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February 12, 2020

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State Capitol Room 125
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Honorable Vice-Chair of Senate Finance Committee
Senator Natasha von Imhof
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Re: SB 168 Introduced 1/27/20.

I write to express an opinion on SB 168 will likely give rise to future litigation and suggest how those areas could be changed to possibly avoid that result.

Sec. 1: We have no objection to the amendments to AS 12.61.010(a).

Sec. 2: The proposed amendment to AS 12.62.015 presents a problem because if the victim is allowed to present a written statement or sworn testimony, it puts the victim in the position of being subpoenaed and cross examined. This is especially true if their statement is given any evidentiary value in the proceedings established under Section 8 of the Bill.

Sec. 3: Amendments to AS 12.63.010(b) also present a potential problem, especially the changes to subsections (b)(1)(E) and subsection (b)(1)(G). The proposed changes to these subsection could be interpreted as compelling disclosure of information belonging to innocent third parties e.g., vehicles owned by a third-party employer or fishing vessels owned by an employer. This section should be amended to make it clear that information that discloses property owned by a third party should not be required.

Sec. 8: This section establishes a procedure for filing a petition seeking removal from the registry. However, this section does not go far enough to avoid constitutional infirmity. The proposed AS 12.63.035 only allows removal from the publication but does not allow removal from the registration requirement. That means that an offender with a lifetime registration requirement would still be required to register for life and update his registration on a quarterly basis. There would be no way to be relieved of this requirement, and that would be contrary to the Supreme Court's recent decision that makes clear under our constitution, an offender has a right to seek a due process hearing to seek removal from the duties imposed by the ASORA. If the legislature wants a provision that would pass constitutional muster, the court should be given the authority to relieve someone of publication or both publication and registration.

Sec. 8: Another issue the legislation fails to address is whether full faith and credit will be given to decision by a foreign tribunal that relieves someone of the registration requirement under a procedure similar to Alaska's proposed procedure. As an

example, if someone is relieved on the registration requirement in Washington, Oregon, Colorado or another state and they move to Alaska, is Alaska going to live up to its duty to provide full faith and credit to the determinations made in the other state? Under the full faith and credit clause of the U.S. Constitution, Article IV, Section 1, States within the United States have to respect the "public acts, records, and judicial proceedings of every other state." See also: 28 U.S.C. § 1738 requiring full faith and credit between the states. Alaska should give full faith and credit to a decision in another state that the individual is no longer required to register.

Sec. 14: While I don't object to amendment of AS 44.28.020, per se, I do object to using those regulations and procedures to evaluate individuals who are not within the jurisdiction of the Department of Corrections ("DOC"). If you are going to expand the jurisdiction of the DOC then you are opening new areas that may not be wise and that may support further litigation arguing the constitutionality of particular provisions of the legislation and existing act.

Sec. 15: I agree with adoption of a new rule allowing application and I agree to many of the procedures set out in that section. I see two problems.

First, the requirement that the individual be assessed as a low risk by a treatment provider approved by the DOC under AS 44.28.020 is problematic. You are excluding individuals who have long been released and out of the jurisdiction of the DOC. Are you putting those individuals back under the Department's jurisdiction? Moreover, the Department has extensive procedures and requirements governing the approval of treatment providers. These procedure also include imposed ethical responsibilities. There will be an argument that some approved treatment providers will be biased because they could lose there approval if they go against the State. You are creating a situation where DOC procedures and requirements can be put under direct scrutiny and challenged as to their validity. The individual providers credentials will also be put under direct scrutiny. You should seek an opinion from the Department of Corrections on this issue because it simply does not work and I believe it will end up as being very costly for the Department and the State. Under the basic principles of due process, the individual petitioning for removal should be allowed to retain their own independent expert witness to testify before court, and it should be left within the sound discretion of the trial court to qualify any proposed expert witness, and to assess

what weight to give that testimony. Requiring a State approved expert and requiring the applicant to pay the costs of the State's expert, limits a petitioner's rights to a fair and unbiased proceeding. A more prudent course would be to allow both sides of the dispute an hire their own expert.

Finally, we disagree with the evidentiary standard because it elevates the standard generally applied in sentencing proceedings and other proceedings where the Court is charged with the duty to determine future dangerousness. Several states use the preponderance of the evidence standard including, Arkansas, Colorado, Deleware, Georgia and several others. If you rely on the clear and convincing evidence standard, then State assertions in defense to the petition should also be subject to the clear and convincing evidence standard.

In closing, I appreciate the opportunity to express and opinion on SB 168 and I ask that the attachment to this letter be entered into the record on HB 168. The attachment is a recidivism study performed by the University of Alaska and it will contradict the unsupported testimony that you are likely to here at hearings on SB 168.

Sincerely;

Darryl L. Thompson

cc: File

Attachment: University of Alaska, Alaska Sex Offender Recidivism and Case Processing Study: Final Report, 2016.

# Alaska Sex Offender Recidivism and Case Processing Study: Final Report

## ALASKA SEX OFFENDER RECIDIVISM AND CASE PROCESSING STUDY

(Grant #2014-R2-CX-K031)

# Final Report

Submitted to:
U.S. Department of Justice,
Bureau of Justice Statistics

By

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2016

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# PART I

## Alaska Sex Offender Recidivism

## Introduction

While sex offender recidivism is a public policy issue of importance in most, if not all, jurisdictions in the United States, it is a topic of particular importance in Alaska because of the state's egregiously high rates of sexual violence. For decades Alaska has had among the highest per capita rates of reported rapes/sexual assaults in the United States. Research examining sexual violence victimization in the state suggests that Alaska's high rate of reported rape/sexual assault is the result of high rates of sexual violence victimization, not merely the willingness of people to report sexual violence incidents to police and other officials. A 2015 study conducted by the Alaska Council on Domestic Violence and Sexual Assault (CDVSA) and the UAA Justice Center found that an estimated 33.1 percent of adult women in Alaska have experienced sexual violence in their *lifetimes*, and an estimated 2.9 percent experienced sexual violence *in the past year*. With a statewide adult female population estimate of 264,204 in 2015, these percentages translate to roughly 87,400 adult women in Alaska who have experienced sexual violence in their lifetimes, and 7,600 adult women in Alaska who experienced sexual violence in the preceding year.

Within the broad frame of public policy, designed to address the state's epidemic of sexual violence, are specific concerns pertaining to sex offender accountability and rehabilitation, particularly once convicted sex offenders are released from incarceration back into Alaska's communities. Both policymakers and members of the public want to know how well the state's efforts to prevent post-incarceration reoffending by those convicted of sex offenses are working.

Historically, determinations of criminal justice policy "success" or "failure" have relied heavily on the concept of *recidivism*. Recidivism refers to a person's return to criminal offending after having received sanctions for a previous crime (e.g., arrest, conviction, incarceration). Because of the difficulty of obtaining self-reported offending data and, to a lesser extent, crime victimization data, researchers and policymakers have come to rely (primarily) on official data sources such as the number of post-sanction arrests, convictions, and remands to jail or prison to measure recidivism. Since these official measures of recidivism depend on crimes coming to the attention of criminal justice officials, they are imperfect proxy measures of offenders' actual recidivism. Nevertheless, official measures of recidivism do provide important (even if limited) information pertaining to the nature and intensity of recidivism, particularly when one considers the heightened surveillance regimes imposed on those convicted of criminal offenses (particularly those convicted of sex crimes), which substantially increase the likelihood of detection.

## Study Goals & Objectives

The primary goal of this study was to provide a detailed empirical portrait of sex offender recidivism in order to assist the state's criminal justice policymakers and practitioners in their efforts to design, develop and implement evidence-based policies and practices. In pursuit of this goal, the study set out to achieve three specific objectives:

1. Provide updated estimates of Alaska sex offender recidivism.

2. Expand the post-incarceration follow-up period from two to seven years in order to better understand sex offender desistance from crime.
3. Use group-based trajectory modeling (GTM) techniques to examine potential differences among sex offenders in the frequency and intensity of post-incarceration reoffending.

In order for evidence-based policymaking to be effective, it is imperative that policymakers have access to up-to-date information. The Alaska Judicial Council (AJC) conducted the most recent analysis of Alaska sex offender recidivism five years ago. The AJC's analysis sample included sex offenders returned to the community in 2008 and 2009. The current study includes all sex offenders released from institutional custody by the Alaska Department of Corrections (DOC) between January 1, 2006 and December 31, 2008.

While they are often not made explicit, criminal justice policies have long-term aspirations and implications. Ideally, criminal justice policies are developed and implemented in order to reduce crime and enhance public safety not only in the short-term, but in the medium-term and the long-term as well. However, previous studies of Alaska sex offender recidivism have been concerned only with short-term reoffending (i.e., two or three years). Consequently, previous studies have been unable to contribute to the assessment of policies aimed at reducing sex offender recidivism over the medium- or long-term. By expanding the post-incarceration time period to seven years, the present study seeks to broaden the discussion of Alaska's sex offender policies to include medium-term, and perhaps even long-term, recidivism reduction objectives.

Previous research examining Alaska sex offender recidivism has focused primarily on the percentage of convicted sex offenders who reoffended within certain periods of time – for example, within the first year following their release from jail or prison. This is not unimportant information, but it is limited information. There is certainly value in knowing how many convicted sex offenders were rearrested within a year of being released from incarceration. There is also value in knowing how much time passed between release and rearrest. A fundamental problem with each of these measures is that as summary yes-no measures, they fail to distinguish between different types of sex offenders. All individuals who reoffend within a given time period are categorized recidivists, even if they committed vastly different offenses in vastly different quantities. As an example, the Alaska Judicial Council's study of Alaska sex offender recidivism found that 18 percent of sex offenders were rearrested (for any offense) within one year of returning to the community, and 32 percent of sex offenders were rearrested (for any offense) within two years of returning to the community. These statistics imply that there is no qualitative difference in the types of offenses sex offenders were rearrested for, or more importantly, no differences in the intensity (or *rate*) with which sex offenders reoffended. An individual who was rearrested for a single offense was counted the same as an individual who was rearrested 3 times for a total of 10 offenses. An additional problem with these particular statistics is that they are cumulative percentages, meaning that once an individual has reoffended they are counted as having recidivated in every subsequent time period. This exaggerates the objective risk of reoffending in each subsequent time period, particularly for offenders who recidivate early, but then quickly desist from future offending. In reality, sex offenders, like other types of offenders, not only have different rates of reoffending, their respective rates of reoffending vary over time.

A more accurate depiction of sex offender recidivism would take into account both of these aspects of recidivism – differences in reoffending rates, and variability in reoffending rates over time. This study takes into account these important components of sex offender recidivism through the use of GTM modeling techniques which provide an objective, empirical means of distinguishing between sex offenders who recidivate at different rates, and modeling the change in those rates over time.

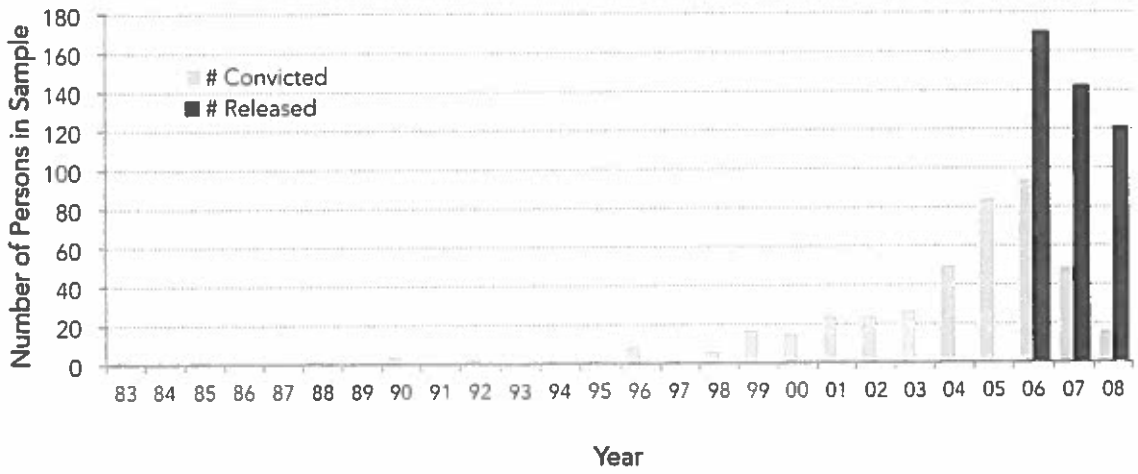
## Study Data

The data used for this study were obtained from two agencies. The Alaska Department of Corrections (DOC) provided the roster of individuals who were convicted of one or more qualifying sex offenses and subsequently released from institutional confinement between January 1, 2006 and December 31, 2008. The Alaska Department of Public Safety (DPS) provided all of the arrest and conviction data used in this study.

## Sex Offender Sample

For the purposes of this study, the term *sex offender* was operationalized as a person convicted and sentenced to a period of incarceration in a jail or prison for the violation of one or more offenses defined in Alaska Statutes as a "registerable sexual offense." Sexual offenses that require registration with the State of Alaska include sexual assault, sexual abuse of a minor, incest, online enticement of a minor, unlawful exploitation of a minor, indecent exposure, distribution and/or possession of child pornography, distribution of indecent materials to minors, sex trafficking, and in some instances, harassment. The initial analysis sample included all persons who were convicted of one or more registerable sexual offenses and subsequently *released from incarceration* between January 1, 2006 and December 31, 2008. A total of 433 individuals met these criteria.

**Figure 1.1.** Number of persons included in sample by year of sex offense conviction (yellow), and number of persons included in sample by year of release (green).



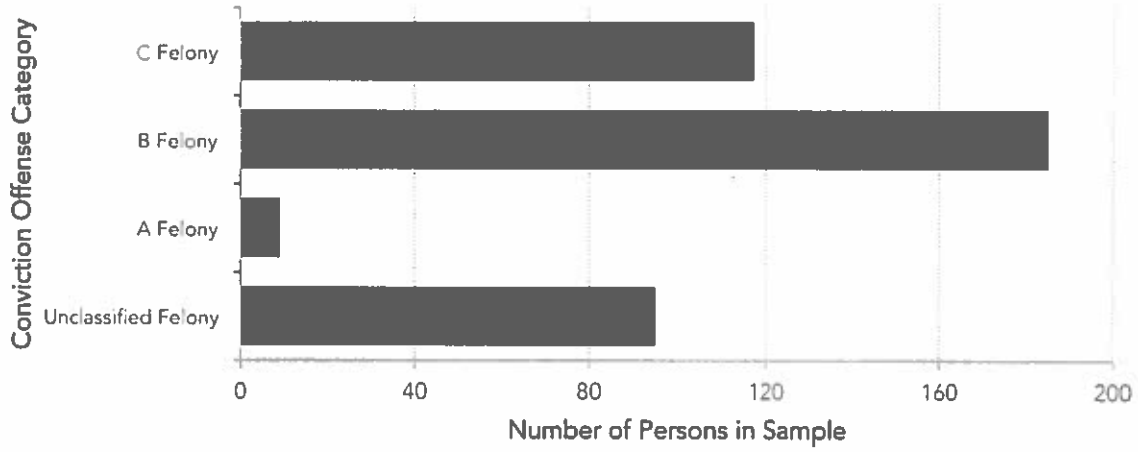

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Slightly less than 40 percent (n=170; 39.3%) of sex offenders in the sample were released in 2006, about a third (n=142; 32.8%) were released in 2007, and just over a quarter (n=121; 27.9%) were released in 2008 (see dark green bars in Figure 1.1). A large majority of sample members (88.5%) were convicted since 2000; more than two-thirds of the sample (67.7%) was convicted between 2004 and 2008.

A total of 27 individuals included in the original sample died after being released from institutional custody. Therefore, the final analysis sample included only 406 sex offenders, rather than 433.

**Conviction offenses.** On average, the total elapsed time between the date of conviction and the date of release for sex offenders was 1,179 days (approximately 3.2 years). The largest period of elapsed time among individuals included in the sample belonged to a single offender who was convicted in 1983 and released in 2008. The total elapsed time between this person's date of conviction and their date of release was 9,003 days (approximately 24.6 years).

**Figure 1.2.** Number of persons included in sample by seriousness of conviction offense.



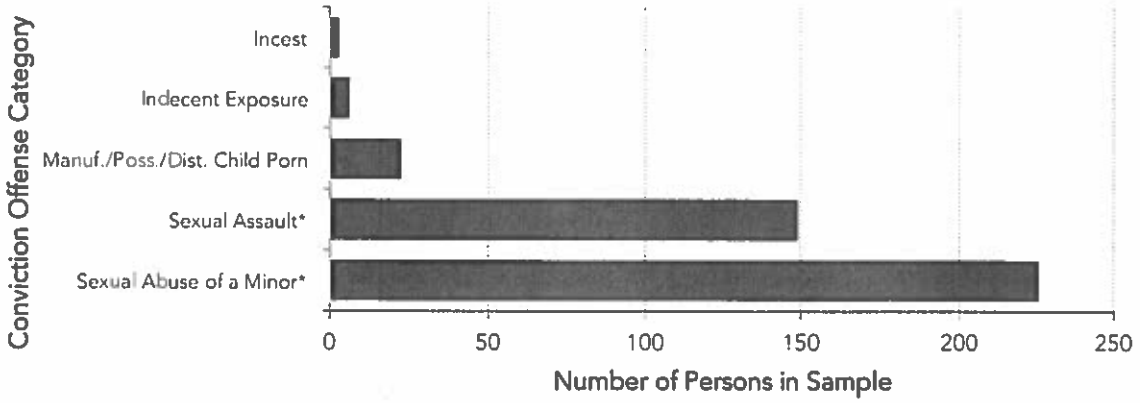

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

The amount of time between date of conviction and date of release was heavily influenced by the seriousness of the offense for which sex offenders were convicted. Nearly half of the sample (n=185; 45.6%) was convicted of a Class B felony offense, followed by Class C felony convictions (n=117; 28.8%), Unclassified felony convictions (n=95; 23.4%), and Class A felony convictions (n=9; 2.2%) (see Figure 1.2). Unclassified felonies had – by far – the longest average length of time between date of conviction and date of release: 2,518 days (6.9 years). Class A felonies averaged 1,643 days (4.5 years), Class B felonies averaged 895 days (2.5 years), and Class C felonies averaged 489 days (1.3 years).

The types of sex offenses for which members of the sample were convicted are presented in

Figure 1.3, below. More than half of the sex offenders in the sample were imprisoned for at least one sexual abuse of a minor conviction (n=226; 55.7%). More than a third of the sample was convicted of one or more sexual assault offenses (n=149; 36.7%). Remaining sample members were convicted of the following three offense types: manufacture/distribution/possession of child pornography (n=22; 5.4%), indecent exposure (n=6; 1.5%), and incest (n=3; 0.7%).

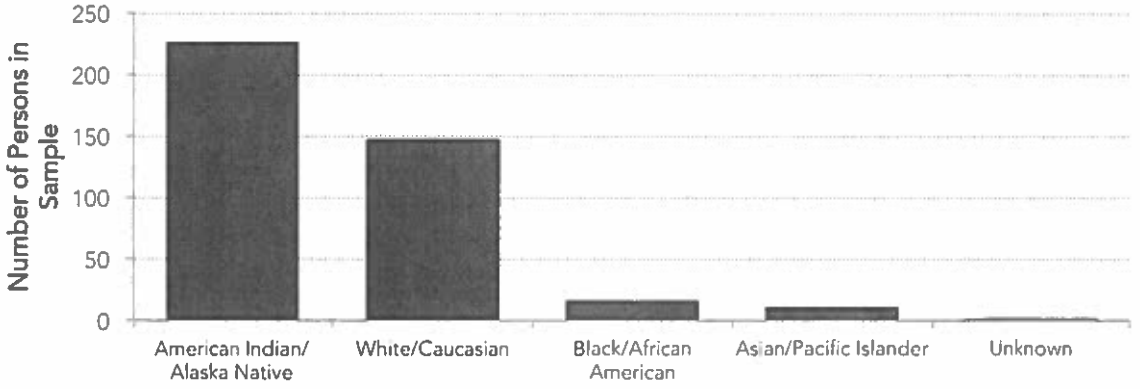
**Figure 1.3.** Number of persons included in sample by conviction offense category.




**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.
**Notes:**
* Includes attempts.

**Offender demographics.** Sex offenders included in the sample were overwhelmingly male (n=404; 99.5%), and a majority (n=227; 55.9%) was American Indian or Alaska Native. Approximately a third of sex offenders in the sample were White/Caucasian (n=148; 36.5%). Black/African Americans and Asians comprised small percentages of the sample – 3.9 percent and 2.7 percent, respectively (see Figure 1.4). On average, sex offenders were 35.5 years of age when convicted and 38.1 years of age when released from prison.

**Figure 1.4.** Number of persons included in sample by racial/ethnic group membership.




**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

## Criminal Histories of Sex Offenders

Our examination of the criminal histories of sex offenders released from institutional custody between January 1, 2006 and December 31, 2008 began with the *total number of arrest incidents* involving members of the sample. In all, the 406 sex offenders in the sample were identified in 3,709 arrest incidents dating back as far as October of 1965, and occurring as recently as August of 2015. Sample members were arrested for a total of 6,982 separate charges. Of these arrests, 3,508 occurred prior to the sex offense(s) that resulted in sample members' convictions, incarcerations, subsequent releases, and inclusion in the analysis sample. Final dispositions were recorded in the criminal history repository for 6,502 charges (93.1% of all arrest charges). Among arrest charges for which a final disposition was noted, approximately 40 percent (n=3,013; 43.2%) resulted in conviction.

Nearly two-thirds of the sex offenders in the sample (n=271; 66.7%) had been convicted of one or more prior offenses. Among those with at least one prior conviction, the average number of prior convictions was 6.3. The maximum number of prior offense convictions was 64 (observed for one offender). A third (33.3%) of the sample did not have any prior convictions. In all, this sample of sex offenders had been previously convicted of 1,705 charges. Table 1 shows the types of *charges* these 271 sample members were convicted of prior to their qualifying sex offense conviction.

The most common type of offenses for which sample members were previously convicted fell into the *offenses against society* category. Driving under the influence was the most frequently observed (13.7% of all previous conviction charges), followed by disorderly conduct (6.5%), liquor law violations (6.3%), trespass of real property (4.8%), weapons law violations (2.2%), drug/narcotics offenses (2.2%), pornography/obscene materials (0.1%), and non-violent family offenses (<0.1%). Altogether, these offenses comprised 35.8 percent of all previous conviction offenses.

Offenses against persons represented just over a quarter (27.8%) of all previous convictions. Convictions for assault were most common (18.9% of all previous conviction charges). Sex offenses were second-most common, representing 8 percent of all previous convictions charges. Previous convictions for human trafficking, homicide, and kidnapping/abduction offenses were rare (0.5%, 0.2%, and 0.2% of all previous conviction charges, respectively).

About one out of every six previous convictions (17.3%) were for property crimes. Larceny/theft offenses comprised the largest segment of prior property crime convictions (8.6% of all previous conviction charges). This was followed by convictions for destruction/damage/vandalism of property (4.1%) and burglary/breaking and entering offenses (2.8%). Sample members were rarely convicted for arson, bad checks, counterfeiting/forgery, fraud, motor vehicle theft, or robbery. Altogether, convictions for all six of these offenses combined represented less than two percent of all prior charge convictions.

**Table 1.1.** Distribution of prior conviction charges for sex offender sample, by NIBRS crime category

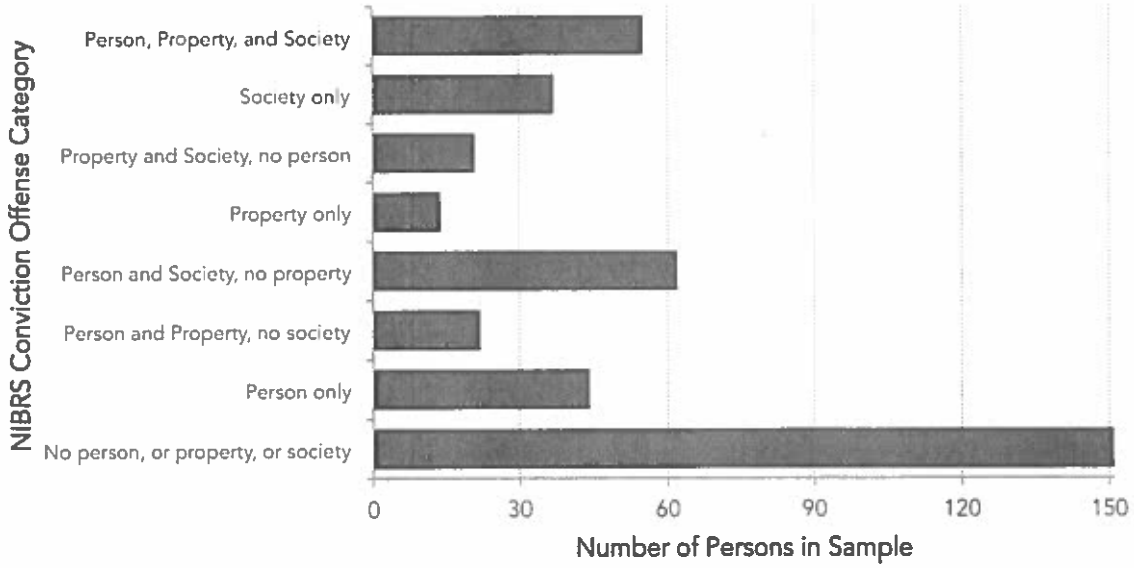
| NIBRS Crime Category | # Conviction Charges | % Total |
|---|---|---|
| Offenses against persons | | |
| Assault offenses | 323 | 18.9% |
| Homicide offenses | 4 | 0.2 |
| Human trafficking offenses | 8 | 0.5 |
| Kidnapping/abduction offenses | 3 | 0.2 |
| Sex offenses | 137 | 8.0 |
| ***Subtotal*** | ***475*** | ***27.8*** |
| Property offenses | | |
| Arson | 1 | <0.1 |
| Bad checks | 3 | 0.2 |
| Burglary/breaking & entering | 48 | 2.8 |
| Counterfeiting/forgery | 4 | 0.2 |
| Destruction/damage/vandalism | 70 | 4.1 |
| Fraud | 1 | <0.1 |
| Larceny/theft | 147 | 8.6 |
| Motor vehicle theft | 16 | 0.9 |
| Robbery | 3 | 0.2 |
| ***Subtotal*** | ***293*** | ***17.3*** |
| Offenses against society | | |
| Disorderly conduct | 110 | 6.4 |
| Drug/narcotics offenses | 37 | 2.2 |
| Driving under the influence | 234 | 13.6 |
| Family offenses (non-violent) | 1 | <0.1 |
| Liquor law violations | 107 | 6.2 |
| Pornography/obscene materials | 2 | 0.1 |
| Trespass of real property | 82 | 4.8 |
| Weapons law violations | 38 | 2.2 |
| ***Subtotal*** | ***611*** | ***35.5*** |
| All other (person, property, or society) | 326 | 19.1 |
| ***Subtotal*** | ***326*** | ***19.1*** |
| ALL CONVICTION CHARGES | 1,705 | 100.0% |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Finally, slightly fewer than 20 percent (19.8%) of this sample of sex offenders' prior charge convictions fell within the *All Other* NIBRS offense category. The largest share of the 326 conviction offenses in this category were offenses against public administration, such as: obstruct/interfere/hinder official proceedings, failure to register as a sex offender, violation of conditions of release, contributing to the delinquency of a minor, failure to appear, making a false report, eluding/evasion/escape, and witness/evidence tampering. Traffic offenses such as leaving the scene of an accident, reckless/negligent driving, and other non-specified traffic violations were also observed quite frequently. In fact, traffic offenses constituted the single largest prior conviction type within the All Other offense category.

At the individual-level (rather than the conviction charge-level), members of the sex offender sample were most likely to have had at least one prior conviction for a *person* offense. Approximately 45 percent of the sample had one or more prior convictions for an offense against persons. Offenses against society convictions were observed for more than 40 percent of the sample. Slightly more than a quarter of the sample had one or more prior convictions for property crimes. Approximately a third of sample members had previously been convicted for one or more offenses falling within the NIBRS *all other* category.

**Figure 1.5.** Number of persons with one or more previous criminal convictions, by NIBRS conviction offense category.




**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Figure 1.5 (previous page) shows the various combinations of previous convictions according to the three main NIBRS conviction offense categories: offenses against persons, offenses against property, and offenses against society. More than a third of the sex offenders in the sample (37.2%; n=151) did not have a previous conviction for a person offense, or a property offense, or an offense against society. With respect to single-category convictions, slightly more than 10 percent (10.8%; n=44) of offenders' previous criminal records consisted only of one or more person crime convictions, and slightly less than 10 percent (9.1%; n=37) had a prior criminal history that was limited to offenses against society. The criminal histories of only 3.5 percent of the sample were limited to property crime-only convictions. Approximately one out of every eight sex offenders in the sample (13.6%; n=55) had one or more previous convictions for offenses against persons, and one or more previous property crime convictions, and one or more previous offenses against society convictions.

These data show that while all 406 sex offenders in the analysis sample were convicted of one or more sex offenses, relatively few displayed *specialization* in their overall pattern of criminal offending in the months and years leading up to their qualifying sex offense. A third of the sample had no criminal history prior to conviction for their immediate sex offense(s). And, while it was not necessarily uncommon for offenders in the sample to have one or more prior convictions for offenses against persons, a majority did not. Moreover, approximately 80 percent of the sample had no prior criminal convictions for sex offenses, specifically. Sex offenders in the current sample were nearly as likely to have one or more prior convictions for offenses against society (e.g., driving under the influence, disorderly conduct, liquor law violations) as they were to have one or more prior convictions for offenses against persons. Prior convictions for property offenses, while less likely than prior convictions for person offenses or offenses against society, were not uncommon. More than a quarter of sex offenders had one or more prior convictions for property crimes – primarily larceny/theft, destruction of property, or burglary.

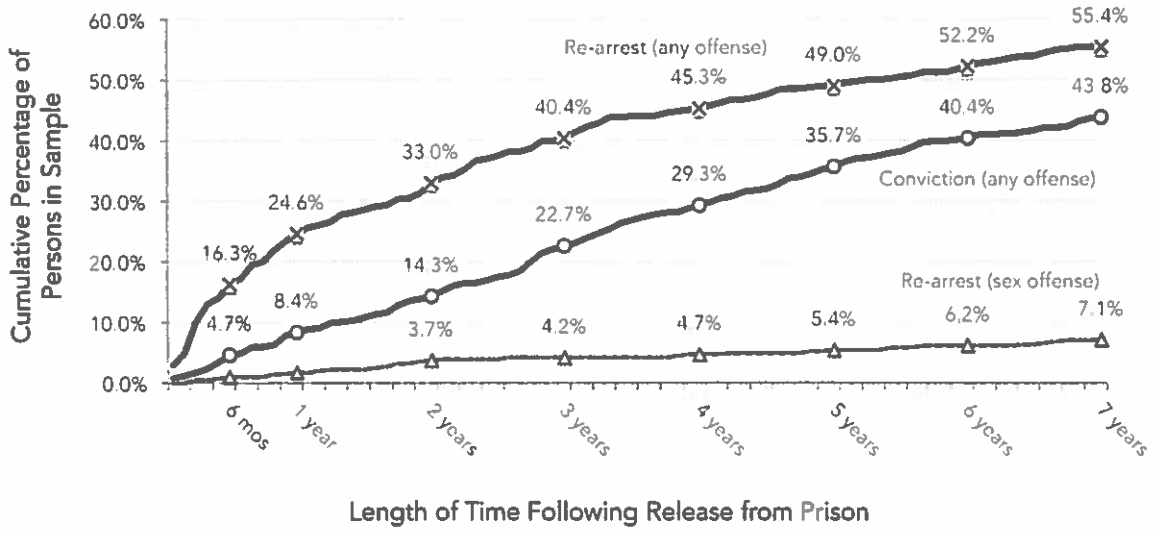
## Recidivism of Sex Offenders

Our examination of the recidivism of sex offenders released from institutional custody between January 1, 2006 and December 31, 2008 began with the calculation of the *cumulative recidivism hazard rate* for all post-release offenses. A *recidivism hazard* is the probability of reoffending between two defined points in time. The first point in time is referred to as "Time Zero," and is commonly denoted as $t_0$. The second point in time is referred to as "Time One," and is denoted at $t_1$. Subsequent points in time are denoted $t_2$, $t_3$, $t_4$,...$t_n$. A *cumulative* recidivism hazard represents the probability of reoffending between $t_0$ and $t_n$ for all members of the analysis sample, and is expressed as a proportion (or percentage). Once an individual in the analysis sample has reoffended, that recidivism incident is counted at every subsequent time period.

Figure 1.6, below, shows three separate cumulative recidivism hazard curves for the sample of 406 sex offenders. The total time depicted in Figure 1.6 is 7 years; that is, arrests and subsequent convictions for each sex offender were tracked for seven years following their release from incarceration. The top curve represents the cumulative recidivism rate for post-release

*arrests (for any offense)*; the middle curve represents the cumulative recidivism rate for post-release *convictions (for any offense)*; and, the bottom curve represents the cumulative recidivism rate for post-release *arrests for sex offenses.*

**Figure 1.6.** Alaska sex offender recidivism within 7 years of release from prison.

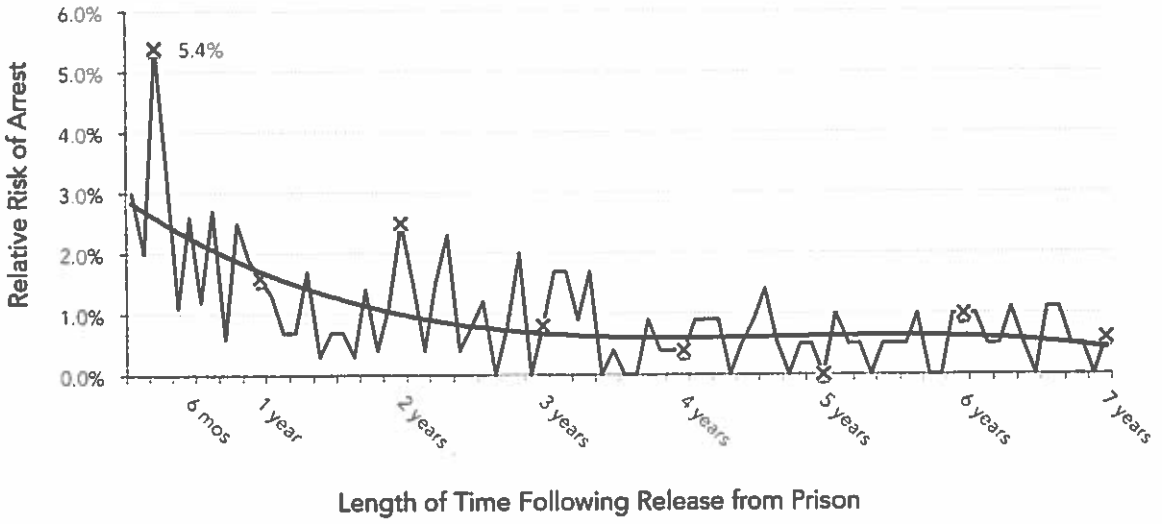



**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Within six months of being released from incarceration, 16.3 percent of the sample was rearrested for any offense; 4.7 percent of the sample was convicted of one or more offenses. At the 12-month mark, nearly a quarter (24.6%) of the sample had been rearrested for any offense, and 8.4 percent of the sample had been reconvicted for one or more offenses. By the seventh year of the follow-up period, more than half of the sex offenders in the sample (55.4%) had been rearrested for any offense, and over 40 percent (43.8%) had been reconvicted of at least one new offense.

The cumulative rearrest hazard curve for *sex offenses*, depicted with a dashed line at the bottom of Figure 1.6, was much different than the cumulative rearrest hazard curve for all offenses both in terms of its overall shape and magnitude. For example, while nearly a quarter (24.6%) of sex offenders in the sample had been rearrested for any offense within the first year of their release from incarceration, only 1.7 percent had been arrested for a new sex offense. At the 3-year mark, 40.4% of the sample had been rearrested for any offense, but only 4.2 percent had been arrested for a new sex offense. And, by seven years post-release, more than half (55.7%) of the sample had been arrested for any offense, only 7.1 percent had been arrested for a new sex offense. (Note: Reconvictions for sex offenses are not displayed in Figure 10.6 due to extremely small values.)

**Figure 1.7.** Alaska sex offender relative arrest risk, 7-year period following release from prison.




**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Figure 1.7, above, depicts the *relative risk* of rearrest (for any offense) for the 7-year follow up period. In contrast to a cumulative recidivism hazard, which represents all of the individuals arrested up to a given point in time (that is, a cumulative total), *relative risk* represents only the specific number of individuals arrested within a specific time period. To illustrate the difference:

- The percentage of sex offenders rearrested (for any offense) between $t_0$ and $t_1$ was 3.0 percent of the sample;
- The percentage of sex offenders rearrested (for any offense) between $t_1$ and $t_2$ was 2.0 percent of the sample;
- The percentage of sex offenders rearrested (for any offense) between $t_2$ and $t_3$ was 5.4 percent of the sample; and,
- The percentage of sex offenders rearrested (for any offense) between $t_3$ and $t_4$ was 3.3 percent of the sample. And so forth.
- In contrast, the respective percentages for the *cumulative* rearrest hazard were 3 percent, 5 percent, 10.4 percent and 13.7 percent, respectively (see Figure X, previous page).

The data depicted in Figure 1.7 show that over the course of the 7-year follow-up period, the relative risk of sex offender recidivism steadily decreased. The single-largest percentage of sex offenders rearrested was observed between $t_2$ (60 days post-release) and $t_3$ (90 days post-release) when 5.4 percent of the sample (n=22) was rearrested. At the one-year mark, the relative risk of rearrest was 1.6 percent; at the seven-year mark the relative risk of rearrest was 0.6 percent.

Table 1.2 provides a description of the charges for which our sample of sex offenders were arrested and convicted following their release from Department of Corrections institutional

**Table 1.2.**

Distribution of post-release arrest offenses and convictions for sex offender sample

| Offense Category | Charges: Arrest (n=1,580) Number | Charges: Arrest (n=1,580) Percent | Charges: Guilty (n=656) Number | Charges: Guilty (n=656) Percent |
|---|---|---|---|---|
| **Offenses Against the Person** | | | | |
| Assault | 349 | 22.09% | 158 | 24.09% |
| Harassing communications | 13 | 0.82 | 7 | 1.07 |
| Murder/homicide | 11 | 0.70 | 1 | 0.15 |
| Kidnapping | 5 | 0.32 | 1 | 0.15 |
| Robbery | 5 | 0.32 | 2 | 0.31 |
| Intimidation | 2 | 0.13 | 0 | 0.00 |
| ***Subtotal*** | ***385*** | ***24.4%*** | ***169*** | ***25.8*** |
| **Registerable Sex Offenses** | | | | |
| Sexual assault | 45 | 2.85% | 10 | 1.52% |
| Possession of obscene materials | 29 | 1.84 | 3 | 0.46 |
| Sexual abuse of a minor | 26 | 1.65 | 9 | 1.37 |
| Indecent exposure | 16 | 1.01 | 6 | 0.92 |
| Incest | 2 | 0.13 | 0 | 0.00 |
| Distribution of obscene materials | 1 | 0.06 | 1 | 0.15 |
| ***Subtotal*** | ***119*** | ***7.5*** | ***29*** | ***4.4*** |
| **Offenses Against Property** | | | | |
| Larceny | 80 | 5.06% | 31 | 4.73% |
| Trespass | 64 | 4.05 | 34 | 5.18 |
| Malicious mischief | 51 | 3.23 | 12 | 1.83 |
| Burglary/possess burglary tools | 29 | 1.84 | 9 | 1.37 |
| Vehicle theft/unauthorized use | 18 | 1.14 | 6 | 0.92 |
| Shoplifting | 17 | 1.08 | 11 | 1.68 |
| Forgery | 12 | 0.76 | 3 | 0.46 |
| Fraud | 8 | 0.51 | 0 | 0.00 |
| Arson | 1 | 0.06 | 1 | 0.15 |
| ***Subtotal*** | ***280*** | ***17.7*** | ***107*** | ***16.3*** |
| **Motor Vehicle Offenses** | | | | |
| Traffic offense | 122 | 7.72% | 50 | 7.62% |
| Driving/operating under the influence | 52 | 3.29 | 37 | 5.64 |
| Leaving scene of an accident | 7 | 0.44 | 3 | 0.46 |
| ***Subtotal*** | ***181*** | ***11.4*** | ***90*** | ***13.7*** |
| **Controlled Substances Offenses** | | | | |
| Possession of dangerous drugs | 42 | 2.7% | 17 | 2.6% |
| ***Subtotal*** | ***42*** | ***2.7*** | ***17*** | ***2.6*** |

**Table 1.2.** (continued)
Distribution of post-release arrest offenses and convictions for sex offender sample

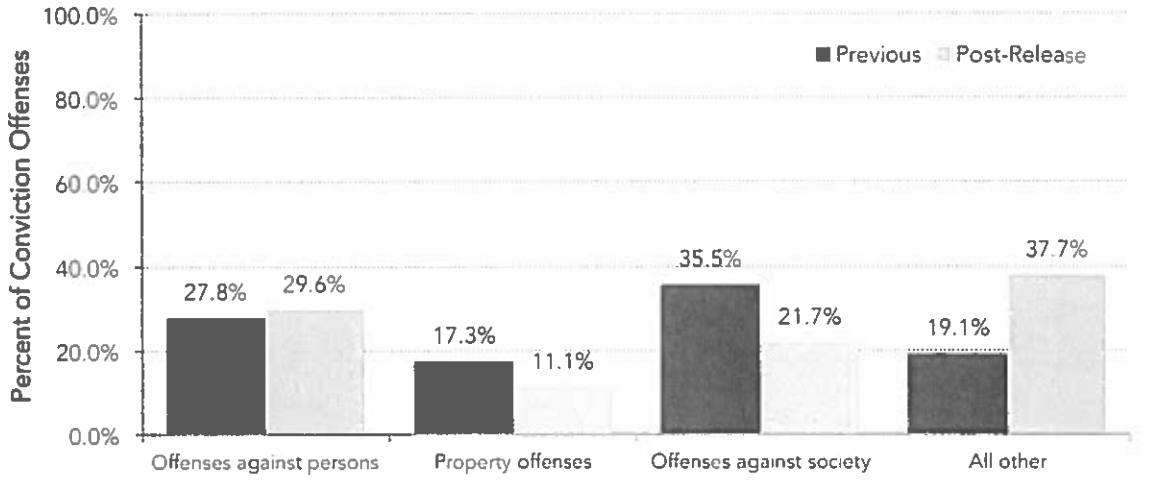
| Offense Category | Charges: Arrest (n=1,580) Number | Percent | Charges: Guilty (n=656) Number | Percent |
|---|---|---|---|---|
| **Offenses Against Public Order** | | | | |
| Disorderly conduct | 53 | 3.35% | 25 | 3.81% |
| Misconduct involving weapons | 18 | 1.14 | 7 | 1.07 |
| ***Subtotal*** | ***71*** | ***4.5*** | ***32*** | ***4.9*** |
| **Offenses Against Public Administration** | | | | |
| Failure to register as a sex offender | 203 | 12.85% | 104 | 15.85% |
| Violation of conditions of release | 100 | 6.33 | 43 | 6.56 |
| Obstruct justice/police/court officer | 93 | 5.89 | 31 | 4.73 |
| Making a false report | 29 | 1.84 | 9 | 1.37 |
| Perjury | 7 | 0.44 | 1 | 0.15 |
| Failure to appear | 6 | 0.38 | 3 | 0.46 |
| Escape | 6 | 0.38 | 0 | 0.00 |
| Evidence tampering | 5 | 0.32 | 1 | 0.15 |
| Promoting contraband | 2 | 0.13 | 2 | 0.31 |
| Terroristic threatening | 1 | 0.06 | 0 | 0.00 |
| ***Subtotal*** | ***452*** | ***28.6*** | ***194*** | ***29.6*** |
| **Offenses Against Family & Vulnerable Adults** | | | | |
| Contribute to delinquency of a minor | 14 | 0.89% | 7 | 1.07% |
| Other (unspecified) | 6 | 0.38 | 1 | 0.15 |
| Endanger welfare of a child | 5 | 0.32 | 3 | 0.46 |
| ***Subtotal*** | ***25*** | ***1.6*** | ***11*** | ***1.7*** |
| **Alcohol Offenses** | | | | |
| Alcohol possession/transport | 20 | 1.27% | 7 | 1.07% |
| ***Subtotal*** | ***20*** | ***1.3*** | ***7*** | ***1.1*** |
| **No Offense Description Provided** | 5 | 0.3 | 0 | 0.0 |
| TOTAL OFFENSES | 1,580 | 100.0 | 656 | 100.0 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

custody. The recidivism offense descriptions in Table 1.2 are presented according to offense categories defined in Alaska statutes. Nine offense categories are represented: offenses against the person, registerable sex offenses, offenses against property, motor vehicle offenses, controlled substances offenses, offenses against public order, offenses against public administration, offenses against the family and vulnerable adults, and alcohol offenses. No offense description was provided for five post-release offenses. Table 1.2 presents the percentage of recidivism *arrest offenses* and *conviction offenses*.

The largest share of recidivism *arrest offenses* were offenses against public administration (28.6% of all arrest offenses), followed by offenses against the person (24.4%), offenses against property (17.7%), motor vehicle offenses (11.4%), registerable sex offenses (7.5%), offenses against public order (4.5%), controlled substances offenses (2.7%), offenses against the family and vulnerable adults (1.6%), and finally alcohol offenses (1.3%). The distribution of conviction offenses was very similar, with only two offense categories – offenses against public order and registerable sex offenses – switching positions.

**Figure 1.8.** Comparison of prior offense and post-release offense convictions, by NIBRS offense categories




**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Figure 1.8 provides a direct comparison of the types of offenses sample members were convicted of prior to their qualifying sex offense, and the types of offenses sample members were convicted of for new offenses committed following their release from prison. Overall, there was very little change the percentage of convictions attributable to offenses against persons. Prior to the commission of their qualifying sex offense, 27.8 percent of sample members' convictions were for offenses against persons (e.g., assault, sex offenses, homicide). Following their release from prison, 29.6 percent of sex offenders' convictions were for offenses against persons, a difference of only +1.8 percentage points. In contrast, there were readily observable changes in the percentages of property offense, offense against society, and all other offense convictions. The percentage of convictions attributable to property offenses (e.g., larceny/theft, vandalism/destruction of property, burglary) declined from 17.3 percent to 11.1 percent (-6.2 percentage points). The percentage of convictions attributable to offenses against society (e.g., DUI, disorderly conduct, alcohol violations) also decreased, from 35.5 percent to 21.7 percent (-13.8 percentage points). Conversely, the percentage of convictions attributable to all other offense types (e.g., traffic offenses and offenses against public administration) increased quite dramatically, from 19.1 percent of all convictions prior to the commission of their qualifying sex offense to 37.7 percent of all convictions offenses following release from prison (+18.6 percentage points). Much of this increase in post-release convictions was for a specific offense

applicable only to those convicted of registerable sex offenses: failure to register as a sex offender. As shown in Table 1.2, this particular offense alone accounted for nearly 16 percent of all post-release convictions.

## Recidivism Trajectories of Sex Offenders

Traditionally, criminal recidivism studies have conceptualized reoffending as a discrete *outcome* rather than as a *developmental process*. They have also been designed to explain *individual variability* around a *single* population trend. As an example, the most common measure of recidivism – the proportion of offenders that commits a new offense within a given period of time, or *recidivism rate* – stands as perhaps the clearest example of the dominant conception (see Figure 1.6). While it is important to know how many offenders commit new offenses following incarceration, a recidivism rate provides limited insight into the dynamics of offending because the only qualitative distinction it provides is between those who reoffend and those who did not. A recidivism rate does not distinguish between offenders who commit new crimes at different rates (e.g., "low," "medium," "high"). In addition, because it relies on cumulative totals a standard recidivism rate provides very little information about the *onset* of reoffending, and no information pertaining to *desistance* from offending.

In contrast, group-based trajectory modeling (GTM) assumes that there is a strong likelihood that there are *qualitatively distinct* subgroups within the offender population of interest that demonstrate distinct developmental trends. In other words, the GTM approach does not assume that all offenders follow the same recidivism trajectory. On the contrary, GTM methods allows for the possibility of both homogeneity (within groups) as well as heterogeneity (among groups) in offending trajectories.

**GTM estimation.** The analytic objective of GTM is to identify clusters ("groups") of individuals who share similar recidivism trajectories. GTM models are an example of what statisticians refer to as *finite mixture models*. In statistical parlance, a *mixture model* refers to a model that estimates parameters for a population that is comprised of a *mixture* of unobserved, latent groups. GTM models are finite in the sense that the statistical modeling procedure produces estimates based on a *finite* number of discrete groups. Importantly, the number of trajectory groups is not predetermined prior to analysis; rather, the number of trajectory groups is determined through the model estimation process. The GTM methodology estimates a set of parameters that maximize the probability of the outcome of interest (in this case, the total number of offenses for which an individual was arrested) for each increment of time. The parameters that are estimated define the *overall shape* of each trajectory, as well as the *probability of group membership* for each member of the estimation sample. The parameters are produced using maximum likelihood estimation, and a separate set of parameters is estimated for each trajectory group.

Because the data used in this GTM analysis are non-negative integer *counts* of post-release arrests (0, 1, 2, 3...*n*), the appropriate probability distribution for statistical estimation is the *Poisson distribution*. Because of the preponderance of zero counts in the data (that is, zero arrests within a given time period), the GTM methodology used here makes use of a generalized

version of the basic Poisson model called the *zero-inflated Poisson* (ZIP) model, which is appropriate for count data with an excess of zeroes. The outcome probabilities calculated by the model denote the expected number of offenses per unit of time for all individuals in a specific trajectory group.

All of the GTM models reported here also made use of the ZIP model's ability to account for each offender's *exposure time* when estimating group trajectories. Incorporating exposure time into model estimation serves to adjust expected counts of recidivism according to the proportion of time each individual offender was free to commit new criminal offenses. For the GTM models presented and discussed below, exposure time was measured as the *proportion of days each individual was not incarcerated in a jail or prison*. This measure was calculated for every individual offender, for every increment of time.

**Estimation sample**. The GTM model presented below included only those sex offenders who were arrested for *at least one new offense* during the 7-year follow-up period. Those individuals who were not arrested, for any offense, during the follow-up period comprised 44.6% ($n$=181) of the full sample of 406 sex offenders. Thus, the GTM model that was estimated included only the 225 sex offenders *who recidivated during the 7-year follow-up period.*

**GTM model selection.** A combination of formal statistical criteria and subjective judgment is used to determine the number of groups in the GTM model. In a GTM framework, model specification relies on formal statistical criteria to constrain subjective assessments about the number and overall shape of the recidivism trajectories modeled. The primary statistical tool that is used for model selection is the *Bayesian Information Criterion*, or BIC. In general, higher BIC scores indicate a better model fit to the data. From a purely statistical point of view, the model with the largest BIC score is the model that should be selected. Application of this standard requires, by definition, that multiple GTM models with differing numbers of groups be estimated and the resulting BIC scores compared. Table 1.3, below presents the results of this model selection process.

**Table 1.3.** Bayesian criterion information (BIC) scores used to determine number of trajectory groups to include in model

| Number of trajectory groups | $BIC_1$ (n=3,150) | $BIC_2$ (n=225) | Probability correct model |
|---|---|---|---|
| 2 | -3,045.28 | -1,486.16 | .000 |
| 3 | -2,962.67 | -2,956.07 | .000 |
| 4 | -2,939.87 | -2,928.00 | .999 |
| 5 | -2,947.93 | -2,933.41 | .000 |
| 6 | -2,960.73 | -2,943.57 | .000 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Table 1.3 shows the BIC scores for 2-group, 3-group, 4-group, 5-group, and 6-group GTM models of sex offender recidivism along with the probability that each model specification is the correct model. The GTM estimation procedure produces two BIC scores. The first BIC score

($BIC_1$) is calculated using the total number of *assessments* across individuals for each unit of time. The second BIC score ($BIC_2$) is based on the total number of *individuals* included in the estimation sample. The "true" BIC score lies between these two computed scores. The BIC scores presented in Table 3, and subsequently used in the model selection process, were those estimated from the total number of assessments made ($n$=3,150).

Also included in Table 1.3 is a *probability correct model* statistic, which provides the probability that each model with $j$ groups is the correct model from a set of $J$ different GTM models. The statistic is computed by:

$$p_j = \frac{e^{BIC_j - BIC_{max}}}{\sum_j e^{BIC_j - BIC_{max}}},$$

where $BIC_j$ is the BIC score for model $j$ and $BIC_{max}$ is the maximum BIC score of the $J$ models being examined in the model selection process. The BIC score and probability correct model statistic presented in Table 1.3 indicated that a 4-group model provided the best fit to the data.

GTM parameter estimates for the 4-group model, as well as the estimated percentages of the population within each trajectory group, are presented in Table 1.4. The final model was specified using three zero-order trajectories and one quadratic trajectory. Because separate parameters are estimated for each group, the GTM model allows the order (shape) of each trajectory to vary across groups. All of the estimated trajectory group parameters were statistically significant.

**Table 1.4.** Maximum likelihood estimates, zero-inflated Poisson (ZIP) 4-group trajectory model (n=225)

| Trajectory group | Parameter | Estimate | Std. Error | T | *p*-value |
|---|---|---|---|---|---|
| 1 | Intercept | -0.274 | 0.092 | -2.969 | 0.003 |
| 2 | Intercept | -1.656 | 0.083 | -19.941 | 0.000 |
| 3 | Intercept | 0.793 | 0.065 | 12.215 | 0.000 |
| 4 | Intercept | -1.619 | 0.520 | -3.113 | 0.002 |
| | Linear | 1.594 | 0.226 | 7.052 | 0.000 |
| | Quadratic | -0.150 | 0.022 | -6.705 | 0.000 |
| Group membership | | | | | |
| 1 | (%) | 24.0 | 3.941 | 6.094 | 0.000 |
| 2 | (%) | 54.0 | 4.316 | 12.503 | 0.000 |
| 3 | (%) | 15.3 | 2.817 | 5.420 | 0.000 |
| 4 | (%) | 6.7 | 1.798 | 3.758 | 0.000 |
| $BIC_1$ | -2939.87 | (n=3,150) | $BIC_2$ | -2928.00 | (n=225) |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

These parameter estimates were then used to calculate *posterior group membership*

*probabilities* for each sample member. The posterior probability of trajectory group membership refers to the probability of membership in trajectory group $j$, given the actual measured behavior of individual $i$ for each time period assessed. Calculation of posterior probabilities provides an objective, statistical basis for assigning individual offenders to the trajectory group that best matches their observed behavior. Individual sex offenders were assigned to one of the four estimated trajectories using a "maximum probability rule." The percentage of sample members assigned to each of the four trajectory groups is presented in the bottom half of Table 1.4.

Table 1.5 shows the posterior probabilities for five individuals included in the estimation sample to illustrate how sample members were assigned to trajectory groups. All five sample members were assigned to Trajectory Group 1 using the maximum probability rule. It is important to note that none of the individuals in the estimation sample "belong" to any trajectory group in reality. Rather, membership in a trajectory group is probabilistic. Trajectory group assignments are made using posterior probabilities.

**Table 1.5.** Posterior group membership probability scores

| | Posterior probability | | | | |
|---|---|---|---|---|---|
| Sample member | Group 1 | Group 2 | Group 3 | Group 4 | Assigned group |
| 1 | .744 | .256 | <.000 | <.000 | 1 |
| 2 | .822 | .074 | .104 | <.000 | 1 |
| 3 | .874 | .123 | .003 | <.000 | 1 |
| 4 | .925 | .016 | .059 | <.000 | 1 |
| 5 | .992 | .007 | <.000 | <.000 | 1 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center. Anchorage, AK.

Posterior probabilities can also be used to assess the GTM model that was estimated. When evaluating the adequacy of the statistical model, the rule of thumb is that the *average posterior probability* (APP) should be at least 0.7 for all groups. All of the APP scores surpassed the minimum threshold of 0.7, ranging from a low of .836 to a high of .933 (see Table 1.6).

An additional measure of model assignment adequacy is to compute the *odds of correct classification* (OCC) for each trajectory group. This is calculated as the odds of correct classification (using the maximum probability assignment rule) divided by the odds of correct classification (based on random assignment):

$$OCC_j = \frac{APP_j \Big/ 1 - APP_j}{\hat{\pi}_j \Big/ 1 - \hat{\pi}_j},$$

where $APP_j$ is the average posterior probability for trajectory group $j$, and $\hat{\pi}_j$ is the estimated percentage of sex offenders within each trajectory group $j$. OCC scores greater than 5.0 for all

groups indicates that the GTM model that was estimated has high assignment accuracy. As shown in Table 1.6, the OCC scores for each group far exceeded 5.

A third diagnostic is a direct comparison of a group's estimated probability (i.e., the proportion of the population estimated to belong to each group) and the proportion of individuals in the sample assigned to each group using the maximum posterior probability rule. The rule of thumb for this measure is admittedly quite vague: a reasonably close correspondence between the two metrics. For each of the estimated trajectory groups there was relatively close concurrence between the estimated percentage of the population belonging to each trajectory group and the percentage of the sample assigned to each group using the maximum probability assignment rule.

Overall, the diagnostic measures presented in Table 1.6 show that the four group GTM model performed very well.

**Table 1.6.** Model diagnostics, 4-group trajectory model

| Trajectory group | $\hat{\pi}_j$ | $\pi_j$ | APP | OCC | $\pi$-$\pi_j$ |
|---|---|---|---|---|---|
| One | 24.0% | 22.7% | .836 | 16.1 | 1.3% |
| Two | 54.0 | 54.7 | .933 | 11.9 | -0.7 |
| Three | 15.3 | 15.1 | .905 | 52.7 | 0.2 |
| Four | 6.7 | 7.5 | .871 | 94.0 | -0.8 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016) *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Notes**

$\hat{\pi}_j$ = estimated percentage of the population falling within trajectory group $j$

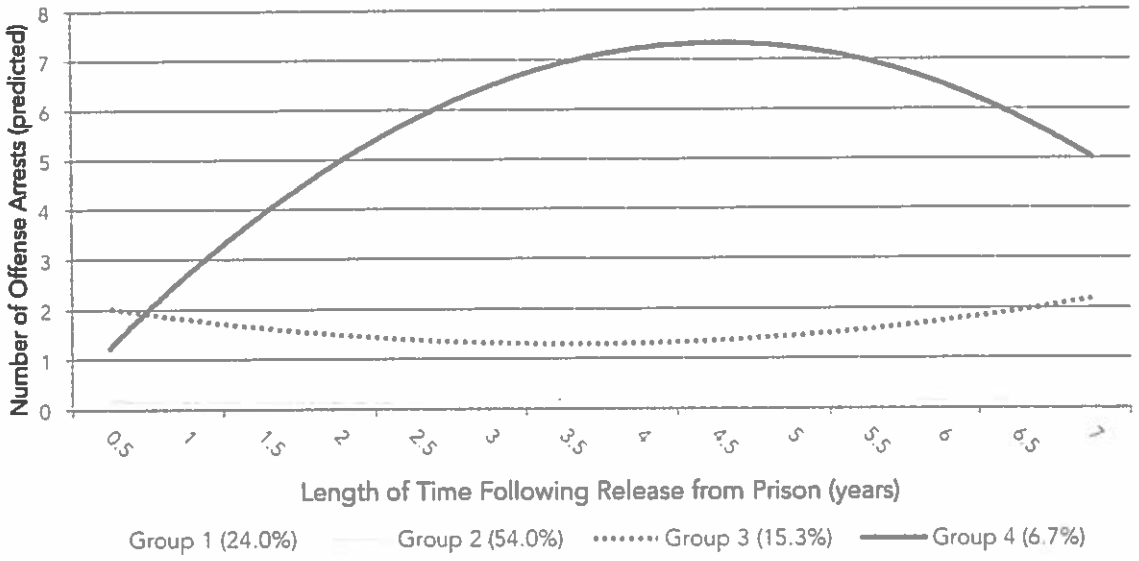
$\pi_j$ = percentage of sample classified in group $j$.

APP = average posterior probability of membership in group $j$

OCC = odds of correct classification.

Figure 1.9 shows the recidivism trajectories for the GTM model. The trajectories shown in Figure 1.9 depict the estimated reoffending rates for each group. The x-axis in Figure 9 represents *time following release from prison* (in years). The y-axis is the estimated number of offense arrests for each period of time, controlling for the proportion of time offenders were not incarcerated during the 7-year follow-up period.

**Figure 1.9.** Alaska sex offender recidivism trajectories, 7-year period following release from prison.




**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

and Group 3 (estimated to comprise 15.3% of the sex offender population). The reoffending trajectories for all groups were relatively constant over time. The primary distinction between these three groups was the estimated *rate* of reoffending during the 7-year follow-up period. The average rate of reoffending for Group 3 was estimated to be 1.6, the average rate of reoffending for Group 1 was estimated to be 0.6, and the average rate of reoffending for Group 2 was 0.1.

While four distinct trajectory groups were identified in the GTM model, visual inspection of the trajectories shows there to be essentially two qualitatively distinct patterns of reoffending during the 7-year follow-up period. The first pattern is characterized by (1) relative *stability* in the rate of reoffending over time, and (2) relatively *low* rate(s) of reoffending. Three of the four groups identified in the GTM model evidenced this pattern: Group 1 (estimated to comprise 24% of the sex offender population), Group 2 (estimated to comprise 54% of the sex offender population), and Group 3 (estimated to comprise 15.3% of the sex offender population). The reoffending trajectories for all groups were relatively constant over time. The primary distinction between these three groups was the estimated *rate* of reoffending during the 7-year follow-up period. The average rate of reoffending for Group 3 was estimated to be 1.6, the average rate of reoffending for Group 1 was estimated to be 0.6, and the average rate of reoffending for Group 2 was 0.1.

The second distinct pattern of reoffending during the 7-year follow-up period is characterized by (1) *change* in the rate of reoffending over time, with the development of the reoffending trajectory characterized by a dramatic *increase* in the rate of offending through year five, followed by a rapid *decrease* in the rate of offending afterwards, and (2) a consistently *higher*

rate of reoffending throughout the 7-year follow-up period. Only one of the groups evidenced this reoffending trajectory: Group 4. An estimated 6.7 percent of the sex offender population fell within this group.

**Demographic profiles of groups.** Table 1.7 presents the basic demographic composition of each trajectory group, as well as those sex offenders who were not arrested for any new offenses during the 7-year follow-up period. The percentages in Table 1.7 reflect the proportion *within* each trajectory group with each demographic characteristic.

With respect to sex/gender, there was no discernable difference between any of the groups. All of the sex offenders in Trajectory Groups 1, 2, 3 and 4 were male; 98.9 percent of sex offenders in the no new offenses group were male as well.

**Table 1.7.** Demographic characteristics of sex offender cohort, by recidivism trajectory group

| Demographic characteristic | Group 1 | Group 2 | Group 3 | Group 4 | No new offenses |
|---|---|---|---|---|---|
| Sex/gender (%) | | | | | |
| Male | 100.0 | 100.0 | 100.0 | 100.0 | 98.9 |
| Female | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 |
| Race/ethnicity (%) | | | | | |
| American Indian/Alaska Native | 82.4 | 66.7 | 82.4 | 47.1 | 37.0 |
| Asian/Pacific Islander | 0.0 | 0.8 | 0.0 | 0.0 | 5.5 |
| Black/African American | 0.0 | 6.5 | 2.9 | 5.8 | 3.3 |
| White/Caucasian | 17.6 | 25.2 | 14.7 | 47.1 | 52.5 |
| Unknown/Other | 0.0 | 0.8 | 0.0 | 0.0 | 1.7 |
| Age at release | | | | | |
| Average age (years) | 33.3 | 37.4 | 30.8 | 32.8 | 41.7 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

There was more variation when it came to the average ages of the individuals included in each of the groups shown in Table 1.7. On average, the youngest offenders were in Group 3 (30.8 years of age), followed by Group 4 (32.8 years of age), Group 1 (33.3 years of age), Group 2 (37.4 years of age), and finally the no new offenses group (41.7 years of age). Despite the observed differences in average ages among the trajectory groups, none of these differences was statistically significant. However, the no new offenses group was significantly older than all of the trajectory groups. Thus, it appears that the influence of sex offender age is limited to distinguishing between those that reoffended during the follow-up period and those that did not, but sex offender age does not appear to distinguish among the different trajectory groups.

The racial/ethnic composition of each group varied. Trajectory Group 1 was limited to only

American Indian/Alaska Native and White/Caucasian offenders. American Indians/Alaska Natives comprised more than 80 percent (82.4%) of Group 1, and Whites/Caucasians comprised 17.6 percent. A smaller percentage of Group 2 sex offenders were American Indian/Alaska Native (66.7%), and a larger percentage were White/Caucasian (25.2%). Group 2 also included sex offenders who were Black/African American (6.5%) and Asian/Pacific Islander (0.8%). The racial/ethnic composition of Group 3 was very similar to that for Group 1, with the addition of a small percentage of Blacks/African Americans (2.9%). Finally, equal proportions of sex offenders in Group 4 were American Indian/Alaska Native (47.1%) and White/Caucasian (47.1%). This group also included a small number of Blacks/African Americans (5.8%).

**Criminal history, by group.** Table 1.8 presents the criminal histories of each trajectory group, as well as the criminal history of those sex offenders who did not commit any new offenses during the 7-year follow-up period. The averages in Table 1.8 reflect the average number of prior offense arrests, the average number of prior offense convictions, the average number of prior sex offense arrests, and the average number of prior sex offense convictions *within* each trajectory group.

The average number of prior offense arrests varied among all of the groups. However, the only statistically significant difference observed was the average number of prior offense arrests for those sex offenders who did not commit any new offenses during the 7-year follow-up period. On average, the no new offense group had 6 prior offense arrests. This average was significantly lower than the average number of prior offense arrests for Group 1 (12.6 prior offense arrests), Group 3 (12.9 prior offense arrests), and Group 4 (15.8 prior offense arrests). The same pattern was observed with respect to the average number of prior offense convictions. The no new offenses group had significantly fewer prior offense convictions than Group 1, Group 3, and Group 4. These findings suggest that the number of prior offense arrests and number of prior offense convictions – for any offense – differentiates between those who reoffended during the follow-up period and those who did not reoffend during the follow-up period. However, these measures did not distinguish among the different trajectory groups who reoffended at differing rates during the follow-up period.

**Table 1.8.** Criminal history of sex offender cohort, by recidivism trajectory group

| | Group 1 | Group 2 | Group 3 | Group 4 | No new offenses |
|---|---|---|---|---|---|
| Criminal history | | | | | |
| Avg. # prior arrests (any offense) | 12.6 | 8.7 | 12.9 | 15.8 | 6.0 |
| Avg. # prior convictions (any offense) | 6.5 | 4.2 | 6.5 | 7.5 | 2.8 |
| Avg. # prior sex offense arrests | 1.2 | 1.2 | 0.8 | 0.9 | 1.5 |
| Avg. # prior sex offense convictions | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 |

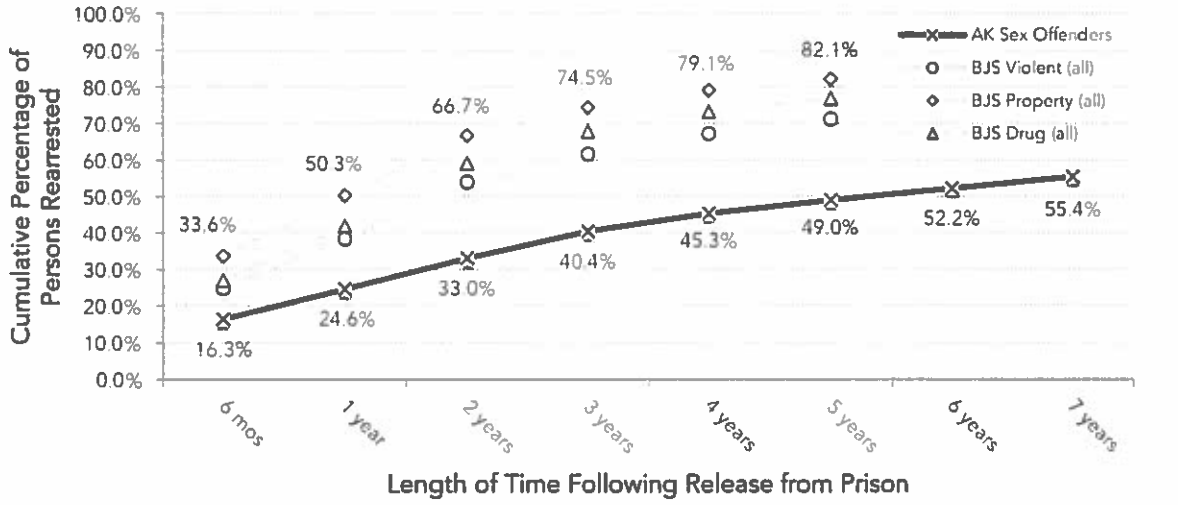
**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Comparisons were also made with respect to the average number of prior sex offense arrests and the average number of prior sex offense convictions. No significant differences were observed.

## Summary

**Cumulative recidivism rate.** The first analytic measure used to assess Alaska sex offender recidivism was the *cumulative recidivism rate* for individuals released from institutional custody between January 1, 2006 and December 31, 2008, calculated for a period of seven years. More than half (55.4%) percent of Alaska sex offenders were rearrested for one or more new offenses (any offense) and 7.1 percent were rearrested for one or more new sex offenses within seven years of being released from prison.

**Figure 1.10.** Comparison of cumulative rearrest (any offense) rates: sex offenders in Alaska, and violent offenders in 30 states, property offenders in 30 states and drug offenders in 30 states.




**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.Durose, D., Cooper, A., & Snyder H. (2014). *Recidivism of prisoners released in 30 states in 2005: Patterns from 2005 to 2010*. Bureau of Justice Statistics, Washington, D.C.

These findings affirm the results of previous sex offender recidivism studies in Alaska and elsewhere showing that sex offenders recidivate at a lower rate than individuals convicted of other types of criminal offenses. To illustrate, Figure 1.10 presents the cumulative rearrest rate (any offense) for Alaska sex offenders, as well as the 5-year cumulative rearrest rates (any offense) for violent, property, and drug offenders released from prison in 2005 in 30 states. The data presented in Figure 10 show that sex offenders in Alaska were rearrested at substantially lower rates than individuals who were convicted of violent, property and drug crimes. In sum, not only were Alaska sex offenders less likely to be rearrested (for any offense) than individuals convicted of other crimes, sex offenders were especially unlikely to be rearrested for sex crimes after they were released from prison back into the community.

**Relative risk of rearrest for new offenses.** The second measure used in this study to

assess Alaska sex offender recidivism was *relative recidivism risk*, calculated as the percentage of unique sex offenders rearrested within a defined time period. The results of this analysis were presented in Figure 7. The single largest percent of sex offenders rearrested (5.4%) – for any offense – was between 60 days and 90 days post-release. At the one-year mark, the relative risk of rearrest – for any offense – was 1.6 percent; by the seven-year mark the relative risk of rearrest – for any offense – declined to 0.6 percent. In sum, over time the relative risk of sex offenders being arrested for committing new offenses declined.

**Sex offender recidivism trajectories.** The third and final measure used to assess Alaska sex offender recidivism was the use of GTM methods to examine if individuals convicted of sex offenses displayed qualitatively distinct patterns of reoffending during the seven-year follow-up period. Results showed that among Alaska sex offenders who were rearrested for one or more new offenses following release from prison, there was notable "clustering" into qualitatively distinct recidivism trajectory groups. In total, the final GTM model identified a total of four distinct trajectory groups (see Table 1.9). Each of these trajectory groups displayed a different *rate* of post-release reoffending. While numerically distinct, the estimated recidivism rates of three of the four trajectory groups were relatively low, and the reoffending trajectory of each group displayed *stability* over the entirety of the follow-up period. An estimated 93.3 percent of sex offenders who commit new offenses following release from prison fall within one of these three low-rate recidivism trajectory groups. In contrast, the fourth trajectory group reoffended at a much higher rate than any of the other three groups, and demonstrated marked *change* in reoffending intensity over time. The shape of this fourth recidivism trajectory was characterized by a dramatic *increase* in the rate of offending through the fifth year following release from prison, followed by a steady *decrease* in the rate of offending afterwards. An estimated 6.7 percent of sex offenders who commit new offenses following release from prison fall within this fourth recidivism trajectory group. Finally, a fifth and final "group" was identified in the analysis. This fifth group, which consisted of 44.6 percent of sex offenders in the sample, did not recidivate within seven years of being released from prison, was not included in the GTM model.

Table 1.9 presents three pieces of summary information for each recidivism trajectory group that helps to translate the estimates produced by the GTM model into more tangible implications. The first row shows the estimated percentage of sex offender recidivist population belonging to each group. An estimated 24 percent of sex offender recidivists are in Group 1, 54 percent are in Group 2, 15.3 percent are in Group 3, and an estimated 6.7 percent are in Group 4. The second row of Table 1.9 presents the total number of arrest offenses each group was responsible for during the seven-year follow-up period. Group 1 accounted for 27.4 percent of all arrest offenses, Group 2 accounted for 21 percent of all arrest offenses, Group 3 accounted for 34.8 percent of all arrest offenses, and Group 4 accounted for 17 percent of all arrest offenses during the seven-year follow-up period. Comparing these two rows begins to illuminate differences in offending rates among the four trajectory groups.

**Table 1.9.** Comparison of reoffending intensity during 7-year follow-up period, by trajectory group

| | Trajectory group | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| Estimated Percentage of Sex Offender Population (A) | 24.0 | 54.0 | 15.3 | 6.7 |
| Percentage of offense arrests, 7-year follow-up period (B) | 27.4 | 21.0 | 34.8 | 17.0 |
| Percentage of 7-year follow-up period at-risk (C) | 61.8 | 81.6 | 41.6 | 15.6 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Members of Group 1 reoffended at a rate on-par with their overall representation in the sex offender recidivist population: they constituted an estimated 24 percent of the population, and they accounted for approximately 27 percent of all arrest offenses. Group 2 on the other hand represented an estimated 54 percent of the sex offender recidivist population, but members of this group accounted for just 21 percent of all offense arrests during the seven-year follow-up period. Groups 3 and 4, on the other hand, displayed disparity in the opposite direction of Group 2. While Group 3 constituted only 15.3 percent of the sex offender recidivist population, members of this trajectory group were responsible for more than a third (34.8%) of all new arrest offense. The numbers for Group 4 were 6.7 percent and 17 percent, respectively.

The third row of Table 1.9 shows the (average) percentage of days members of each trajectory group were free to commit new offenses during the follow-up period. On average, members of Group 1 were at-risk (that is, not incarcerated) 61.8 percent of the time; members of Group 2 were at-risk 81.6 percent of the time; members of Group 3 were at-risk 41.6 percent of the time; and, members of Group 4 were at-risk for only 15.6 percent of the total time available during the follow-up period.

**Demographic profiles of trajectory groups.** After estimating the final GTM model, demographic information for members of each trajectory group were compiled. A side-by-side comparison of the demographic composition of each trajectory group, as well as the demographic composition of those sex offenders who did not recidivate during the follow-up period, was presented in Table 1.7.

With respect to sex/gender, there were no discernable differences between any of the groups.

When it came to sex offender age, the only statistically significant difference was between sex offenders who did not recidivate during the follow up period and each of the four recidivism trajectory groups. The no new offense group was significantly older than all of the trajectory groups, on average.

The racial/ethnic composition of each group varied. Trajectory Group 1 was limited to only American Indian/Alaska Native and White/Caucasian offenders. American Indians/Alaska Natives comprised more than 80 percent (82.4%) of Group 1, and Whites/Caucasians comprised 17.6 percent. A smaller percentage of Group 2 sex offenders were American Indian/Alaska Native (66.7%), and a larger percentage were White/Caucasian (25.2%). Group 2 also included

sex offenders who were Black/African American (6.5%) and Asian/Pacific Islander (0.8%). The racial/ethnic composition of Group 3 was very similar to that for Group 1, with the addition of a small percentage of Blacks/African Americans (2.9%). Finally, equal proportions of sex offenders in Group 4 were American Indian/Alaska Native (47.1%) and White/Caucasian (47.1%). This group also included a small number of Blacks/African Americans (5.8%).

**Criminal histories of sex offenders.** A summary of criminal histories for the entire sample of sex offenders was also presented (see Table 1.1). The 406 sex offenders included in the analysis sample were identified in 3,709 arrest incidents dating back as far as October 1965, and occurring as recently as August 2015. Sample members were arrested for a total of 6,982 separate offenses. Of these prior arrest incidents, 3,508 occurred prior the sex offense(s) that resulted in sample members' convictions, incarcerations, subsequent releases, and inclusion in the analysis sample.

Nearly two-thirds of sex offenders in the sample had been convicted of one or more prior offenses. Among those with at least one prior conviction, the average number of prior convictions was 6.3. The remaining third of the sample did not have any prior convictions.

The most common type of offenses for which sample members were previously convicted fell into the NIBRS *offenses against society* category. Examples of conviction offenses included: driving under the influence, disorderly conduct, liquor law violations and trespass, among others. *Offenses against persons* represented about a quarter of all previous convictions. Convictions for assault were most common, followed by sex offenses (about 8% of all previous convictions). Previous convictions for human trafficking, kidnapping/abduction, and homicide were exceedingly rare. About one out of every six previous convictions were for *property crimes* such as larceny/theft, destruction/damage/vandalism, and burglary/breaking and entering. Finally, about one out of every five previous convictions fell within the NIBRS *All other* offense category. The largest share of these convictions consisted of offenses against public administration such as obstruct/interfere/hinder official proceedings, failure to register as a sex offender, and violation of conditions of release. This was followed by traffic offenses, and miscellaneous other minor offenses and violations. In sum, the analysis of these criminal history data showed that very few sex offenders displayed specialization in their overall pattern of criminal offending in the months and years preceding the sex offense that triggered inclusion in the sample.

This study also included a comparison of summary criminal history information for each of the four trajectory groups identified in the GTM model, as well as the group of sex offenders who did not recidivate during the seven-year follow-up period. The average number of prior offense arrests varied among all of the groups. However, the only statistically significant difference observed was the average number of prior offense arrests for those sex offenders who did not recidivate during the seven-year follow-up period. On average, the no new offense group had 6 prior arrests. This average was significantly lower than the average number of prior offense arrests for Group 1, Group3 and Group 4. This same pattern also held with respect to the average number of prior convictions. The no new offenses had significantly fewer prior offense convictions than Group 1, Group 3 and Group 4.

The between-group criminal history analysis also included a comparison of prior sex offense arrests and prior sex offense convictions. No statistically significant differences emerged among any of the groups.

## Conclusions

1. **Nearly half of all convicted sex offenders in Alaska are not rearrested or reconvicted within seven years of being release from prison.** With a specific focus on the *recidivism* of sex offenders, it can be easy to overlook the extent to which sex offenders successfully desist from crime, in general, and sex offending in particular. While this study did find that more than half (55.4%) of Alaska sex offenders were rearrested (for any offense) within seven years of being release from prison, it also found that nearly half (44.6%) of sex offenders *were not rearrested for any offense* within seven years of being released from prison.
2. **Alaska sex offenders are infrequently rearrested or reconvicted for the commission of new sex offenses.** This conclusion is related to #5 below. This study found that just 7.1 percent of all Alaska sex offenders released from prison commit a new sex offense within seven years, and only a small portion of those are convicted of new sex crimes. Considering the harm sex crimes inflict upon victims and communities, a cumulative recidivism rate of 7.1 percent is certainly not inconsequential, nor is it trivial. Nevertheless, a 7.1 percent cumulative recidivism rate for sex offenses provides important empirical context for objectively assessing sex offense recidivism risk.
3. **Sex offenders in Alaska recidivate at different rates.** The GTM model results presented here clearly show that the post-release offending behaviors of Alaska sex offenders vary in both frequency and intensity. All Alaska sex offenders do not present the same recidivism risk. Many do not recidivate at all within seven years and, among those sex offenders who do reoffend following release from prison, there are objective differences in their *rates* of reoffending.
4. **Rates of sex offender recidivism in Alaska vary over time.** The GTM model results also show that in addition to differing overall rates of reoffending, Alaska sex offenders' recidivism rates change over time. Such change was particularly pronounced for one recidivism trajectory group (Group 4), but was also observed (albeit to a lesser extent) for other recidivism trajectory groups as well. This suggests that desistance from crime is a *developmental process*, not simply the binary yes-no outcome that is so often described in recidivism research.
5. **Alaska sex offenders are not crime "specialists."** The analysis of Alaska sex offender criminal histories and post-release recidivism clearly evidence a generalization – not a specialization – in criminal offending. While each member of the analysis sample used in this study was a "sex offender" due to one or more convictions for sex offenses, it is important to also understand that sexual offending constitutes only a small portion of the crimes Alaska sex offenders commit.
6. **The cumulative recidivism rate for sex offenders in Alaska is markedly lower than the cumulative recidivism rates of those convicted of other offenses.** As has been found in previous studies of sex offender recidivism in Alaska and elsewhere, the cumulative recidivism rate of Alaska sex offenders is demonstrably lower than what is found

for those convicted of other types of crime. An important aspect of sex offender recidivism is the well-known fact that sex offenses are among the least reported of all crimes. That sex crimes are among the least likely to come to the attention of police or other authorities is a fact that should be kept in mind when contemplating the results of sex offender recidivism studies – particularly those that rely on official data sources. Nevertheless, it is also important to consider the intensity of post-release supervision regimes for sex offenders. Sex offenders are subject to a much higher level of supervision and surveillance by both the government and local communities. In Alaska, many (although not all) sex offenders are required to submit to repeated polygraph examinations in addition to more routine enhanced supervision requirements. Thus, while sex crimes are not likely to be reported to police or other criminal justice officials, the commission of new offenses by convicted sex offenders are more likely to be detected than new offenses committed by individuals released from prison for other offenses.

7. **The relative risk of Alaska sex offender recidivism declines over time.** Most recidivism studies focus primarily (and often exclusively) on cumulative recidivism rates. A significant limitation of such rates as that they often exaggerate recidivism risk over time because they continue to increase until such time as no additional offenders recidivate. In contrast, the calculation of relative risk statistics provide an accurate assessment of recidivism risk for any given time period. The relative risk results presented in this study show a continuous decline in the relative risk of recidivism for Alaska sex offenders. In other words, the proportion of sex offenders who commit new crimes following their release from prison steadily decreases over time.

# PART II

## Alaska Sex Offender Case Processing

## Introduction

While Alaska's criminal history repository compiles detailed information pertaining to arrests, charge filings, charges dispositions and sentencing information, to date the feasibility of using the repository for conducting *criminal case processing* remains largely unexplored. The primary objective of this study was to examine the suitability of the data maintained in Alaska's criminal history repository for the purposes of conducting criminal case processing studies.

While criminal case processing studies have been conducted in Alaska, they have been limited in terms of their topics (e.g., studies focused on domestic violence and sexual assault) and their scope (e.g, studies limited to the Alaska State Troopers or the Anchorage Police Department). Both of these limitations would be overcome if it were determined that the data maintained in Alaska's criminal history repository is suitable for use in criminal case processing studies. Criminal case processing studies could be conducted for *all crime types* across *the entire state*. Criminal history repository data would also provide the opportunity to *study case-processing outcomes longitudinally*.

We determined that Alaska's criminal history repository data on sex offenses can be used to empirically document the case processing of sex offenses. Less than six percent of cases in the sample were missing data on any of the variables we analyzed. We found several significant influences on case processing of sex offense arrest events and individual sex offenses. Therefore, the results presented in this report will provide criminal justice policymakers and practitioners with vital statewide information about the formal case processing of sex offenses. The results can be used to assess how well Alaska's criminal justice system is meeting its stated goals of accountability for sex offenders at each stage of the criminal process from arrest, to prosecution, to disposition, and to sentencing.

## Study Data

The data used for this study were extracted from Alaska's criminal history data repository by the Alaska Department of Public Safety (DPS). DPS is the agency charged with compilation and the ongoing maintenance of the archive. The analysis sample included a full enumeration of individual suspects who were arrested – at least once – for the commission of one or more registerable sex offenses between January 1, 2008 and December 31, 2011.

For the purpose of this study, a *registerable sex offense* was defined as a violation of AS 11.41.410–11.41.470, or an offense included on the list of Alaska Sex Offender/Child Kidnapper Registerable Offenses (i.e., promoting sex trafficking (AS 11.66.110 and 11.66.130(a)(2)), possession and distribution of child pornography (AS 11.61.125, AS 11.61.127, and 11.61.128), and kidnapping involving sexual assault or threat of sexual assault (11.41.300(A)(1)(C)).

A total of 1,179 *individual suspects* were identified as having been arrested for a qualifying registerable sex offense during the study period.

These 1,179 suspects were identified in a total of 3,062 arrest events, and were suspected of committing 8,129 individual arrest offenses. An *arrest event* was defined as the arrest of an

individual by a state or local police agency on a specific date. An arrest event could include multiple arrest offenses. An *arrest offense* was defined as the specific statutory violation(s) for which an individual was arrested, as recorded by the arresting agency. (Note: We do not use the term "charge" because charging decisions are made at the discretion of prosecutorial agencies, not arresting agencies.)

On average, the individual suspects included in the analysis sample were arrested 2.6 times, for any offense(s), between January 1, 2008 and December 31, 2011. The largest number of arrest events was 40 (observed for 1 individual); the smallest number of arrest events was 1 (observed for 527 individuals).

While all of the *individual suspects* included in the analysis sample were arrested at least once during the study period for committing a registerable sex offense, only a minority (47.7%) of the *arrest events* observed included one or more registerable sex offenses. In contrast, more than half of the *arrest offenses* observed met the study's definitional criteria for a registerable sex offense (see Table 2.1).

**Table 2.1.** Offense type, by arrest event and arrest offense

| | Arrest events | | Arrest offenses | |
|---|---|---|---|---|
| Offense type | Number | Percent | Number | Percent |
| Registerable sex offenses | 1,460 | 47.7% | 4,665 | 57.4% |
| All other offenses | 1,602 | 52.3 | 3,464 | 42.6 |
| TOTAL | 3,062 | | 8,129 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

## Arrest Event Characteristics: Sex Offense Arrests

In this section we provide a description of sex offense arrest events in Alaska by presenting univariate statistics on temporal characteristics such as day, month, and year of arrest events. Next we describe the number of arrest events made by each arresting agency and processed by each court of jurisdiction. The geography of sex offense arrest events is described with frequencies of arrest events for each borough/municipality/census area in Alaska and the number of arrest events that occurred in each of five behavioral health regions. Finally, we present the number of individual sex offenses per sex offense arrest.

**Temporal features of sex offense arrest events.** Table 2.2 presents the frequency distribution of sex offense arrest events (hereafter, "sex offense arrests") according to the *day of week* they occurred. Data are presented for sex offense arrests only (n=1,460). While variability was observed, the data presented in Table 2.2 reveal no clear temporal pattern.

**Table 2.2.** Sex offense arrests, by day of week

| | Sex offense arrests | |
|---|---|---|
| Day of week | Number | Percent |
| Sunday | 203 | 13.9% |
| Monday | 178 | 12.2 |
| Tuesday | 206 | 14.1 |
| Wednesday | 194 | 13.3 |
| Thursday | 211 | 14.4 |
| Friday | 245 | 16.8 |
| Saturday | 223 | 15.3 |
| TOTAL | 1,460 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Table 2.3 presents sex offense arrest information by *month*. In general, sex offense arrests were most likely to occur during the summer months of June (10.0%), July (9.0%) and August (9.4%), and least likely to occur during the autumn and early winter months of September (6.4%), October (7.5%), and November (7.3%).

**Table 2.3.** Sex offense arrests, by month

| | Sex offense arrests | |
|---|---|---|
| Month | Number | Percent |
| January | 144 | 9.9% |
| February | 105 | 7.2 |
| March | 121 | 8.3 |
| April | 123 | 8.4 |
| May | 115 | 7.9 |
| June | 146 | 10.0 |
| July | 131 | 9.0 |
| August | 137 | 9.4 |
| September | 94 | 6.4 |
| October | 110 | 7.5 |
| November | 107 | 7.3 |
| December | 127 | 8.7 |
| TOTAL | 1,460 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

However, the months with the second-highest and fifth-highest numbers of sex offense arrests were the mid-winter months of January (9.9%) and December (8.7%). Thus, while variation was observed with respect to the month in which sex offense arrests occurred, there was no definitive seasonal pattern observed.

Finally, we examined the *year* in which sex offense arrests occurred (see Table 2.4). Sex offense arrest events were least likely to occur in 2008 (21.1%). The percentages of sex offense arrests in 2009, 2010 and 2011 were nearly identical (26.3%, 26.2% and 26.4%, respectively).

**Table 2.4.** Sex offense arrests, by year

| | Sex offense arrests | |
|---|---|---|
| Year | Number | Percent |
| 2008 | 308 | 21.1% |
| 2009 | 384 | 26.3 |
| 2010 | 382 | 26.2 |
| 2011 | 386 | 26.4 |
| TOTAL | 1,460 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Arresting agency.** The Alaska's criminal history repository data provided contained two fields for identifying the *arresting agency* for each sex offense arrest. The first field contained an arresting agency code; the second field contained an expanded textual descriptor of arresting agency. A significant limitation of the data provided in these fields was that approximately a quarter of all entries (23.8%) identified either a *court of jurisdiction* (e.g., Superior Court Anchorage; District Court Bethel; Magistrate Court Dillingham) or a specific *district attorney office* (e.g., District Attorney Barrow; District Attorney Fairbanks) rather than the police agency that executed the sex offense arrest (see Table 2.5).

**Table 2.5.** Sex offense arrests, by arresting agency

| | Sex offense arrests | |
|---|---|---|
| Arresting agency | Number | Percent |
| Police agencies | 1,112 | 76.2% |
| Alaska State Troopers (all units) | 358 | |
| Anchorage Police Department | 414 | |
| All other police agencies | 340 | |
| District attorney offices (all) | 42 | 2.9% |
| Courts | 306 | 20.9% |
| Magistrate Court | 7 | |
| District Court | 31 | |
| Superior Court | 268 | |
| TOTAL | 1,460 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

With this limitation in mind, Alaska's criminal history repository contained specific police agency information for more than three-quarters (76.2%) of the 1,460 sex offense arrests included in the analysis sample. In all, 39 state and local police agencies were identified as

having executed at least one sex offense arrest during the study period. Two police agencies – the Alaska State Troopers and the Anchorage Police Department – accounted for nearly 70 percent of the sex offense arrests for which a specific police agency was identified (32.2% and 37.2%, respectively).

**Court of jurisdiction.** In addition to arresting agency information, Alaska's criminal history repository also contained three fields for identifying the *court of jurisdiction*. The first field denoted the court case number; the second field contained a court code; and, the third field contained the actual court name. The latter two fields each had missing values for 40 sex offense arrests (2.7% of all sex offense arrests). The court case number field contained 88 missing values (6.0%). Table 2.6 presents the frequency distribution for court of jurisdiction for the 1,460 sex offense arrests in the analysis sample. Frequencies were computed using the court code/court name fields because they were more complete than the court case number field.

**Table 2.6.** Sex offense arrests, by court of jurisdiction

| | Sex offense arrests | |
|---|---|---|
| Court of jurisdiction | Number | Percent |
| Magistrate Court | 25 | 1.7% |
| District Court | 297 | 20.3 |
| Superior Court | 1,039 | 71.2 |
| District attorney offices (all) | 57 | 3.9 |
| Anchorage city attorney | 2 | 0.1 |
| Missing | 40 | 2.7 |
| TOTAL | 1,460 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

A majority of sex offense arrests (71.2%) were heard in Superior Court, and approximately one out of every five (20.3%) sex offense arrests were heard in District Court. Only a small percentage (1.7%) of sex offense arrests were tried in Magistrate Court. Specific court of jurisdiction information was missing for 99 sex offense arrests. More than half of these (n=57) identified a district attorney office as the court of jurisdiction, two identified the court of jurisdiction as the Anchorage city attorney office, and court of jurisdiction information was missing for 40 sex offense arrests.

**Table 2.7.** Sex offense arrests, by judicial district

| | Sex offense arrests | |
|---|---|---|
| Judicial district | Number | Percent |
| First Judicial District | 145 | 9.9% |
| Second Judicial District | 127 | 8.7 |
| Third Judicial District | 798 | 54.7 |
| Fourth Judicial District | 350 | 24.0 |
| Missing | 40 | 2.7 |
| TOTAL | 1460 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

The court of jurisdiction data presented in Table 2.6 were aggregated to examine the frequency of sex offense arrests within each of Alaska's four *judicial districts*. Results are shown in Table 2.7. More than half (54.7%) of all sex offense arrests were brought before courts within Alaska's Third Judicial District, approximately a quarter (24.0%) were brought before courts within the Fourth Judicial District, and less than 10 percent of all sex offense arrests were brought before courts within the First or Second Judicial Districts (9.9% and 8.7%, respectively).

**Table 2.8.** Borough/municipality/census area of sex offense arrests, by arresting agency measure

| | Measure 1 All arresting agency data | | Measure 2 Police agency data only | |
|---|---|---|---|---|
| Borough /Municipality/Census Area | Number | Percent | Number | Percent |
| Aleutians East Borough | 8 | 0.5% | 3 | 0.3% |
| Aleutians West Census Tract | 12 | 0.8 | 12 | 1.1 |
| Anchorage Municipality | 497 | 34.0 | 422 | 38.0 |
| Bethel Census Area | 203 | 13.9 | 118 | 10.6 |
| Bristol Bay Borough | 9 | 0.6 | 6 | 0.5 |
| Denali Borough | 2 | 0.1 | 2 | 0.2 |
| Dillingham Census Area | 58 | 4.0 | 38 | 3.4 |
| Fairbanks North Star Borough | 137 | 9.4 | 106 | 9.5 |
| Haines Borough | 3 | 0.2 | 2 | 0.2 |
| Hoonah-Angoon Census Area | 1 | 0.1 | 1 | 0.1 |
| Juneau City and Borough | 82 | 5.6 | 32 | 2.9 |
| Kenai Peninsula Borough | 88 | 6.0 | 70 | 6.3 |
| Ketchikan Gateway Borough | 20 | 1.4 | 18 | 1.6 |
| Kodiak Island Borough | 33 | 2.3 | 30 | 2.7 |
| Kusilvak Census Area | 3 | 0.2 | 3 | 0.3 |
| Matanuska-Susitna Borough | 80 | 5.5 | 65 | 5.8 |
| Nome Census Area | 48 | 3.3 | 41 | 3.7 |
| North Slope Borough | 28 | 1.9 | 20 | 1.8 |
| Northwest Arctic Borough | 53 | 3.6 | 38 | 3.4 |
| Petersburg Borough | 2 | 0.1 | 2 | 0.2 |
| Prince of Wales-Hyder Census Area | 18 | 1.2 | 17 | 1.5 |
| Sitka City and Borough | 14 | 1.0 | 14 | 1.3 |
| Skagway Municipality | 1 | 0.1 | 1 | 0.1 |
| Southeast Fairbanks Census Area | 8 | 0.5 | 8 | 0.7 |
| Valdez-Cordova Census Area | 25 | 1.7 | 17 | 1.5 |
| Wrangell City and Borough | 4 | 0.3 | 4 | 0.4 |
| Yakutat City and Borough | 1 | 0.1 | 1 | 0.1 |
| Yukon-Koyokuk Census Area | 4 | 0.3 | 3 | 0.3 |
| Statewide* | 18 | 1.2 | 18 | 1.6 |
| TOTAL | 1,460 | | 1,112 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Notes:** * Statewide code used for arresting agency entries for which specific geographic information was not provided

**The geography of sex offense arrest events.** The arresting agency information presented in Table 2.5 was aggregated to create two broad geographic location measures of sex offense arrests. Table 2.8 presents the frequency distribution for the first of these geographic measures: *borough/municipality/census area* designation. Table 2.8 presents the frequency distributions for all arresting agency data (n=1,460 sex offense arrests; Measure 1) and arresting agency data limited to specific entries that identified a police agency (n=1,112 sex offense arrests; Measure 2).

The side-by-side comparison presented in Table 2.8 reveals very little difference in the frequency distributions of these two arresting agency measures. Regardless of which arresting agency measure was used, the overall geographic pattern remained the same. In excess of a third of all sex offense arrests originated in the Municipality of Anchorage. The borough/municipality /census area with the second-highest percentage of sex offense arrests was the Bethel Census Area, followed by the Fairbanks North Star and Kenai Peninsula Boroughs. Altogether, these four boroughs/municipalities/census areas accounted for more than 6 out of every 10 sex offense arrests.

**Table 2.9.** Region of sex offense arrests, by arresting agency measure

| | Measure 1 All arresting agency data | | Measure 2 Police agency data only | |
|---|---|---|---|---|
| Behavioral health region | Number | Percent | Number | Percent |
| Far North | 140 | 9.6% | 80 | 7.2% |
| Interior | 149 | 10.2 | 147 | 13.2 |
| Southeast | 145 | 9.9 | 91 | 8.2 |
| South Central | 688 | 47.1 | 569 | 51.2 |
| Southwest | 320 | 21.9 | 207 | 18.6 |
| Statewide* | 18 | 1.2 | 18 | 1.6 |
| TOTAL | 1460 | | 1112 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016) *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Notes:** * Statewide code used for arresting agency entries for which specific geographic information was not provided

The data presented in table 2.8 were further aggregated into six *behavioral health regions*: Southwest, Far North, Interior, South Central, and Southeast. (Sex offense arrests that were originally coded as *statewide* were not recoded into one of these five behavioral health regions.) Results are presented in Table 2.9. As before, frequency distributions are presented for each arresting agency measure (all arresting agency data *vs.* police agency data only).

Once again, we see very little difference in the frequency distributions of the two arresting agency measures. Approximately half of all sex offense arrests originated in the South Central region. The Southwest region accounted for roughly 20 percent of sex offense arrests. Slightly more than 1 out of every 10 sex offense arrests originated in the Interior. Finally, the Far North and Southeast regions each accounted for less than 10 percent of all sex offense arrests.

**Table 2.10.** On or off road system location of sex offense arrests, by arresting agency measure

| | Measure 1 All arresting agency data | | Measure 2 Police agency data only | |
|---|---|---|---|---|
| Off road system? | Number | Percent | Number | Percent |
| Yes | 537 | 37.2% | 382 | 34.9% |
| No | 905 | 62.8 | 712 | 65.1 |
| TOTAL* | 1442 | | 1094 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.
**Notes:** * Sex offense arrests coded as "Statewide" excluded.

The third measure created to assess the geographic distribution of sex offense arrests was uniquely Alaskan. Unlike other U.S. jurisdictions, in Alaska, many towns and villages are only accessible by airplane or boat. That is, while these geographically isolated towns and villages have roads within them and sometimes have roads extending into the immediate surrounding area, they do not have roads connecting them to other towns and villages in the state. In order to examine this particular geographic distribution, arresting agency information was recoded into a two-category measure indicating *on the road system* or *not on the road system*. Table 2.10 presents the results. Approximately one-third of sex offense arrests originated in communities located off of Alaska's road system.

**Number of offenses per sex offense arrest.** In total, the analysis sample included 1,460 separate sex offense arrests involving 4,665 *sex offenses*. By definition, each of these 1,460 sex offense arrests included at least one sex offense. However, a majority of sex offense arrests involved two or more sex offenses. Table 2.11 provides a summary of the total number of sex offenses that were cited for each sex offense arrest in the analysis sample.

**Table 2.11.** Number of sex offenses per sex offense arrest

| | Sex offense arrests | |
|---|---|---|
| Number of sex offenses per arrest | Number | Percent |
| 1 sex offense | 675 | 46.2% |
| 2 sex offenses | 334 | 22.9 |
| 3 sex offenses | 158 | 10.8 |
| 4 sex offenses | 100 | 6.9 |
| 5 sex offenses | 38 | 2.6 |
| 6 to 10 sex offenses | 96 | 6.6 |
| 11 to 15 sex offenses | 29 | 2.0 |
| 16 to 20 sex offenses | 5 | 0.3 |
| 20 or more sex offenses | 25 | 1.7 |
| TOTAL | 1,460 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Nearly half (46.2%) of sex offense arrests involved a single sex offense. An additional 22.9 percent of sex offense arrests involved two sex offenses, and 10.8 percent involved three sex offenses. In total, close to 80 percent of sex offense arrests involved no more than three sex offenses, and almost 90 percent involved five or fewer sex offenses. The highest number of sex offenses was 100 (observed for a single possession of child pornography arrest).

## Arrest Offense Characteristics: Sex Offenses

The 1,460 sex offenses arrests included in the analysis sample were comprised of 5,509 individual *offenses*. Using the offense descriptions in the data provided, each sex offense was recoded into one of three categories: *sexual assault*, *sexual abuse of a minor*, or *other registerable offenses*. Each offense was categorized according to definitions provided in Alaska Statutes. Among registerable offenses, more than half (50.5%; 42.7% of all offenses) were violations of Alaska's sexual abuse of a minor statutes, and more than a quarter (27.1%; 22.9% of all offenses) were violations of Alaska's sexual assault statutes. Approximately 1 out of every 5 registerable offenses fell within other statutory provisions (see Table 2.11).

**Table 2.12** Frequency of offenses, by offense type

| | Number | Percentage |
|---|---|---|
| Total Offenses | 5,509 | 100.0% |
| Registerable offenses | | |
| Sexual abuse of a minor | 2,354 | 42.7% |
| Sexual assault | 1,263 | 22.9 |
| Other registerable offense | 1,048 | 19.0 |
| Subtotal | 4,665 | |
| Non-registerable offenses | | |
| Offenses against persons (excluding registerable offenses) | 415 | 7.5% |
| Offenses against property | 107 | 1.9 |
| Offenses against the family and vulnerable adults | 43 | 0.8 |
| Offenses against public administration | 89 | 1.6 |
| Offenses against public order | 67 | 1.2 |
| Offenses against public health and decency | 4 | <0.1 |
| Controlled substances offenses | 47 | 0.8 |
| Motor vehicle offenses | 7 | 0.1 |
| Alcoholic beverages offenses | 61 | 1.1 |
| Miscellaneous borough/municipality/city ordinances | 4 | <0.1 |
| Subtotal | 844 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

With respect to the 844 additional offenses associated with sex offense arrest events, a preponderance (n=415) were for crimes classified as offenses against persons such as assault (which comprised 94.5% of all additional person offenses). In all, 107 individual offenses against property were noted. More than half of these property offenses were for burglary or possession

of burglary tools. More than 20 percent of these additional offenses against property were for criminal mischief. Offenses against the family and vulnerable adults, offenses against public administration, offenses against public order, controlled substance offenses, and alcoholic beverages offenses each comprised less than two percent of the 5,509 offenses included in the 1,460 sex offense arrests included in the analysis sample. Offenses against public health and decency, motor vehicle offenses, and ordinance violations were exceedingly rare.

**Severity and classification of sex offenses.** In addition the particular type of sex offenses individual suspects were arrested for, the Alaska criminal history repository also contained information pertaining to *offense severity* and *offense classification* for the 4,665 registerable offenses for which sample members were arrested (see Table 2.12). Offense severity data were provided for 94.4 percent of all sex offenses in the analysis sample. Among those cases for which offense severity information was available, 96.1 percent were classified as *felonies*. Only 3.9 percent of sex offenses were classified as *misdemeanors*.

**Table 2.13.** Sex offense classification by sex offense severity

| | Offense severity | | | | | |
|---|---|---|---|---|---|---|
| | Misdemeanor | | Felony | | Unknown/Missing | |
| Offense classification | Number | Percent | Number | Percent | Number | Percent |
| Unclassified | 0 | 0.0% | 1,516 | 35.8% | 0 | 0.0% |
| Class A | 122 | 70.5 | 4 | 0.1 | 0 | 0.0 |
| Class B | 32 | 18.5 | 1,540 | 36.4 | 0 | 0.0 |
| Class C | 0 | 0.0 | 1,153 | 27.3 | 0 | 0.0 |
| Violation | 18 | 10.4 | 0 | 0.0 | 0 | 0.0 |
| Unknown/Missing | 1 | 0.6 | 18 | 0.4 | 261 | 100.0 |
| TOTAL | 173 | | 4,231 | | 261 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Among misdemeanor sex offenses, more than 70 percent were classified as Class A offenses, 18.5 percent were classified as Class B offenses, and the remainder were classified as miscellaneous violations of state statutes or borough/municipal codes. An offense classification was missing for one misdemeanor sex offense.

Among felony-level sex offenses, offenses were almost equally distributed among Unclassified (35.8%), Class B (36.4%), and Class C offenses (27.3%). Only four offenses were classified as Class A felonies. Offense classification data were missing for a total of 18 felony sex offenses.

## Dispositions of Sex Offense Arrests and Individual Sex Offenses

The first stage of post-arrest criminal case processing examined was *prosecution*. Alaska's criminal history repository does not contain a specific prosecution variable. However, detailed

disposition information is coded into a single variable for each arrest offense in the repository data. This disposition variable includes a total of 14 codes:

1. Acquitted;
2. No complaint filed;
3. Dismissed;
4. Guilty;
5. Not guilty;
6. No true bill;
7. Guilty: mentally ill;
8. Not prosecuted;
9. Conviction set aside;
10. Suspended imposition of sentence/deferred imposition of sentence (SIS/DIS);
11. Set-aside denied;
12. Reduced to violation;
13. Unknown; and,
14. Missing.

The categories of this variable were used to create a measure to assess the frequency with which sex offense arrests and specific sex offenses were *prosecuted*. For the purposes of this analysis, "prosecuted" refers to affirmative steps taken by prosecutors to secure a criminal conviction. If the disposition variable in the criminal history repository was coded *no complaint filed* or *not prosecuted* the prosecution variable was coded "0"=*Not prosecuted*, otherwise the prosecution variable was coded "1"=*Prosecuted*. Importantly, this measure is not intended to measure whether or not a sex offense case (sex offense arrest) or sex offense charge (sex offense) was heard in court or adjudicated in some other manner.

The criminal history repository contains two additional variables that we used to construct a finding of guilt measure. The first variable was a dichotomous measure of guilt whereby 1=*Yes* and 0=*No*. The second variable was a dichotomous measure of whether or not the recorded disposition was the final disposition. This variable was also coded 1=*Yes* and 0=*No*. Our measure of guilt determination was coded 1=*Yes* if both of the criminal history repository variables indicating guilt and final disposition were coded 1=*Yes*, otherwise the measure was coded 0=*No*.

Finally, Alaska's criminal history repository included specific sentencing data for each conviction offense. More specifically, the repository contained information on the total number of *incarceration* and *probation* days for each conviction sentence. These data were recoded into summary incarceration and probation measures. *Incarceration sentence* was coded 1=*Yes* if the total number of incarceration days included in the sentence exceeded zero, and 0=*No* otherwise. Similarly, the *probation sentence* was coded 1=*Yes* if the total number of probation days included in the sentence exceeded zero, and 0=*No* otherwise. Tables 2.14 and 2.15 present summary disposition statistics for sex offense arrest events (n=1,460) and individual sex offenses (n=4,665). Figures 2.1 and 2.2 depict these statistics graphically (see pages 59-60).

**Table 2.14** Dispositions of sex offense arrests

| Disposition | Number | Percent of total |
|---|---|---|
| Sex offense arrests | 1,460 | 100.0% |
| > Prosecuted | 1,418 | 97.1 |
| >> Convicted | 1,006 | 68.9 |
| >>> Incarceration sentence (only) | 110 | 7.5 |
| >>> Probation sentence (only) | 1 | <0.1 |
| >>> Incarceration and probation | 873 | 59.8 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Very nearly all (97.1%) of the 1,460 sex offense arrests were prosecuted. In total, only 42 sex offense arrests were not prosecuted. The criminal history repository data were coded *not prosecuted* for 40 instances and *no complaint filed* for 2 additional cases. More than 70 percent of the sex offense arrests that were prosecuted resulted in a conviction (68.9% of all sex offense arrests). Out of the 1,006 sex offense arrests that resulted in conviction, 97.7 percent resulted in a sentence of incarceration. A large majority of these incarceration sentences (88.8%) were coupled with probation sentences as well. Overall, 86.9 percent of sex offense arrest convictions resulted in a probation sentence.

At the level of sex offense arrests, an arrest was coded as prosecuted if any of the individual offenses associated with the arrest was *prosecuted*. Conversely, a sex offense arrest was coded *not prosecuted* only if none of the individual offenses associated with the arrest was prosecuted. Similarly, sex offense arrests were coded *convicted* if any of the individual offenses associated with the arrest resulted in conviction, and *not convicted* only if none of the individual offenses associated with the arrest resulted in conviction. This same approach was also used to code sex offense arrests as resulting in an *incarceration sentence* and/or a *probation sentence*.

Table 2.15 presents summary disposition statistics for individual sex offenses. As was the case for sex offense arrests, the data presented in Table 2.14 show that the vast majority of sex *offenses* (96.3%) were prosecuted. A noticeable contrast, however, was the relatively low rate of convictions for individual sex offenses (i.e., charges) as compared to sex offense arrests (i.e., cases). Whereas more than 70 percent of sex offense *arrests* that were prosecuted resulted in conviction, only 29.1 percent of individual sex *offenses* that were prosecuted resulted in conviction (28.0% of all sex offenses). Furthermore, additional analysis revealed that more than a third (37.6%) of the 1,307 conviction offenses differed from the specific offenses for which individual suspects were arrested (data not shown). Despite these caveats, individual sex offenses that resulted in conviction had a very high likelihood producing a sentence of incarceration. Out of the 1,307 sex offenses that resulted in a conviction, 1,219 (93.3%) came with an incarceration sentence, either alone or in combination with a probationary sentence. Overall, more than 8 out of every 10 sex offense convictions resulted in a probation sentence, all but one of which was coupled with a period of incarceration.

**Table 2.15** Dispositions of sex offenses

| Disposition | Number | Percent of total |
|---|---|---|
| Individual sex offenses | 4,665 | 100.0% |
| > Prosecuted | 4,494 | 96.3 |
| >> Convicted | 1,307 | 28.0 |
| >>> Incarceration sentence (only) | 151 | 3.2 |
| >>> Probation sentence (only) | 1 | <0.1 |
| >>> Incarceration and probation | 1,068 | 22.9 |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

## Factors Influencing Sex Offense Arrest Convictions

We used one-way analysis of variance (ANOVA) to examine the differences in conviction rates for sex offense arrest events in terms of the characteristics used to describe the sample of sex offense arrest events. These characteristics included the following: temporal characteristics, arresting agency, court of jurisdiction, geography, and the number of individual sex offenses per sex offense arrest event.

**Temporal factors.** Our bivariate analyses began with an examination of association between *when* sex offense arrests were made and the likelihood that any of the offenses for which a suspect was arrested resulted in a conviction. One-way ANOVA analysis was used to test for statistically significant between-group differences in the proportion of sex offense arrests that resulted in conviction. The first temporal variable examined was the *day of the week* arrests were made. The results of this analysis are presented in Table 2.16.

**Table 2.16** One-way ANOVA results: Likelihood of conviction, by day of week

| Day of week | Number | Mean | s.d. |
|---|---|---|---|
| Monday | 171 | 0.649 | 0.479 |
| Tuesday | 200 | 0.755 | 0.431 |
| Wednesday | 188 | 0.745 | 0.437 |
| Thursday | 205 | 0.702 | 0.458 |
| Friday | 239 | 0.728 | 0.446 |
| Saturday | 217 | 0.590 | 0.493 |
| Sunday | 200 | 0.595 | 0.492 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 5.936 | 6 | 0.989 | 4.62 | 0.000 |
| Within groups | 302.551 | 1413 | 0.214 | | |
| Total | 308.487 | 1419 | 0.217 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Overall, there was significant variation in the likelihood of conviction according to the day of the week sex offense arrests were made ($F$=4.62; $p$=.000). More specifically, there was a lower

likelihood of conviction when sex offense arrests occurred on *weekends*, particularly arrests that took place on Saturdays and Sundays. On average, 59 percent of sex offense arrests that occurred on Saturdays and Sundays ultimately resulted in conviction. In contrast, sex offense arrests that were made Monday through Friday had a conviction rate of approximately 70 percent.

The bivariate analysis also included an examination of sex offense arrest conviction rates by *month*. That analysis did not produce any statistically significant results. However, when months were aggregated into *quarters*, a statistically significant result did emerge. On average, sex offense arrests made in the 2nd quarter of the year (i.e., April through June) had a significantly higher rate of conviction (77.3%) than sex offense arrests made in the 1st (64.0%), 3rd (67.7%), or 4th (62.7%) quarters of the year (see Table 2.17).

**Table 2.17** One-way ANOVA results: Likelihood of conviction, by quarter

| Quarter | Number | Mean | s.d. |
|---|---|---|---|
| 1st quarter (Jan – Mar) | 361 | 0.640 | 0.481 |
| 2nd quarter (Apr – Jun) | 374 | 0.773 | 0.420 |
| 3rd quarter (Jul – Sep) | 350 | 0.677 | 0.468 |
| 4th quarter (Oct – Dec) | 335 | 0.627 | 0.484 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 4.744 | 3 | 1.581 | 7.37 | 0.000 |
| Within groups | 303.743 | 1416 | 0.215 | | |
| Total | 308.487 | 1419 | 0.217 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Finally, our analysis of the association between when sex offense arrests occurred and the likelihood of conviction included a comparison of conviction rates by *year*. The results of this analysis are presented in Table 2.18.

**Table 2.18** One-way ANOVA results: Likelihood of conviction, by year

| Year | Number | Mean | s.d. |
|---|---|---|---|
| 2008 | 301 | 0.684 | 0.465 |
| 2009 | 375 | 0.640 | 0.481 |
| 2010 | 374 | 0.652 | 0.477 |
| 2011 | 370 | 0.749 | 0.434 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 2.633 | 3 | 0.878 | 4.06 | 0.007 |
| Within groups | 305.854 | 1416 | 0.216 | | |
| Total | 308.487 | 1419 | 0.217 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

On average, sex offense arrests in 2011 were significantly more likely to result in conviction (74.9%) than sex offense arrests that occurred in 2010 (65.2%), 2009 (64.0%) and 2008 (68.4%).

**Arresting agency.** The second phase of the bivariate analysis focused on the potential influence of *arresting agency* and *court of jurisdiction* on the likelihood of sex offense arrests resulted in conviction. With respect to the arresting agency analysis, we examined only three arresting agency categories due to the limitations of those data in the criminal history repository: sex offense arrests made by the Anchorage Police Department (APD), sex offense arrests made by the Alaska State Troopers (AST), and sex offense arrests made by all other police agencies. Excluded from the analysis were all sex offense arrests that did not specifically identify a police agency as the arresting agency. The conviction rate for sex offense arrests made by APD was 78.5 percent. The conviction rate for sex offense arrests made by AST was 80.7 percent. And, the conviction rate for sex offense arrests made by other Alaska police agencies was 74.4 percent (see Table 2.19). No statistically significant between-agency differences were observed with respect to the proportion of sex offense arrests resulting in conviction.

**Table 2.19** One-way ANOVA results: Likelihood of conviction, by arresting agency

| Arresting agency | Number | | Mean | | s.d. |
|---|---|---|---|---|---|
| Anchorage Police Department (APD) | 414 | | 0.785 | | 0.411 |
| Alaska State Troopers (AST) | 358 | | 0.807 | | 0.395 |
| All other Alaska police agencies | 340 | | 0.744 | | 0.437 |
| | Analysis of variance (ANOVA) | | | | |
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 0.714 | 2 | 0.357 | 2.08 | 0.125 |
| Within groups | 190.307 | 1109 | 0.172 | | |
| Total | 191.021 | 1111 | 0.172 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

It is worth noting that the conviction rate for sex offense arrests made by AST (80.7%) based criminal history repository data was nearly identical AST's conviction rate for sexual assault and sexual abuse of a minor arrests established in prior research. In their study of sexual assault and sexual abuse of a minor cases investigated by AST in 2003 and 2004, Postle and his colleagues estimated that 80.2 percent of cases accepted for prosecution ultimately resulted in conviction (Postle, Rosay, Wood, & TePas, 2007). Similarly, in their study of sexual assault and sexual abuse of a minor cases investigated by AST between 2008 and 2011, Myrstol and Parker found that 78.7 percent of sexual assault and sexual abuse of a minor cases that were prosecuted resulted in conviction (Myrstol & Parker, 2015).

**Court of jurisdiction** In stark contrast to the null finding with respect to the association between arresting agency and the likelihood of sex offense arrest conviction, our analysis of the association between *court of jurisdiction* and the likelihood of conviction revealed a highly significant relationship. Sex offense arrests that were tried in Superior Court were much more

likely to result in conviction (73.9%) than those heard in District Court (57.9%) or Magistrate Court (44.0%) (see Table 2.20).

**Table 2.20** One-way ANOVA results: Likelihood of conviction, by court of jurisdiction

| Arresting agency | Number | Mean | s.d. |
|---|---|---|---|
| Magistrate Court | 25 | 0.440 | 0.507 |
| District Court | 297 | 0.579 | 0.495 |
| Superior Court | 1,039 | 0.739 | 0.439 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 7.622 | 2 | 3.811 | 18.56 | 0.000 |
| Within groups | 278.866 | 1358 | 0.205 | | |
| Total | 286.488 | 1360 | 0.211 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Table 2.21** One-way ANOVA results: Likelihood of conviction, by judicial district

| Judicial District | Number | Mean | s.d. |
|---|---|---|---|
| 1st Judicial District | 145 | 0.502 | 0.502 |
| 2nd Judicial District | 127 | 0.709 | 0.456 |
| 3rd Judicial District | 798 | 0.704 | 0.457 |
| 4th Judicial District | 350 | 0.691 | 0.463 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 5.138 | 3 | 1.713 | 7.99 | 0.000 |
| Within groups | 303.349 | 1416 | 0.214 | | |
| Total | 308.487 | 1419 | 0.217 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Judicial district.** Table 2.21 presents the ANOVA results for our second court-level measure: *judicial district*. Once again, we see a significant court-level effect on the likelihood of conviction. Sex offense arrests that were heard in the 1st Judicial District in Southeast Alaska were significantly less likely to result in conviction than sex offense arrests that were heard in other Judicial Districts in the state. More specifically, slightly more than half (50.2%) of sex offense arrests tried in the 1st Judicial District resulted in conviction, as compared to 70.9 percent in the 2nd Judicial District, 70.4 percent in the 3rd Judicial District, and 69.1 percent in the 4th Judicial District.

**Geographic context of sex offense arrests.** Our bivariate analysis of the association between *where* sex arrests occurred and the likelihood of conviction was limited to *behavioral health region*. The results of this analysis are presented in Table 2.22.

**Table 2.22** One-way ANOVA results: Likelihood of conviction, by behavioral health region

| Behavioral health region | Number | Mean | s.d. |
|---|---|---|---|
| Far North | 140 | 0.657 | 0.476 |
| Interior | 149 | 0.832 | 0.375 |
| Southeast | 145 | 0.497 | 0.502 |
| South Central | 688 | 0.724 | 0.447 |
| Southwest | 320 | 0.641 | 0.481 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 10.148 | 4 | 2.537 | 12.16 | 0.000 |
| Within groups | 299.797 | 1437 | 0.209 | | |
| Total | 309.945 | 1441 | 0.215 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

There was marked – and highly significant – between-region variability in the likelihood that sex offense arrests would result in conviction. The region with the lowest probability of sex offense arrest conviction was Southeast. Less than half of sex offense arrests (49.7%) that originated in this region ultimately resulted in conviction. Moreover, the Southeast sex arrest conviction rate was significantly lower than every other region examined. In contrast, the highest sex offense arrest conviction rate was observed in the Interior region. In excess of 80 percent (83.2%) of sex offense arrests in that region resulted in conviction. This sex offense arrest conviction rate was significantly higher than all of the other regions, with the exception of South Central. In between the relatively low sex offense arrest conviction rate observed in the Southeast region and the relatively high sex offense arrest conviction rate observed in the Interior region were the conviction rates for South Central (72.4%), the Far North region (65.7%) and the Southwest region (64.1%). Overall, the findings presented in Table 2.22 (as well as the findings presented in Table 2.21) demonstrate that geographic context is an important factor influencing the likelihood that sex offense arrest will result in conviction.

**Number of offenses per sex offense arrest.** The last variable examined in our bivariate analyses of factors influencing the likelihood of sex offense arrest conviction was the number of specific *offenses* that were part of an arrest. Sex offense arrests between 2008 and 2011 involved 3.8 offenses of all types, on average. The average number of registerable sex offenses associated with each sex offense arrest was 3.2.

Both of these measures – the total number of offenses, and the number of registerable sex offenses – were significantly correlated with the likelihood of conviction. With respect to the total number of offenses (of any type), there was a strong and highly significant correlation ($r$=.37; $p$=.000). The correlation between the number of individual sex offenses involved in an arrest and the likelihood of conviction was weaker, but still highly significant ($r$=.23; $p$=.000).

**Table 2.23** One-way ANOVA results: Likelihood of conviction, by number of sex offenses

| Sex offenses per sex offense arrest | Number | Mean | s.d. |
|---|---|---|---|
| 1 sex offense | 675 | 0.582 | 0.494 |
| 2 sex offenses | 334 | 0.719 | 0.450 |
| 3 sex offenses | 158 | 0.797 | 0.403 |
| 4 sex offenses | 100 | 0.850 | 0.359 |
| 5 sex offenses | 38 | 0.842 | 0.370 |
| 6 to 10 sex offenses | 96 | 0.771 | 0.423 |
| 11 to 15 sex offenses | 29 | 0.966 | 0.186 |
| More than 15 sex offenses | 30 | 0.933 | 0.254 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 17.981 | 7 | 2.569 | 12.65 | 0.000 |
| Within groups | 294.844 | 1452 | 0.203 | | |
| Total | 312.825 | 1459 | 0.214 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

One-way ANOVA analysis was also conducted, to more fully explore the relationship between the number of individual sex offenses involved in each sex offense arrest and the likelihood of arrests resulting in conviction. In order to conduct the ANOVA analysis, the number of specific sex offenses involved in each arrest was recoded into an 8-category measure, and the average number of sex offenses were compared for each category. Results are presented in Table 2.23.

The results presented in Table 2.23 show a near-linear relationship between the number of specific offenses involved in sex offense arrests, and the likelihood that sex offense arrests resulted in conviction. When a sex offense arrest involved only a single sex offense, only a small majority (58.2%) resulted in conviction. The addition of one more sex offense dramatically increased the likelihood of conviction. More than 70 percent (71.9%) of sex offense arrests involving two offenses resulted in conviction. Nearly 80 percent (79.7%) of sex offense arrests involving three sex offenses resulted in conviction. When sex offense arrests involved five specific sex offenses, the conviction rate increased to nearly 85 percent. Convictions for sex offense arrests involving 10 or more specific sex offenses was a near certainty (exceeding 90%).

**Summary.** Our bivariate analyses of factors potentially influencing the likelihood that sex offense arrests will result in conviction revealed the following:

1. *When* sex offense arrests occur was associated with the likelihood of conviction. Bivariate analyses revealed that sex offense arrests that occurred on Saturdays and Sundays had a significantly lower likelihood of resulting in conviction than sex offense arrests that occurred on other days of the week. Our analyses also revealed that sex offense arrests that occurred in the 2nd quarter of the year were significantly more likely to result in conviction than sex offense arrests made in the 1st, 3rd and 4th quarters of the year. Finally, the bivariate analysis showed that sex offense arrests made in 2011 were

significantly more likely to result in conviction than sex offense arrests made in 2008, 2009 and 2010.

2. *Where* sex offense arrests occurred was associated with the likelihood of conviction. Our analysis also revealed that the geographic context within which sex offense arrests occurred also influenced the likelihood of conviction. More specifically, sex offense arrests in the Southeast region of Alaska were significantly less likely to result in conviction than arrests made in other regions of the state. Conversely, sex offense arrests made in communities in the Interior region of Alaska had the highest conviction rate.

3. Both the *court of jurisdiction* and the *judicial district* in which sex offense arrests were tried were associated with the likelihood of conviction. In addition to geographic context, our analysis revealed that court context was associated with the likelihood of conviction as well. With respect to court of jurisdiction, sex offense arrests adjudicated in Superior Court were the most likely to result in conviction. District Court had the second-highest conviction rate. And finally, Magistrate Court had the lowest rate of conviction. Expanding out from court of jurisdiction to judicial district, we also found that sex offense arrest conviction rates varied according to the specific judicial district in which sex offense arrests were adjudicated. Three of Alaska's four judicial districts had similar conviction rates (approximately 70%). The First Judicial District, however, had a significantly lower rate of conviction for sex offense arrests. In the First Judicial District, only half of sex offense arrests resulted in conviction.

4. The specific *agency* that made sex offense arrests was not associated with the likelihood of conviction. While our analyses revealed an association between court context and the likelihood of conviction for sex offense arrests, our analysis did not reveal a significant association between *arresting agency* and the likelihood of conviction.

5. Both the *total number of offenses* and the *number of specific sex offenses* involved in sex offense arrests were associated with the likelihood of conviction. The bivariate analyses presented here revealed a robust and highly significant associating between the number of offenses involved in sex offense arrests and the likelihood of conviction. Put simply, as the number of specific offenses charged increased, the likelihood of conviction increased dramatically.

## Factors Influencing Individual Sex Offense Convictions

We used one-way ANOVA to examine differences in conviction rates for sex offense arrest events based on offense type and offense severity.

**Registerable offense type.** Our analysis of factors influencing the likelihood of sex *offense* conviction (in contrast to our analysis of factors influencing the likelihood of sex offense *arrest* conviction presented previously) began with an examination of the *type of registerable offense* suspects were arrested for. We compared the percentages of sexual assault, sexual abuse of a minor, and other registerable offenses that resulted in conviction. Results are shown in Table 2.24.

Approximately one-third (31%) of sexual assault offenses, 27.6 percent of sexual abuse of a minor offenses, and 27.7 percent of other registerable offenses resulted in conviction. The small percentage differences observed were not statistically significant.

**Table 2.24** One-way ANOVA results: Likelihood of conviction, by registerable offense type

| Offense type | Number | Mean | s.d. |
|---|---|---|---|
| Sexual assault | 1,231 | 0.310 | 0.463 |
| Sexual abuse of a minor | 2,304 | 0.276 | 0.447 |
| Other registerable offense | 1,044 | 0.277 | 0.448 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 1.043 | 2 | 0.521 | 2.56 | 0.078 |
| Within groups | 932.895 | 4576 | 0.204 | | |
| Total | 933.938 | 4578 | 0.204 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Offense severity.** We also examined the association between the *severity* of specific offenses and the likelihood of conviction. Results of this analysis are presented in Table 2.25. More than two-thirds (67.1%) of *misdemeanor* offenses resulted in conviction. In contrast, only 28.2 percent of *felony* offenses resulted in conviction. This difference of 38.9 percentage points was highly significant.

**Table 2.25** One-way ANOVA results: Likelihood of conviction, by offense severity

| Offense severity | Number | Mean | s.d. |
|---|---|---|---|
| Misdemeanor | 173 | 0.671 | 0.471 |
| Felony | 4,230 | 0.282 | 0.450 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 25.145 | 1 | 25.145 | 123.80 | 0.000 |
| Within groups | 893.881 | 4401 | 0.203 | | |
| Total | 919.026 | 4402 | 0.209 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Finally, we examined the association between the *classification* of specific offenses (an additional measure of offense severity) and the likelihood of conviction. Separate analyses were conducted for misdemeanor and felony offenses. Results are presented separately in Table 2.26 (misdemeanor offenses) and Table 2.27 (felony offenses).

With respect to *misdemeanor* offenses, offense classification was not significantly related to the likelihood of conviction. Approximately two-thirds of Class A (68.9%) and Class B (65.6%) misdemeanor offenses resulted in conviction. Among offenses classified as "violations," 55.6 percent resulted in conviction. While the conviction rate for violations was lower than the

conviction rates for Class A and Class B misdemeanor offenses, these differences were not statistically significant.

**Table 2.26** One-way ANOVA results: Likelihood of conviction, by offense classification (misdemeanor offenses only)

| Offense severity | Number | Mean | s.d. |
|---|---|---|---|
| Class A | 122 | 0.689 | 0.465 |
| Class B | 32 | 0.656 | 0.483 |
| Violation | 18 | 0.556 | 0.511 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 0.283 | 2 | 0.142 | 0.63 | 0.532 |
| Within groups | 37.827 | 169 | 0.224 | | |
| Total | 38.110 | 171 | 0.223 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

For *felony* offenses, the findings were markedly different. Conviction rates for felony offenses were quite variable according to offense classification. Class C felony offenses had the highest conviction rate (37.0%), followed by Class B felony offenses (33.2%), Class A felony offenses (25.0%), and finally Unclassified felony offenses (16.0%). Despite the variability in conviction rates observed, the only differences that were statistically significant were for contrasts with Unclassified felonies. Unclassified felony offenses were significantly less likely to result in conviction than Class B and Class C offenses. The conviction rates for Unclassified felony offenses and Class A felony offenses differed, but not significantly. None of the other classification group differences attained statistical significance.

**Table 2.27** One-way ANOVA results: Likelihood of conviction, by offense classification (felony offenses only)

| Offense severity | Number | Mean | s.d. |
|---|---|---|---|
| Unclassified | 1,515 | 0.160 | 0.367 |
| Class A | 4 | 0.250 | 0.500 |
| Class B | 1,540 | 0.332 | 0.471 |
| Class C | 1,153 | 0.370 | 0.483 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 35.460 | 3 | 11.820 | 61.07 | 0.000 |
| Within groups | 814.400 | 4208 | 0.194 | | |
| Total | 849.860 | 4211 | 0.202 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Summary.** Our bivariate analyses of factors influencing the likelihood that specific sex offenses will result in conviction revealed the following:

1. The *type* of registerable sex offense was not significantly associated with the likelihood of conviction. While there was some variability in the percentages of sexual assault, sexual abuse of a minor, and other registerable offenses that resulted in conviction, the differences were small and not statistically significant.

2. The *severity* of specific registerable offenses was associated with the likelihood of conviction. More specifically:

    a. Misdemeanor sex offenses were significantly more likely to result in conviction than felony sex offenses.

    b. Offense classification was associated with the likelihood of conviction, but only for felony offenses. The likelihood of conviction did not differ significantly across misdemeanor classifications.

    c. With respect to felony sex offenses, there was substantial variability in the likelihood of conviction across offense classifications. However, the only statistically significant differences that emerged were for contrasts with Unclassified felonies. Overall, Unclassified felony offenses had the lowest likelihood of conviction and Class C felony offenses had the highest conviction rate. Statistically significant differences in the likelihood of conviction were observed for two specific contrasts: Unclassified felony–Class B felony, and Unclassified felony–Class C felony. In both instances, Unclassified felonies were significantly less likely to result in conviction.

## Sex Offense Suspect Characteristics

Table 2.28 presents the demographic characteristics of the individual suspects arrested (at least once) for the commission of one or more registerable sex offenses. An overwhelming majority (97.6%) of suspects were male. In total, only 28 of the 1,179 suspects (2.4%) identified in the criminal history repository were females.

Slightly more than half (50.1%) of all suspects were classified as American Indian/Alaska Native in the criminal history repository data. More than a third (38.4%) of sex offense suspects arrested were classified as White/Caucasian. Relatively few of the suspects arrested for committing registerable sex offenses were classified as Black/African American (6.0%) or Asian (4.0%). A specific race/ethnicity code was missing for just over 1 percent (1.4%) of the 1,179 individual suspects identified in the criminal history repository data.

The third demographic variable included in the criminal history repository data was suspect age. The data presented in Table 2.28 reflect each suspect's age on the day of their most recent sex offense arrest. Suspect ages were split into one of seven categories: less than 18 years of age, 18 to 24 years of age, 25 to 34 years of age, 35 to 44 years of age, 45 to 54 years of age, 55 to 64 years of age, and individuals 65 years of age and older. The largest age group was comprised of suspects between the ages of 18 and 24 years. Nearly a third (30.9%) of the sex offense suspect sample fell within this age range. About a quarter of all sex offense suspects (23.7%) were

between the ages of 25 and 34 years on the day of their most recent sex offense arrest. Sex offense suspects between the ages of 35 and 44 years comprised nearly one-fifth (19.8%) of the sample. An estimated 15.9 percent of sex offense suspects were between the ages of 45 and 54 years. Less than 10 percent of suspects were 55 years of age or older. Sex offense suspects under the age of 18 were also included in the criminal history repository data. This age segment constituted only two percent of all sex offenses suspects identified in the dataset, however.

**Table 2.28** Demographic characteristics of individuals arrested for registerable sex offenses

| Demographic characteristic | | Number | Percent of total |
|---|---|---|---|
| Sex/gender | | | |
| Male | | 1,151 | 97.6% |
| Female | | 28 | 2.4 |
| | TOTAL | 1,179 | |
| Race/ethnicity | | | |
| Asian | | 47 | 4.0% |
| Black/African American | | 71 | 6.0 |
| American Indian/Alaska Native | | 591 | 50.1 |
| White/Caucasian | | 453 | 38.4 |
| Unknown/Missing | | 17 | 1.4 |
| | TOTAL | 1,179 | |
| Age | | | |
| L/T 18 yrs | | 24 | 2.0% |
| 18 to 24 yrs | | 364 | 30.9 |
| 25 to 34 yrs | | 280 | 23.7 |
| 35 to 44 yrs | | 233 | 19.8 |
| 45 to 54 yrs | | 187 | 15.9 |
| 55 to 64 yrs | | 68 | 5.8 |
| 65 yrs and older | | 23 | 1.9 |
| | TOTAL | 1,179 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

The 1,179 sex offense suspects included in the criminal history data provided for this analysis were implicated in 1,460 sex offense *arrests* and 4,665 registerable sex *offenses*. Table 2.29 presents the overall distribution of sex offense arrests and registerable sex offenses. More than 8 out of every 10 suspects were involved in only a single sex offense arrest. An additional 9.3 percent of suspects were arrested twice. Approximately 5 percent were involved in three or more sex offense arrests.

With respect to the total number of specific registerable sex offenses each individual was arrested for, approximately a third (36.0%) were suspected of committing a single offense, approximately a quarter (23.4%) were arrested for two registerable sex offenses, and 12.5 percent were arrested for three registerable sex offenses. Overall, more than 1 in 4 (28.1%) of suspects were arrested for four or more registerable sex offenses.

**Table 2.29** Frequency of sex offense arrests and registerable sex offenses, suspect sample

| | Sex offense arrests | | Registerable sex offenses | |
|---|---|---|---|---|
| Number arrests/offenses | # Individuals | Percent | # Individuals | Percent |
| 1 | 1,022 | 86.7% | 424 | 36.0% |
| 2 | 110 | 9.3 | 276 | 23.4 |
| 3 | 29 | 2.5 | 147 | 12.5 |
| 4 | 7 | 0.6 | 108 | 9.2 |
| 5 | 8 | 0.7 | 44 | 3.7 |
| 6 to 10 | 1 | <0.1 | 105 | 8.9 |
| More than 10 | 2 | 0.2 | 75 | 6.4 |
| TOTAL | 1,179 | | 1,179 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Table 2.30 shows the number of sex offense *arrest* and specific sex *offense* convictions for the suspect sample. Approximately, 1 out of every 5 suspects (19.8%) had zero sex offense arrest convictions. More than 3 out of every 4 (76.6%) had a single sex offense arrest conviction. Out of the 1,179 sex offense suspects, 37 (3.1%) had two sex offense arrest convictions. Only six suspects had convictions for more than two sex offense arrests.

**Table 2.30** Frequency of sex offense arrest and registerable sex offense convictions, suspect sample

| | Sex offense arrests | | Registerable sex offenses | |
|---|---|---|---|---|
| Number convictions | # Individuals | Percent | # Individuals | Percent |
| 0 | 233 | 19.8% | 380 | 32.2% |
| 1 | 903 | 76.6 | 657 | 55.7 |
| 2 | 37 | 3.1 | 73 | 6.2 |
| 3 | 2 | 0.2 | 28 | 2.4 |
| 4 | 1 | <0.1 | 10 | 0.8 |
| 5 | 2 | 0.2 | 8 | 0.7 |
| More than 5 | 1 | <0.1 | 23 | 1.9 |
| TOTAL | 1,179 | | 1,179 | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

With respect to specific sex *offense* convictions, nearly a third (32.2%) of suspects were not convicted of any sex offense charges. About half (55.7%) of suspects were convicted of a single registerable sex offense. An additional 6.2 percent of suspects were convicted of two sex

offenses, and 2.4 percent more were convicted of three. Relatively few suspects (n=41; 3.5%) were convicted of more than three separate sex offenses during the study period.

## Association Between Suspect Demographics and Likelihood of Conviction

The final phase of our bivariate analyses included an examination of the relationships between each of the three suspect demographic characteristics described above (age, race/ethnicity, sex/gender) and the likelihood that suspects would be convicted of one or more sex offense *arrests* and the likelihood that suspects would be convicted of one or more specific registerable sex *offenses*.

**Sex offense arrest convictions.** Table 2.31 presents the sex/gender results for the likelihood of sex offense *arrest* conviction. For this analysis, ANOVA analyses were performed to test if the there was a statistically significant difference between male and female suspects in the likelihood of conviction for any sex offense arrest. While female suspects had a nominally higher likelihood of conviction for a sex offense arrest than male suspects (82.1% vs. 80.2%), this difference was not statistically significant.

**Table 2.31** One-way ANOVA results: Likelihood of sex offense arrest conviction, by suspect sex/gender

| Suspect sex/gender | Number | | Mean | | s.d. |
|---|---|---|---|---|---|
| Male | 1,151 | | 0.802 | | 0.399 |
| Female | 28 | | 0.821 | | 0.390 |
| | Analysis of variance (ANOVA) | | | | |
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 0.010 | 1 | 0.010 | 0.07 | 0.798 |
| Within groups | 186.943 | 1177 | 0.159 | | |
| Total | 186.953 | 1178 | 0.159 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Tables 2.32 and 2.33 present the ANOVA results for the age and race/ethnicity analyses, respectively. As shown in Table 2.31, we did not find a statistically significant relationship between suspect age and the likelihood of conviction for one or more sex offense arrests. The age group with the lowest likelihood of conviction was suspects less than 18 years of age. Slightly more than 70 percent of suspects in this group had one or more sex offense arrest convictions. Suspects between the ages of 18 and 24 years had the highest sex offense arrest conviction rate at 84.1 percent. The five remaining age groups fell within this range. Overall, these observed differences in the likelihood of sex offense arrest conviction were not statistically significant.

Table 2.33 presents the ANOVA results for the race/ethnicity analysis. As was the case for suspect sex/gender and suspect age, we failed to detect a statistically significant association between suspect race/ethnicity and the likelihood of sex offense arrest conviction. The racial/ethnic group with the highest rate of sex offense arrest conviction was White/Caucasian (83.0%), Asian suspects (80.9%), American Indian/Alaska Native suspects (79.0%), and finally

Black/African American suspects (77.5%). While variation in the likelihood of sex offense arrest conviction was certainly observed, none of the between-group differences were statistically significant.

**Table 2.32** One-way ANOVA results: Likelihood of sex offense arrest conviction, by suspect age category

| Suspect age | Number | Mean | s.d. |
|---|---|---|---|
| Less than 18 yrs | 24 | 0.708 | 0.464 |
| 18 to 24 yrs | 364 | 0.841 | 0.367 |
| 25 to 34 yrs | 280 | 0.779 | 0.416 |
| 35 to 44 yrs | 233 | 0.768 | 0.423 |
| 45 to 54 yrs | 187 | 0.802 | 0.400 |
| 55 to 64 yrs | 68 | 0.838 | 0.371 |
| 65 yrs and older | 23 | 0.826 | 0.388 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 1.276 | 6 | 0.213 | 1.34 | 0.235 |
| Within groups | 185.677 | 1172 | 0.158 | | |
| Total | 186.953 | 1178 | 0.159 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Table 2.33** One-way ANOVA results: Likelihood of sex offense arrest conviction, by suspect race/ethnicity

| Suspect race/ethnicity | Number | Mean | s.d. |
|---|---|---|---|
| Asian | 47 | 0.809 | 0.398 |
| Black/African American | 71 | 0.775 | 0.421 |
| American Indian/Alaska Native | 591 | 0.790 | 0.408 |
| White/Caucasian | 453 | 0.830 | 0.376 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 0.479 | 3 | 0.160 | 1.02 | 0.384 |
| Within groups | 181.566 | 1158 | 0.157 | | |
| Total | 182.045 | 1161 | 0.157 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study.* University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

The next three tables present the ANOVA analyses for the likelihood that suspects were convicted of one or more specific sex *offenses*. Table 2.34 presents the results for suspect sex/gender, Table 2.35 presents the results for suspect age, and Table 2.36 presents the results for suspect race/ethnicity.

A slightly higher percentage of male suspects were convicted of at least one registrable sex offense than female suspects (67.9% vs. 64.3%). However, as was the case in our analysis of sex offense arrest convictions, the observed differences in likelihood of specific sex offense conviction was not statistically significant.

**Table 2.34** One-way ANOVA results: Likelihood of sex offense conviction, by suspect sex/gender

| Suspect sex/gender | Number | | Mean | | s.d. |
|---|---|---|---|---|---|
| Male | 1,151 | | 0.679 | | 0.467 |
| Female | 28 | | 0.643 | | 0.488 |
| | Analysis of variance (ANOVA) | | | | |
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 0.035 | 1 | 0.035 | 0.16 | 0.690 |
| Within groups | 257.488 | 1177 | 0.219 | | |
| Total | 257.523 | 1178 | 0.219 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Our analysis of the association between suspect age and the likelihood of conviction for one or more specific sex offenses is presented in Table 2.35. The results show a statistically significant relationship between suspect age and the likelihood of conviction for specific sex offenses. More detailed analyses revealed that the specific between-age group differences producing this effect were for 18 to 24 yrs–25 to 34 yrs and 18 to 24 yrs–45 to 54 yrs contrasts. In both instances, suspects between the ages of 18 and 24 years of age had a higher sex offense conviction rate (75.8%) than suspects aged 25 to 34 (59.3%) and suspects aged 45 to 54 (63.1%). None of the other between-age group contrasts were statistically significant.

**Table 2.35** One-way ANOVA results: Likelihood of sex offense conviction, by suspect age category

| Suspect age | Number | | Mean | | s.d. |
|---|---|---|---|---|---|
| Less than 18 yrs | 24 | | 0.500 | | 0.511 |
| 18 to 24 yrs | 364 | | 0.758 | | 0.429 |
| 25 to 34 yrs | 280 | | 0.593 | | 0.492 |
| 35 to 44 yrs | 233 | | 0.687 | | 0.465 |
| 45 to 54 yrs | 187 | | 0.631 | | 0.484 |
| 55 to 64 yrs | 68 | | 0.735 | | 0.444 |
| 65 yrs and older | 23 | | 0.739 | | 0.449 |
| | Analysis of variance (ANOVA) | | | | |
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 5.873 | 6 | 0.979 | 4.56 | 0.000 |
| Within groups | 251.650 | 1172 | 0.215 | | |
| Total | 257.523 | 1178 | 0.219 | | |

**Source:** Myrstol, B.A., Rivera, M., & Parker, K. (2016). *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

Table 2.36 presents the bivariate analysis results for suspect race/ethnicity. We failed to detect a statistically significant differences in the likelihood of sex offense conviction according to suspect race/ethnicity. White/Caucasian suspects had the highest rate of sex offense conviction (70.4%), followed by American Indian/Alaska Native suspects (67.2%), Black/African American suspects (62.0%), and Asian suspects (61.7%). None of these between-group differences were statistically significant, however.

**Table 2.36** One-way ANOVA results: Likelihood of sex offense conviction, by suspect race/ethnicity

| Suspect race/ethnicity | Number | Mean | s.d. |
|---|---|---|---|
| Asian | 47 | 0.617 | 0.491 |
| Black/African American | 71 | 0.620 | 0.489 |
| American Indian/Alaska Native | 591 | 0.672 | 0.470 |
| White/Caucasian | 453 | 0.704 | 0.457 |

| | Analysis of variance (ANOVA) | | | | |
|---|---|---|---|---|---|
| Source | SS | *df* | MS | F | *p*-value |
| Between groups | 0.749 | 3 | 0.250 | 1.14 | 0.330 |
| Within groups | 252.519 | 1158 | 0.218 | | |
| Total | 253.268 | 1161 | 0.218 | | |

**Source:** Myrstol, B A., Rivera, M., & Parker, K. (2016) *Alaska sex offender recidivism and case processing study*. University of Alaska Anchorage, Alaska Justice Statistical Analysis Center: Anchorage, AK.

**Summary.** Our bivariate analyses of the relationship between suspect demographic characteristics and the likelihood of sex offense *arrest* and specific sex *offense* conviction revealed the following:

1. There was little evidence to suggest that suspect sex/gender, age, or race/ethnicity was directly associated with the likelihood that sex offense *arrests* or specific sex *offenses* resulted in conviction. In all, six bivariate associations were examined. Only one bivariate analysis indicated a statistically significant association with the likelihood of conviction, and even then the association was nuanced.

    a. Our analysis of the relationship between suspect age and the likelihood of specific sex offense conviction did produce a statistically significant result. More specifically, suspects between the ages of 18 and 24 years had the highest rate of conviction for specific sex *offenses*. Among suspects in this age group, 75.8 percent were convicted of one or more specific sex *offenses*. This conviction rate was significantly higher than the conviction rates of two other group: suspects between the ages of 25 and 34 (59.3%), and suspects between the ages of 45 and 54 (63.1%). None of the other between-age group comparisons were statistically different from one another.

## Conclusion

In this study we used Alaska's criminal history repository data to evaluate the accuracy and completeness of Alaska's criminal history repository data on sex offenses and to explore the quality of those data for examining case processing of misdemeanor and felony offenses. We conclude that the criminal history repository data for a sample of sex offenses was reasonably complete. The sample data that we were provided was missing some data, but typically less than three percent of cases in the sample were missing data on the variables we analyzed. One exception was court of jurisdiction where the rate of missing data was six percent. The small amount of missing data does not present a problem serious enough to preclude the prediction of case processing outcomes for sex offenses in Alaska.

Many factors relevant to case processing, for which criminal history repository data were available, were significantly associated with case processing outcomes. We examined 11 factors as potentially influencing *sex offense arrest* convictions and found seven of these to significantly influence conviction. We also examined seven factors as potentially influencing convictions for individual *sex offenses* and found three of these to significantly influence conviction. Overall, we examined 18 factors with data in the criminal history data repository and found 10 factors that significantly influenced conviction for sex offense arrest events or individual sex offenses.

Based on our analyses of the data, we conclude that criminal history data can effectively be used to empirically describe the case processing of sex offenses. We confirm that there is utility in analyzing criminal history data with the goal of developing predictive models for case processing outcomes, namely conviction. The data can also be used to assess how well Alaska's criminal justice system is meeting its goals of accountability for sex offenders by examining the likelihood that a sex offense arrest event or individual sex offense will result in conviction.

While we confirm that there is utility in analyzing criminal history data with the goal of developing predictive models for specific case processing outcomes of sex offense arrest events and individual sex offenses, there is more work to be done. Further analyses examining subgroups in the sex offense data should be conducted. If the goal of determining predictors of sex offense case processing is to identify areas for increased accountability as a result of training or other efforts, there may be value in presenting the results of these and additional subgroup analyses to courtroom workgroup members and gathering their perspective on how or why various factors influence case processing or steps that could be made to increase accountability.

Figure 2.1
Disposition diagram for sex offense arrests in Alaska, 2008-2011

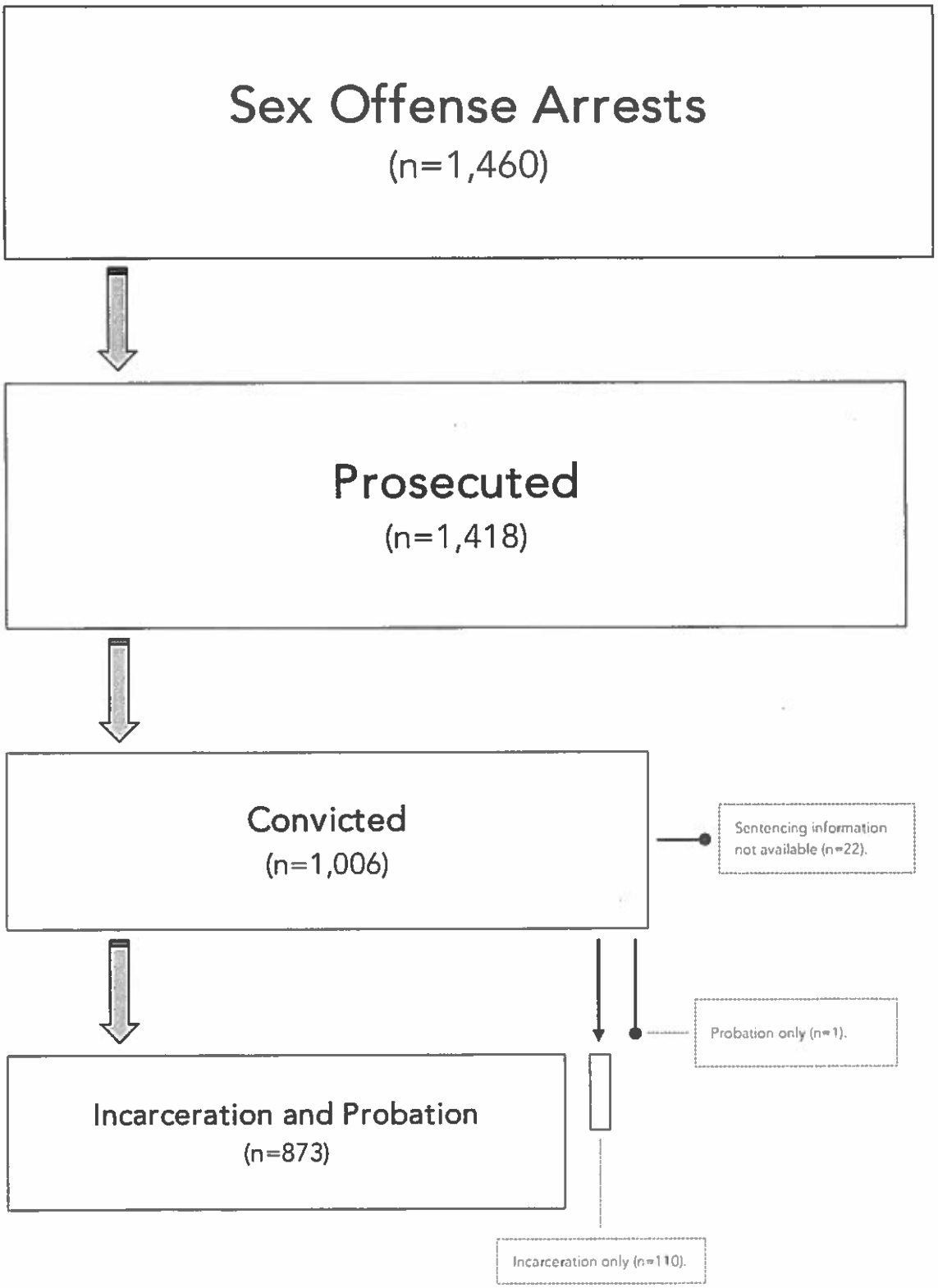


Figure 2.2
Disposition diagram for sex offenses in Alaska, 2008-2011