarceration Charge Types (n = 3,786)

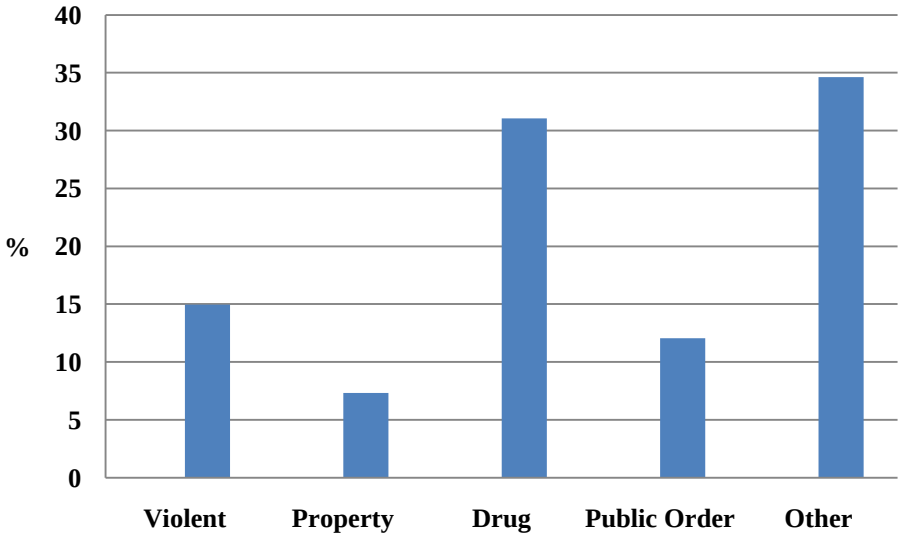


Figure A8b. Incarceration Charge Types with the "other" category broken down (n = 3,786)

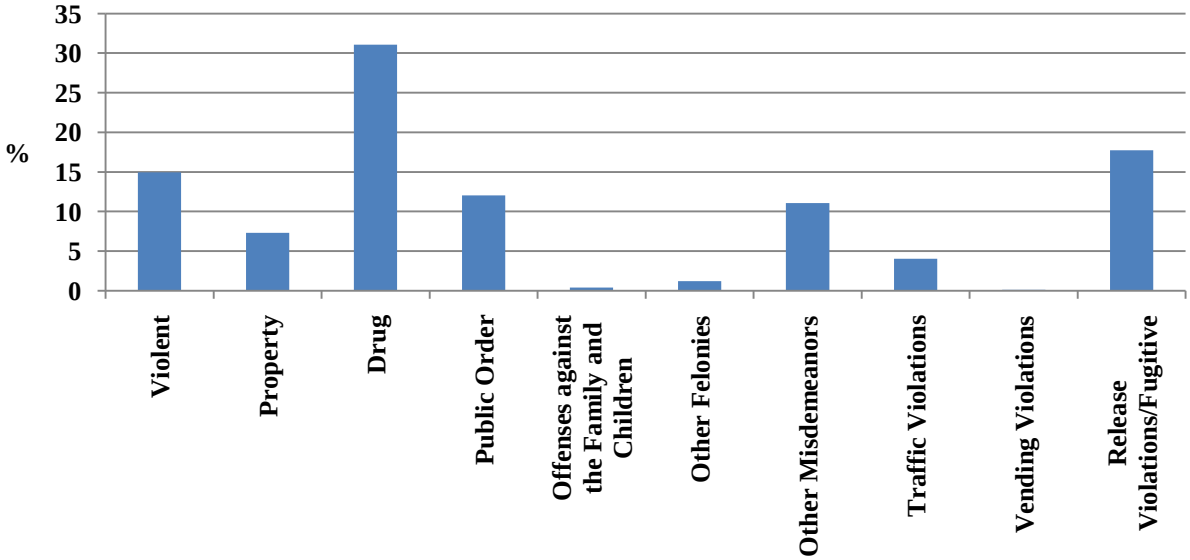


Figure A9. Time in DOC (n = 3,786)

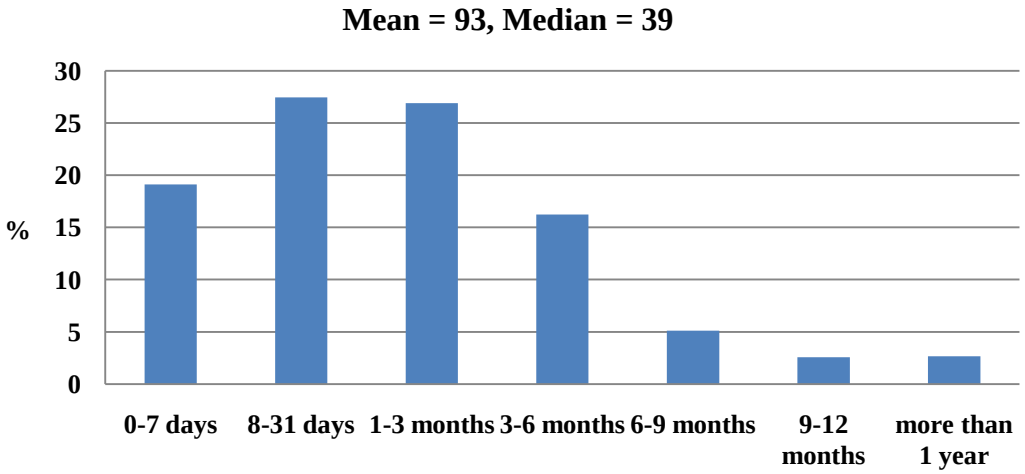
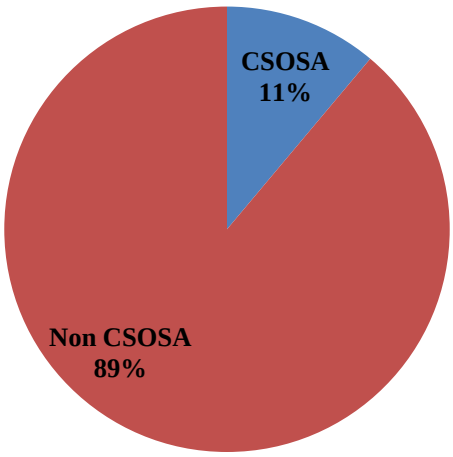


Figure A10. Post-release CSOSA Supervision (n = 3,786)



Appendix B: Frequency of Incarceration Charge Categories

Charge Category	Frequency	Percent
Drug Offenses	1176	31.06
Bail Reform Act Violation	299	7.9
Stalking	267	7.05
DUI	234	6.18
Property Crime	179	4.73
Assault	167	4.41
Traffic	153	4.04
Weapons	150	3.96
Contempt	131	3.46
Sex Offenses	125	3.3
Fugitive	123	3.25
PV	106	2.8
Vandalism	96	2.54
Wanted in another jurisdiction	89	2.35
Aggravated Assault	57	1.51
Supervised Release	41	1.08
Disorderly	35	0.92
Prostitution	34	0.9
UUA	31	0.82
Domestic Violence	30	0.79
Fraud	30	0.79
Escape	26	0.69
Unlawful Entry	24	0.63
Rape/Sex Abuse	18	0.48
Crimes against Family Members	16	0.42
Burglary/Robbery	15	0.4
Sex Abuse	14	0.37
Robbery	13	0.34
Stolen Property	13	0.34
Other Misdemeanor	10	0.26
Public Order	9	0.24
Theft	9	0.24
Threats	9	0.24
US Witness	9	0.24
Other	8	0.21
Writ	7	0.18
ABC	6	0.16
DC Code Violation	5	0.13

Crimes against Persons	4	0.11
Failure to Appear	3	0.08
PV other	3	0.08
Immigration Violations	2	0.05
Kidnapping	2	0.05
Obstruction of Justice	2	0.05
Arson	1	0.03
Conspiracy	1	0.03
Consumer Safety Violations	1	0.03
Crimes against the US	1	0.03
Offense commited while on Releas	1	0.03
Other Felony	1	0.03

Appendix C: Charge Type Aggregation

Code	MPD category	(C)Conviction data, (I)Incarceration data	COURT CHARGE OR CHCAT
1	Aggravated Assault	C	Aggravated Assault Knowingly Grave Risk
		C	Aggravated Assault Knowingly
		C	Assault (Felony)
		C	Assault (Felony) While Armed
		C	Assault on a Police Officer While Armed
		C	Assault On A Police Officer-Dang Weapon
		C	Assault W/I Any Offense
		C	Assault W/I to Kill
		C	Assault W/I to Kill While Armed
		C	Assault With A Dangerous Weapon
		C	Assault With A Dangerous Weapon While Armed
		C	Assault with Significant Bodily Injury
		C	Assault W/I to Rob
		I	Aggravated Assault
		C	Assault W/I to Rob While Armed
2	Arson	C,I	Arson
3	Burglary	C	Attempted Burglary Two
		C	Burglary One
		C	Burglary One While Armed
		C	Burglary Two
		C	Burglary Two While Armed
		I	Burglary
4	Disorderly Conduct/POCA	C	Aggressive Panhandling
		C	Disorderly And Disruptive
		C,I	Disorderly Conduct
		C	Disorderly Conduct - Profane Language

		C	Disorderly-Urinating
		C	Intoxication
		C	Mayhem
		I	POCA
		I	Public Order
5	Fraud	C	Attempted Credit Card Fraud-Misd
		C	Attempted Uttering
		C	Credit Card Fraud-Fel
		C	Credit Card Fraud-Misd
		C	Identity Theft Second Degree
		C	Obtain Controlled Substance By Fraud
		I	Counterfeiting
		C	Uttering
		I	Forgery
		I	Fraud
		I	Intellectual Property Crime
		I	Embezzlement
6	Gambling		
7	Homicide/Manslaughter	C	Involuntary Manslaughter
		C	Murder I
		C	Murder I While Armed
		C	Murder II
		C	Murder II While Armed
		C	Negligent Homicide -Felony
		C	Voluntary Manslaughter While Armed
		I	Homicide
8	Larceny/theft	C	Attempted Theft Second Degree
		C	Shoplifting
		C	Theft First Degree
		C	Theft Second Degree

		C	Theft Second Degree While Armed
		I	Larceny/Theft
		I	Property Crime
9	Liquor laws	C	Poss of an Open Container of Alcohol in a Vehicle
		I	ABC
		C	Poss of Open Container of Alcohol
10	Narcotic drug laws	C	Attempted Poss of a Control Substance -Misd
		C	Dist of A Controlled Substance
		C	Dist of A Controlled Substance While Armed
		C	Distribution of Control Substance to Minor
		C	Distribution of Marijuana-Fel
		C	Distribution of Marijuana-Misd
		C	Liquid PCP Possession Amendment Act of 2010
		C	Peddling Drugs
		C	Poss Drug Paraphernalia W/I to Use
		C	Poss Drug Paraphernalia-Misd
		C	Poss of a Control Substance -Misd
		C	Poss W/I to Dist A Control Substance
		C	Poss W/I to Dist Marijuana-Fel
		C	Poss W/I to Dist Marijuana-Misd
		C	Poss W/I to Dist Marijuana-Misd While Armed
		C	Sale Drug Paraphernalia
		I	Drug offenses
11	Offenses against the family and children	C	Attempted Cruelty to Children
		C	Attempted Second Degree Cruelty to Children
		I	Crimes against Family members
12	Other felonies	C	Attempt to While Armed
		C	Attempted Obstructing Justice
		C	Attempted Threat to Injure a Person-Fel

		C,I	Conspire to
		C	Conspire to While Armed
		C	Deceptive Labeling - Felony
		C	Driving Under the Influence-3rd Off
		C,I	Escape, (From Officer)
		C	Flee Law Enforce Officer
		C,I	Kidnapping
		C	Kidnapping While Armed
		C,I	Obstructing Justice
		C	Obstructing Preventing Interfg W/Reports/ Requests for Assist from Law Enforce Med Prov Child Wlfr Agency
		C	Obstruction Justice (Due Administration)
		C	Prison Breach
		C	Prisoner Escape
		C	Threat to Injure a Person-Fel
		C	While Armed
		C	With Aggravating Circumstances
		I	Crimes against the US
		I	Crimes against persons
		I	Other Felony
		I	Trade and Tariff violations
		I	Threats to President
		I	Witness Protection
13	Other misdemeanors	C	Altered Registration
		C	Attempt to
		C	Attempted Contempt
		C	Attempted Operating After Suspension
		C	Attempted Threats to Do Bodily Harm -Misd
		C	Attempted Violation of Protection Order

		C	Civil Protection Order Violation
		C,I	Contempt
		C	Contempt - OAG
		C	Criminal Street Gang Affiliation
		C	Deceptive Labeling - Misd
		C	Driving Under Influence -2nd Off
		C,I	Driving Under Influence-1st Off
		C	Driving While Intoxicated -2nd Off
		C	Driving While Intoxicated -3rd Off
		C	Driving While Intoxicated-1st Off
		C	Fail to Obey Officer
		C	Fail to Register As Sex Offender
		C	Failure to Appear for Citation Release
		C	Failure to Exhibit Registration
		C	Failure To Register Firearm
		C	False Report to Police
		C	Fictitious Sticker
		C	Flee Law Enforcement Officer - Misdemeanor
		C	Improper Tags
		C	Indecent Exposure
		C	Indecent Sexual Proposal
		C	Indecent Sexual Proposal to a Child
		C	Loaning Registration
		C	LV After Collide Damage
		C	LV After Collide Injury
		C	Operating While Impaired
		C	Panhandling a Motor Vehicle
		C	Poss Implements of Crime
		C	Removing, Tampering with and Altering Motor Vehicle Identification Numbers

		C	Tampering with a GPS Device
		C	Tampering With an Automobile
		C	Tampering With Physical Evidence
		C	Threats to Do Bodily Harm -Misd
		C	Unlawful Entry
		C	Unlawful Entry of a Motor Vehicle
		C	Unlawful Possession of Contraband
		C	Violation of Protection Order
		C	Violation of TPO
		I	Conspiracy to commit Misd
		I	Consumer Safety Violations
		C	Pandering
		I	Environmental Crime
		I	Immigration violations
		I	juvenile court
		I	DNR Violations
		I	Other
		I	Other misdemeanor
		I	Other crime
		I	Penalties
		I	Possess implements of crime
		I	Prison law violation
		I	Threats
		I	Unlawful entry
14	Other sex offenses	I	Sex offenses
15	Prostitution and commercialized vice	C	Pandering
		C,I	Prostitution
		C	Sexual Solicitation
16	Rape/Sexual abuse	C	Attempted Sex Abuse- Misd

		C	Attempted Third Degree Sex Abuse- Force
		C	First Degree Child Sex Abuse
		C	First Degree Sex Abuse- Force
		C	First Degree Sex Abuse- Force While Armed
		C	Misdemeanor Sexual Abuse of a Child
		C	Second Degree Child Sex Abuse
		C,I	Sex Abuse- Misd
		C	Third Degree Sex Abuse- Force
		I	Rape/Sex Abuse
17	Robbery/carjacking	C	Attempted Robbery
		C	Attempted Robbery While Armed
		C,I	Carjacking
		C	Carjacking While Armed
		C,I	Robbery
		C	Robbery While Armed
18	Simple and APO assaults	C	*APO - Misd
		C	Assault on a Federal Police Officer
		C	Assault On A Police Officer
		C	Attempted Simple Assault
		C	Attempted Stalking
		C	Attempted Stalking - Misd
		C	Simple Assault
		C	Simple Assault Against A Minor
		C,I	Stalking - Misd
		I	Assault
		I	Domestic Violence
19	Stolen property	C	Receiving Stolen Property-Fel
		C	Receiving Stolen Property-Misd
		I	Stolen Property
20	Theft from auto		

21	Traffic violations	C	Misuse of Temporary Tags
		C	No Permit
		C	No Permit-2nd Offense
		C	Operating a Prohibited Non Tradition Motor Vehicle
		C	Operating After Revocation
		C	Operating After Suspension
		C	Reckless Driving
		C	Speed (30 or Over)
		C	Unregistered Vehicle
		I	Traffic
22	UUV	C	Attempted Unauthorized Use of A Vehicle
		C,I	Unauthorized Use of A Vehicle
23	Vandalism/Tampering with auto	C	Attempted Destruction of Property less than $200
		C	Destruction of Property less than $200
		C	Destruction of Property over $200
		I	Vandalism
24	Vending violations	C	Fail To Exhibit License
		C	Vending Without a License
		I	DC code violation
25	Weapons	C	Attempted Poss Prohibited Weapon -Blackjack
		C	Attempted Poss Prohibited Weapon -Knife
		C	Attempted Poss Prohibited Weapon -Other
		C	Carry Dang Weapon-Outside Home/Business
		C	Carry Dangerous Weapon- Felony
		C	Carry Pistol W/O Lic (Misd)
		C	Carry Pistol W/O Lic -Outside Home/Business
		C	Carry Pistol W/O Lic -Prior Fel/CPOWL
		C	Poss Firearm During Crime of Violence
		C	Poss Prohibited Weapon -Blackjack
		C	Poss Prohibited Weapon -Felony

		C	Poss Prohibited Weapon -Knife
		C	Poss Prohibited Weapon -Other
		C	Possession of BB Gun
		C	Presence In A Motor Vehicle Containing A Firearm
		C	Unlawful Poss Ammunition
		C	Unlawful Poss of A Firearm
		C	Unlawful Poss Pistol -Felony
		C	Unlawful Poss Pistol -Misd
		C	Unlawful Possession of a Firearm
		C	Violation of a Gun Free Zone
		I	Weapons
26	Release violations/fugitive	C	Bail Reform Act -Felony
		C	Bail Reform Act -Misd
		C,I	Offenses Committed During Release
		I	Abscond
		I	Bail Reform Act Violation
		I	Failure to appear
		I	Felony Arrest Warrant
		I	Fugitive
		I	Parole Violation
		I	Probation
		I	Release Violation
		I	Supervised release
		I	Wanted in another jurisdiction
		I	Writ

Appendix D: Severity Scales

Charge category	MPD-based charge severity scale	DOC-based charge severity Scale
Homicide	01	1
Rape/Sex Abuse	03	2
Burglary	04	3
Robbery	04	3
UUV	04	3
Aggravated Assault	05	4
Assault	05	4
Arson	06	5
Fraud	08	6
Gambling	08	6
Larceny	08	6
Stolen Property	08	6
Theft	08	6
Vandalism	08	6
Drug Offenses	09	7
Weapons	10	8
Other Felony	11	9
Release Violation	14	10
Crimes against Family Members	18	11
Sex Offenses	19	12
Prostitution	19	12
Disorderly	21	13
Alcohol	21	13
Traffic	22	14
Trade and Tarriff Violations	23	15
Other Misdemeanor	25	16

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Appendix F: Survey instrument

Survey: Definitions and measurements of recidivism

Recidivism is one of the most fundamental measurements of effectiveness and accountability for criminal justice agencies, facilities, and programs. This survey is part of a larger collaborative project between the Criminal Justice Coordinating Council and the University of Maryland that looks at how recidivism is measured by criminal justice agencies in the District of Columbia and intends to develop reasonable standards for the measurement of recidivism that should help improve interagency communication and collaboration. The questions that follow will ask you about your agency's current practice in defining and measuring recidivism. Your responses will provide the basis for developing District-wide measures of recidivism.

1. About your agency and your role in the agency:

- Agency name: _____
- Your name: _____
- Contact information: _____
- Job title: _____
- What are your primary responsibilities?

  _____

  _____

2. Recidivism is normally defined as the act of reoffending after having been punished (convicted, incarcerated, etc.). Within the context of this survey, recidivism also includes other undesirable events (e.g., rearrest, fail to appear) for pretrial/un-sentenced populations. Using this broad definition of recidivism, does your agency track recidivism?

☐ Yes, we track recidivism

☐ No, we don't track recidivism

If your answer is "yes" to Question **2**, please proceed to Question **3** and continue.

If your answer is "no" to Question **2**, please describe the reason(s) why your agency currently does not track recidivism and answer Question **2.1**.

Reason(s): _____

_____

2.1 Do you use measures of recidivism that are not calculated by your own agency (such as those calculated by other DC agencies, or obtained through collaborations with organizations and think tanks, e.g., Urban Institute, Vera Institute, etc.)?

☐ Yes

☐ No

If your answer is "yes" to Question **2.1**, please specify the agencies or organizations from which you obtain recidivism measures.
Please also describe the recidivism measures.

Agencies or organizations: _____

Recidivism measures: _____

If your answer is "no" to Question **2.1**, please answer Question **2.2**.

2.2 is your agency interested in tracking and measuring recidivism in the future?

☐ Yes

☐ No

If your answer is “yes” to Question **2.2**, please describe the reason(s) why your agency is interested in tracking and measuring recidivism and describe the nature and type of recidivism your agency is interested in tracking and measuring.

Reason(s): _____

_____

The nature and type: _____

If your answer is “no” to Question **2.2**, please describe the reason(s) why your agency is currently not interested in tracking and measuring recidivism.

Reason(s): _____

_____

3. What population does your agency track recidivism for?

**Please check all that apply*

- ☐ Pretrial
- ☐ Probation
- ☐ Parole
- ☐ Supervised release
- ☐ Other (Please specify) _____

4. Does your agency track recidivism separately for special need populations?

**Please check all that apply*

- ☐ Yes (Please check all the conditions that characterize the populations):
- ☐ Sex offenses
- ☐ Domestic violence
- ☐ Substance abuse
- ☐ Mental health
- ☐ Gangs
- ☐ Other (Please specify) _____
- ☐ No

5. If your agency tracks recidivism, does it measure the extent of recidivism in some way (e.g., 12-month recidivism rate)?

- ☐ Yes
- ☐ No

If your answer is "yes", please proceed to Question 6 and continue.

If your answer is "no", please explain the reason(s) why your agency tracks recidivism but does not quantify its extent.

Reason(s): _____

_____

6. How does your agency measure recidivism?

- Recidivism event (the event that determines that a person has recidivated):
  **Please check all that apply*

☐ Arrest

☐ Conviction/adjudication

☐ Incarceration/confinement

☐ Violation of supervision conditions

☐ Other (Please specify the event) _____

- How long are the tracking or follow-up periods for recidivism? In other words, how long does your agency follow individuals after they are initially arrested or punished to examine if they have reoffended or violated supervision conditions in some way?
  **Please check all that apply*

☐ 6 months

☐ 12 months

☐ 18 months

☐ 24 months

☐ 36 months

☐ Other (Please specify) _____

- Does your agency calculate the extent of recidivism by any of the follow methods?
  **Check all that apply*

☐ The percentage who recidivated during the period of follow-up (this is often referred to as "recidivism rate")

☐ Total number of recidivism events during the period of follow-up

☐ Average frequency rate (dividing the total number of recidivism events for each person by the total time in community, and taking the average)

☐ Other (Please specify) _____

- Does your agency measure recidivism by the type of reoffending or the type of supervision violations? (e.g., violent offense vs. non-violent, a new crime vs. technical violation, rearrest vs. failure to appear)

☐ Yes

☐ No

7. Does your agency measure recidivism by the characteristics of the individuals who are supervised by your agency?

**Please check all that apply*

- ☐ Age (in years)
- ☐ Sex (Male, Female)
- ☐ Ethnicity
- ☐ Race
- ☐ Type of offense that resulted in the individual being supervised by your agency (e.g., conviction offense) or the severity of the offense (felony vs. misdemeanor)
- ☐ Employment status
- ☐ Educational attainment
- ☐ Marital status
- ☐ Residential stability
- ☐ Special supervision conditions (domestic violence, sex offender, gang affiliation, etc.)
- ☐ Participation in treatments (e.g., substance abuse, mental health), educational/vocational training
- ☐ Offense history (e.g., age at first arrest, number of prior arrests/convictions/incarcerations)
- ☐ Risk level based on risk assessments
- ☐ Other (Please specify)_____

8. How does your agency use the recidivism information recidivism you collect/calculate? **Please check all that apply*

- ☐ External reporting
- ☐ Internal program evaluation or assessment
- ☐ Agency planning
- ☐ Other (Please specify) _____

9. Are there aspects of the manner in which your agency defines and measures recidivism that are not adequately captured by the above questions? If so, please describe them here.

10. Please describe the rationale for the manner in which your agency defines and measures recidivism. For example, if your agency only tracks and measures reincarceration as a recidivism event, why not track and measure reconviction as a recidivism event?

THIS IS THE END OF THE SURVEY.

Thank you for taking the time to answer our questions.

Your input is very important to this project.