

30<sup>th</sup> Annual

# Recidivism Evaluation of the Colorado Division of Youth Services

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*Regarding Committed Youth*

*Discharged in Fiscal Years*

*2017-18,*

*2018-19,*

*&*

*2019-20*

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July 1, 2022



**COLORADO**

**Division of Youth Services**

Office of Children, Youth & Families

# Table of Contents

<b>BRIEF OVERVIEW</b> .....	1
<b>EXECUTIVE SUMMARY</b> .....	2
<b>INTRODUCTION</b> .....	8
<b>C.R.S., 19-2.5-1501(4) DETAILS</b> .....	8
<b>BACKGROUND</b> .....	9
<i>Definition of Recidivism</i> .....	9
<i>Post-Discharge Recidivism</i> .....	9
<i>Multi-Year Recidivism Rates</i> .....	9
<b>METHODOLOGY</b> .....	11
<i>Recidivist Act Defined</i> .....	11
<i>Study Population</i> .....	11
<i>Study Design</i> .....	13
<i>Record Matching</i> .....	14
<i>Recent Methodology Changes</i> .....	14
<b>RESULTS</b> .....	15
<b>RECIDIVISM RATES</b> .....	15
<i>Multi-Year Recidivism Results</i> .....	16
<i>Recidivism Analysis Cohort</i> .....	17
<b>OFFENSE TYPES</b> .....	27
<i>VRA and Other Crimes</i> .....	27
<b>NATIONAL COMPARISON</b> .....	32
<b>RECOMMENDATIONS</b> .....	36
<b>DISCUSSION/STUDY LIMITATIONS</b> .....	39
<b>APPENDIX A – WORKS CITED</b> .....	41
<b>APPENDIX B –RECORD MATCHING</b> .....	42
<b>APPENDIX C – SIGNIFICANT FINDINGS – ANALYSIS COHORT</b> .....	43
<b>APPENDIX D – NON-SIGNIFICANT FINDINGS – ANALYSIS COHORT</b> .....	44
<b>APPENDIX E – PRE-DISCHARGE RECIDIVISM RATES</b> .....	45
<b>APPENDIX F – TERMS AND DEFINITIONS</b> .....	46
<b>APPENDIX G – CRIMES THAT FALL UNDER C.R.S., 24-4.1-302(1)</b> .....	48

## INDEX OF FIGURES AND TABLES

Index of Figures		Page Number
Figure	1 Recidivism Trends Over Time (One-, Two-, and Three-Years Post-Discharge)	4 & 15
Figure	2 Thirteen-Year Discharge Population Trends	12
Figure	3 DYS Timeline of Care	13
Figure	4 Statistical Analysis Steps	17
Figure	5 Commitment Offense for Recidivists: Felonies and Misdemeanors ( <i>N</i> = 473)	28
Figure	6 Commitment Offense for Recidivists: VRA and Other Offenses ( <i>N</i> = 473)	28
Figure	7 Commitment Offense for Recidivists: Non-VRA Offenses ( <i>N</i> = 271)	29
Figure	8 VRA Commitment Offense for Recidivists ( <i>N</i> = 202)	29
Figure	9 Recidivist Acts ( <i>N</i> = 1,293)	30
Figure	10 Recidivist Acts: VRA and Other Offenses ( <i>N</i> = 1,293)	30
Figure	11 Non-VRA Recidivist Acts ( <i>N</i> = 938)	31
Figure	12 VRA Recidivist Acts ( <i>N</i> = 355)	31
Index of Tables		
Table	1 Recidivism Rates by Discharge Cohort	16
Table	2 Demographic Differences between Non-Recidivists and Recidivists (Analysis Cohort <i>N</i> = 1,146)	22
Table	3 Characteristics Predictive of Recidivism (Presented as Odds Ratios)	24
Table	4 Recidivism Data Collection and Reporting Practices in Juvenile Corrections	33
Table	5 National Comparison of Recidivism Rates over Time by Year of Discharge	34
Table	6 The Five Most Predictive Characteristics of Juvenile Recidivists	36

## BRIEF OVERVIEW

### How Does Colorado Define Juvenile Recidivism?

- Recidivism is defined as a new adjudication or conviction for a misdemeanor or felony offense that occurs after youth are discharged from all DYS supervision, *including parole services*. **Please see page 11 for a more detailed description.**

### What is the Scope of this Study?

- Recidivism rates were calculated at one-, two-, and three-years post-discharge (after all DYS supervision ended). **Please see pages 15-17 for details on these rates.**

### Who is Included in this Study?

- Every committed youth who was discharged from all DYS supervision during Fiscal Years (FY) 2017-18, 2018-19, and 2019-20 were included in the calculation of the one-, two-, and three-year recidivism rates.
- An Analysis Cohort of the total 1,146 youth in each of these three discharge years (cohorts) was also followed for one-year post discharge. This Analysis Cohort was used to examine any significant differences between recidivists and non-recidivists in terms of observable characteristics or other factors. **Please see pages 11-12 for a more detailed description.**

### Were Any Youth Excluded from this Study?

- Nine (9) youth were excluded from the Analysis Cohort (0.8% of the total population). Each of these nine youth had multiple commitments to DYS that resulted in a recidivist act within one-year of discharge for one commitment, and no recidivist acts within one-year of discharge for another commitment. One of the required assumptions of the tests of statistical significance used in the analyses in this report requires that there be an *independence of observations between groups*. In other words, the same youth cannot be simultaneously placed in both the recidivist and the non-recidivist groups. Thus, scientifically rigorous adherence to best practices in research methodology dictated the removal of these nine youth. **Please see pages 11-12 for a more detailed description of youth excluded from the study.**
- No youth were excluded for unsuccessful program completion, unsatisfactory discharge from DYS, or for any other reason.
- All youth who are committed to DYS will eventually discharge, without exception. Thus, all youth who discharged during FYs 2017-18, 2018-19, and 2019-20 (barring the nine dual-status recidivist/non-recidivist youth) were included in the Analysis Cohort.

## EXECUTIVE SUMMARY

Annually, on July 1st, the Colorado Department of Human Services (CDHS or Department) publishes the results of a comprehensive analysis and review of juvenile recidivism for youth discharged from the Division of Youth Services (DYS or Division) in the preceding fiscal years. The current publication marks the 30th edition of the annual recidivism report.

**The Division defines recidivism as the adjudication or conviction of a new misdemeanor or felony offense within a specified time period.**

### YOUTH STUDIED

Recidivism rates were calculated for three unique cohorts of committed youth who discharged from all DHS supervision, including parole services. These discharged youth were followed for one, two, and three years post-discharge from DHS. These three cohorts include every youth who discharged from DHS. As every youth who is committed to DHS will eventually be discharged without exception, no youth were excluded from the three cohorts used to calculate the one-, two-, and three-year recidivism rates. As has been observed nationally among juvenile justice-involved youth, the DHS population is overwhelmingly male, and has averaged an approximate 85% male to 15% female ratio for many years.

- **Fiscal Year 2019-20:** Three hundred ninety-eight (398) youth discharged from DHS. Among these discharged youth, 87% were male, and 13% were female. This cohort was used to determine a one-year recidivism rate.
- **Fiscal Year 2018-19:** Three hundred ninety-five (395) youth discharged from DHS.<sup>i</sup> Among these discharged youth, 85% were male, and 15% were female. This cohort was used to determine a two-year recidivism rate.

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<sup>i</sup> This number ( $n = 395$  discharged youth) differs by one youth from the total cited in the report published on July 1, 2021 ( $n = 396$ ). During FY 2018-19, a single youth was simultaneously sentenced as an adult to the Colorado Department of Corrections (DOC), and DHS on multiple charges in separate court cases. This youth was already serving a lengthy DOC sentence when committed to DHS on the second court case, and was never in DHS custody. The court was petitioned to discharge this youth from DHS records for the second commitment as DHS never held custody of nor had the opportunity to offer any treatment or services to this youth. The court granted this petition, and DHS records currently reflect a single commitment to and discharge from DHS custody for this youth, thus bringing the total number of youth discharged during FY 2018-19 to 395.

- **Fiscal Year 2017-18:** Three hundred seventy-seven (377) youth discharged from DYS. Among these discharged youth, 84% were male, and 16% were female. This cohort was used to determine a three-year recidivism rate.

### ANALYSIS COHORT

The number of committed youth who have discharged from DYS has declined dramatically over the past thirteen years, from a high of 950 in FY 2007-08 to the current number of 398 discharged youth in FY 2019-20. This represents a 58% decrease in population size over time. The notable decline in population size has directly impacted the type and quality of analyses that can be conducted in the attempt to better understand and serve youth committed to DYS.

**The number of committed youth who discharged from DYS annually declined by 58% between FY 2007-08 and FY 2019-20.**

In an effort to combat the challenges associated with a shrinking population of youth who discharge from DYS annually, three years of data were combined to create a single, larger one-year post-discharge cohort. Specifically, each of the youth in the one-year post-discharge cohort for Fiscal Years 2017-18, 2018-19, and 2019-20 were combined to form a single Analysis Cohort of 1,146 unique discharged youth.<sup>ii</sup> By combining these three cohorts into a single, larger cohort, some of the challenges presented by a shrinking population size were ameliorated and sufficient statistical power was generated in the analyses to detect significant between-groups differences.

- **Analysis Cohort:** One thousand one hundred and forty-six (1,146) unique youth discharged from DYS between FY 2017-18 and FY 2019-20. Among these unique discharged youth, 85% were male and 15% were female. This cohort was followed for one year post-discharge and was used for the majority of the analyses discussed throughout the report.

The Division began measuring and reporting two- and three-year post discharge recidivism rates for youth who discharged during FY 2010-11. Please see Figure 1 that follows.

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<sup>ii</sup> For a more detailed description of the Analysis Cohort and how it was comprised, please see the Study Population section on pages 11-12 and Recent Methodology Changes section on page 14.

**RECIDIVISM RATES**

***One-year recidivism rate***

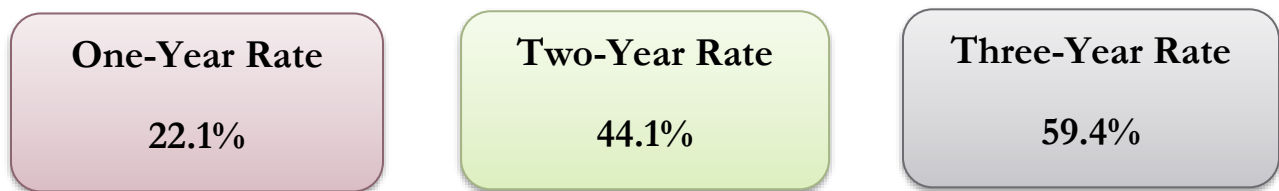
For youth who discharged in FY 2019-20, **22.1%** (88 of 398 youth) were guilty of one or more recidivist acts within one year of discharge from DYS.

***Two-year recidivism rate***

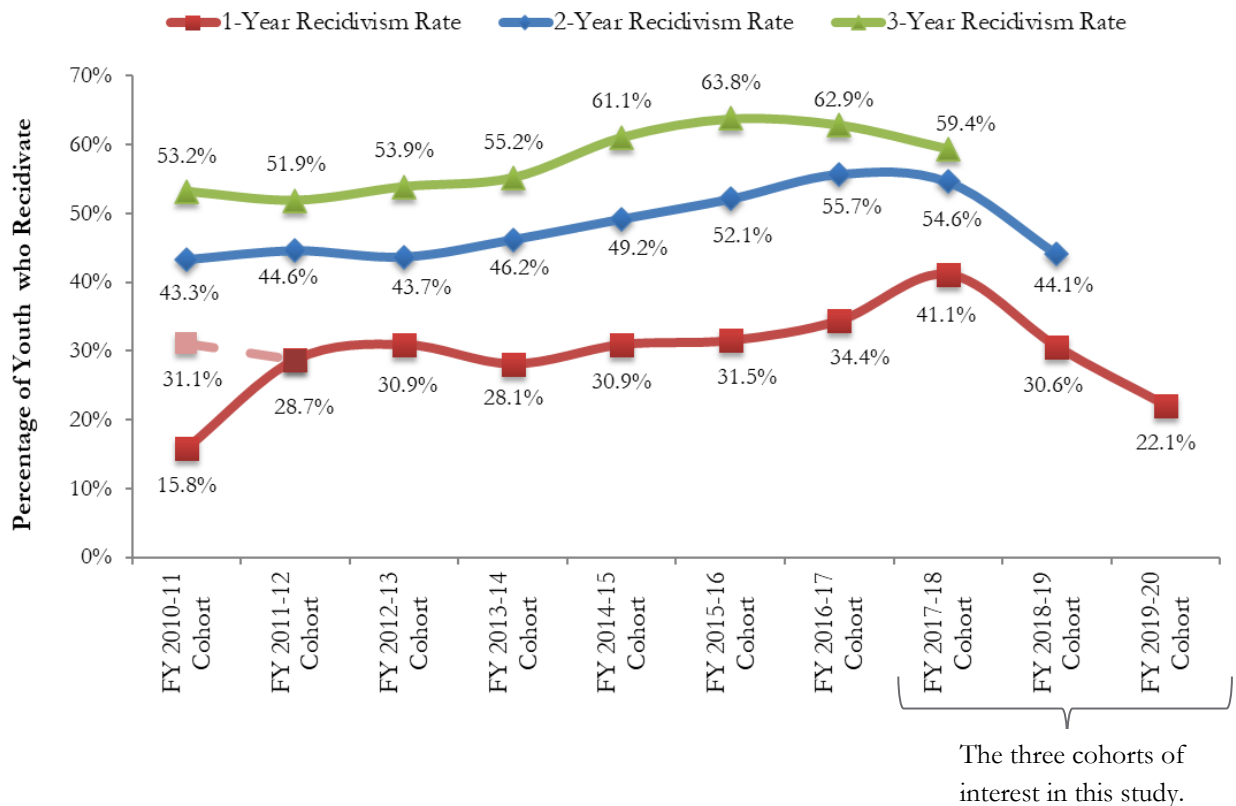
For youth who discharged in FY 2018-19, **44.1%** (174 of 395 youth) were guilty of one or more recidivist acts within two years of discharge from DYS.

***Three-year recidivism rate***

For youth who discharged in FY 2017-18, **59.4%** (224 of 377 youth) were guilty of one or more recidivist acts within three years of discharge from DYS.



**Figure 1: Recidivism Trends Over Time (One-, Two-, and Three-Years Post-Discharge)**



### *Analysis Cohort recidivism rate*

For youth in the combined one-year post-discharge Analysis Cohort, **32.9%** (377 of 1,146 total youth) were guilty of one or more recidivist acts within one year of discharge from DYS.

### **Analysis Cohort One-Year Rate**

**32.9%**

### **CHARACTERISTICS OF RECIDIVISTS**

Compared to non-recidivist youth, recidivists in the Analysis Cohort were statistically more likely to be:

- Male
- Have a history of one or more prior escapes
- Younger at the time of the first adjudication
- Have one or more prior adjudications
- Earn a parole rating of Poor to Unsatisfactory at discharge
- Originally committed for a non-Victim Rights Act (VRA) offense
- Originally committed for a non-violent offense
- Have an assessed substance abuse treatment need
- Have an assessed mental health treatment need
- Lack of involvement in a pro-social program (i.e.: work or school) at discharge

**The characteristics that were the most predictive of being a recidivist were earning a poor to unsatisfactory parole rating at discharge, being male, having a history of one or more escapes, being committed for an offense that did not fall under the VRA, and being younger at the time of first adjudication (see pages 23-26 for details).**

In addition, the majority of recidivist youth were initially committed for a felony offense that did not fall under the Victim Rights Act, and committed an average of 2.7 total recidivist acts. The majority of recidivist acts observed in the three discharge cohorts were misdemeanor offenses that did not fall under the VRA, illustrating a general reduction in the severity of criminal acts from commitment to the end of the follow-up period.



## TYPES OF RECIDIVIST ACTS COMMITTED

Colorado Statute C.R.S., 19-2.5-1501(4) was signed into law on March 7, 2018, and states that the annually mandated recidivism report "...must denote the types of criminal offenses committed, delineating between felonies and misdemeanors and between crimes that are included as a 'crime' pursuant to Section 24-4.1-302(1) and other crimes." In addition to the analysis of the types of recidivist acts (felony or misdemeanor) that has long been included in the recidivism report, 2019 marked the initiation of including an analysis of crimes pursuant to Section 24-4.1-302(1), which are recidivist acts that fall under the Victim Rights Act (VRA). Of the recidivists in the three discharge cohorts, the majority were originally sentenced to DYS on felony adjudications (57.9% felony vs. 42.1% misdemeanor). Of these original commitment offenses, 42.7% were crimes that fell under the VRA. This finding is consistent with the findings described in previous reports, where property crimes (which do not fall under the VRA) were consistently found to be the most common commitment offense. The majority of all recidivist acts committed over each of the follow-up time periods were misdemeanors (53.6%) compared to felonies (46.4%). Relatively few recidivist acts were crimes that fell under the VRA (27.5%).

**The majority of recidivists were committed for a felony offense that did not fall under the Victim Rights Act (VRA), while the majority of recidivist acts were misdemeanors. Only 27.5% of all recidivist acts fell under the VRA (see pages 27 – 31 for details).**

## NATIONAL COMPARISON

Most states do not measure or report on juvenile recidivism regularly, if at all. In addition, states that do sporadically report recidivism rates frequently use a different definition of recidivism as well as research methods that do not match those used in Colorado. Many states are limited in their ability to produce recidivism rates due to a lack of centralized juvenile and adult criminal records, the composition of state vs. local supervision for juvenile justice-involved youth, a lack of available staff resources to conduct a rigorous study, or other complications.

Colorado remains one of the few states to produce an annual report that measures recidivism at one-, two-, and three-years post-discharge using a rigorous definition. Currently, four states and the District of Columbia define, measure, and report juvenile recidivism utilizing a research methodology similar to Colorado, thus providing five data points for a between-states comparison of recidivism rates in years when these data are available at the time this report is published. When comparing the one-year post-discharge recidivism rates between comparable states, Colorado's rate (22.1%) is in the top half of the performance range (18.4% - 50.7%). Maryland (18.4%) reported a recidivism rate that was lower than Colorado. Three additional comparable states that produce annual recidivism rates, Idaho, Florida, and Virginia reported one-year post discharge recidivism rates of 24.0%, 38.0%, and 50.7%, respectively. The

District of Columbia did not have a one-year recidivism rate available for comparison at the time this report was published.

## C.R.S., 19-2.5-1501(4) Details

The Colorado Department of Human Services (CDHS or Department), Office of Children, Youth and Families (OCYF or Office), Division of Youth Services (DYS or Division) prepares an annual recidivism report on committed youth. The current report marks the 30<sup>th</sup> year of investigating juvenile recidivism in Colorado, and is submitted in response to C.R.S., 19-2.5-1501(4) (formerly House Bill 18-1010). The educational outcomes requirement is submitted in a separate report.

*“On or before July 1, 2018, and on or before each July 1 thereafter, the department of human services shall collect recidivism data and calculate the recidivism rates and the educational outcomes for juveniles committed to the custody of the department of human services who complete their parole sentences and discharge from department supervision. In collecting the recidivism data, the department of human services shall include any juvenile adjudication or adult conviction of a criminal offense within three years after parole discharge.”*

Statute C.R.S., 19-2.5-1501(4) specifies that:

*“The report must denote the demographic characteristics of the population considered in the report. In reporting on recidivism rates, the report must denote the types of criminal offenses committed, delineating between felonies and misdemeanors and between crimes that are included as a “crime” pursuant to Section 24-4.1-302(1) and other crimes.”*

Specific elements can be found on the following pages:

- Demographic characteristics of the population considered in the report: Table 2, page 22; and Appendices C and D, pages 43-44.
- Criminal offenses committed (felonies, misdemeanors, and crimes pursuant to Section 24-4.1-302(1), C.R.S): pages 27-31.

### **DEFINITION OF RECIDIVISM<sup>iii</sup>**

The Division defines recidivism as a new adjudication or conviction resulting from a misdemeanor or felony offense at any point within the prescribed follow-up time period(s). This definition allows for a limited between-states comparison of recidivism data, and conforms to the definition endorsed and recommended by the Council of Juvenile Justice Administrators (CJJA, formerly known as the Council of Juvenile Corrections Administrators, or CJCA) [1].

### **POST-DISCHARGE RECIDIVISM<sup>iv</sup>**

Post-discharge recidivism refers to new misdemeanor or felony adjudications and convictions that occur within the prescribed follow-up time period(s) *after* a youth has completed all treatment and services and is fully discharged from DYS supervision. DYS supervision includes time spent on parole; thus, the post-discharge follow-up time clock starts after all time on parole has ended. Every youth who is committed to DYS will eventually discharge from all DYS supervision without exception. Post-discharge recidivism is the primary outcome measure utilized by juvenile justice agencies across the nation. It serves as a proxy measure for how well youth are able to re-integrate back into the community and remain crime-free upon discharge. Nationally, juvenile justice agencies are using recidivism rates as one tool of many outcome measures to objectively determine whether treatment and services provided to youth were appropriate and effective, and also as a tool to inform policy and practice.

### **MULTI-YEAR RECIDIVISM RATES**

The majority of states currently engaged in measuring and reporting juvenile recidivism typically only report a one-year recidivism rate, and utilize significantly different research methods when capturing and measuring juvenile recidivism compared to Colorado. In contrast, DYS tracks youth for three years post-discharge in order to determine whether they have remained crime-free. Tracking youth for three years

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<sup>iii</sup> Please see Appendix F on pages 46 - 47 for a list of DYS Terms and Definitions.

<sup>iv</sup> The Division also measures rates of pre-discharge recidivism. Pre-discharge recidivism rates refer to new deferred agreements, adjudications, or convictions for a felony or misdemeanor offense that occurs between the date of commitment to and the date of discharge from the Division. Pre-Discharge recidivism can occur while a youth is still in residential placement, or while a youth is serving a parole sentence. Please see Appendix E on page 45 for ten years of pre-discharge recidivism rates.

post-discharge provides a more rigorous and comprehensive longitudinal analysis of the overall paradigm of juvenile recidivism in Colorado, as well as the trajectory of outcomes over time.

## METHODOLOGY

### RECIDIVIST ACT DEFINED

A recidivist act is defined as a new adjudication or conviction for a misdemeanor or felony offense that occurs after a youth has discharged from the supervision of the Division. Within the Criminal Justice System, an *adjudication* refers to a finding of guilt for a delinquent offense involving a defendant under the age of 18, and is analogous to a *conviction* of an adult defendant found guilty of a criminal offense. Youth are deemed to be recidivists if they commit a new offense that results in a guilty finding for a misdemeanor or felony class charge (adjudication/conviction). Petty offenses are not considered to be recidivist acts, and traffic violations (not to be confused with traffic infractions), are only included in the analyses if they result in a misdemeanor or felony adjudication or conviction. The unit of analysis for this study is youth discharged from the Division (rather than the number of recidivist acts), and all information is reported in the aggregate.

### STUDY POPULATION

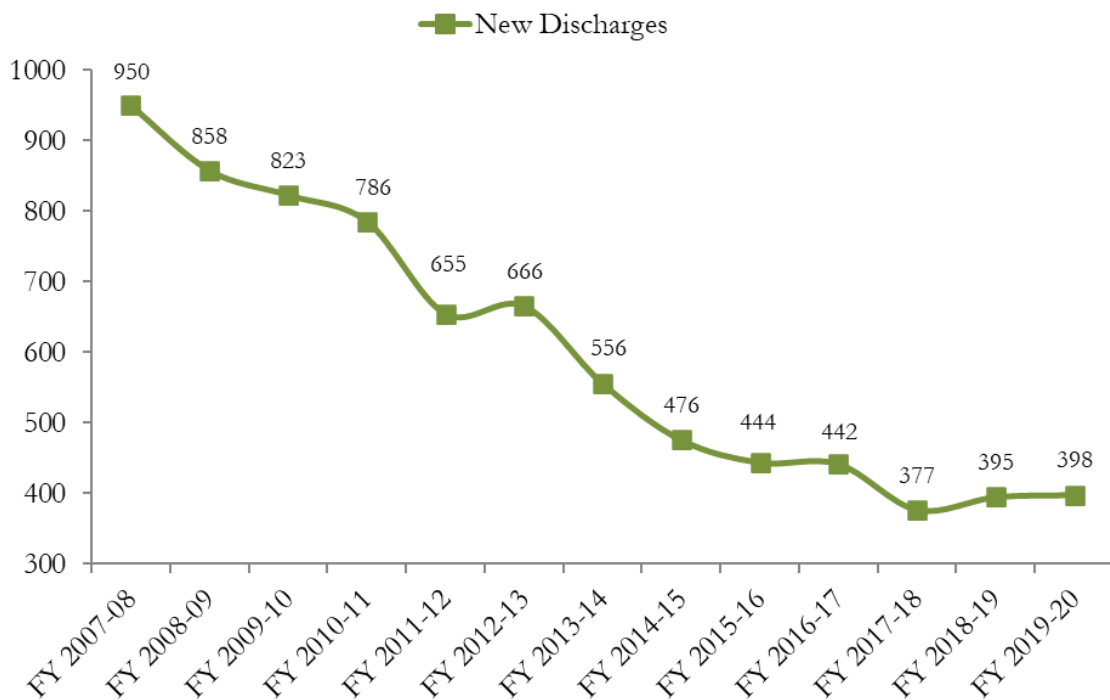
In FY 2019-20, three hundred ninety-eight (398) youth discharged from DYS. These youth were observed for one year after discharge, and a one-year post-discharge recidivism rate was calculated. In FY 2018-19, three hundred ninety-five (395) youth discharged from DYS. These youth were observed for two years after their discharge, and a two-year post-discharge recidivism rate was calculated. In FY 2017-18, three hundred seventy-seven (377) youth discharged from DYS. These youth were observed for three years following their discharge, and a three-year post-discharge recidivism rate was calculated. Official court records from the Judicial Department and Denver County Court were used to identify misdemeanor and felony filings with a finding of guilt for all three discharge cohorts.

The number of committed youth who have discharged from DYS has declined dramatically over the past thirteen years, from a high of 950 in FY 2007-08 to the current low of 398 discharged youth in FY 2019-20 (see Figure 2). This represents a 58% decrease in population size over time. The notable decline in population size has directly impacted the Division's ability to detect significant differences between groups, particularly when examined in smaller sub-populations (e.g.: males vs. females, by ethnicity, or among DYS special populations). Increasing the sample size is one accepted means of minimizing these challenges.

An Analysis Cohort was created by first combining each of the *one-year post-discharge cohorts* from three Fiscal Years (FYs 2017-18, 2018-19, 2019-20) into a single, larger cohort ( $n = 1,170$  total youth), that is further narrowed down as dictated by the tests of statistical significance and requirements of rigorous scientific research methodology. The specifics of these further reductions in the larger Analysis Cohort follow. A total of 15 youth discharged in more than one FY contained within the Analysis Cohort due to consecutive or concurrent DYS commitments, bringing the total of unique youth present in the Analysis Cohort down to 1,155. Of these 15 youth with multiple commitments and discharges from DYS, nine were excluded

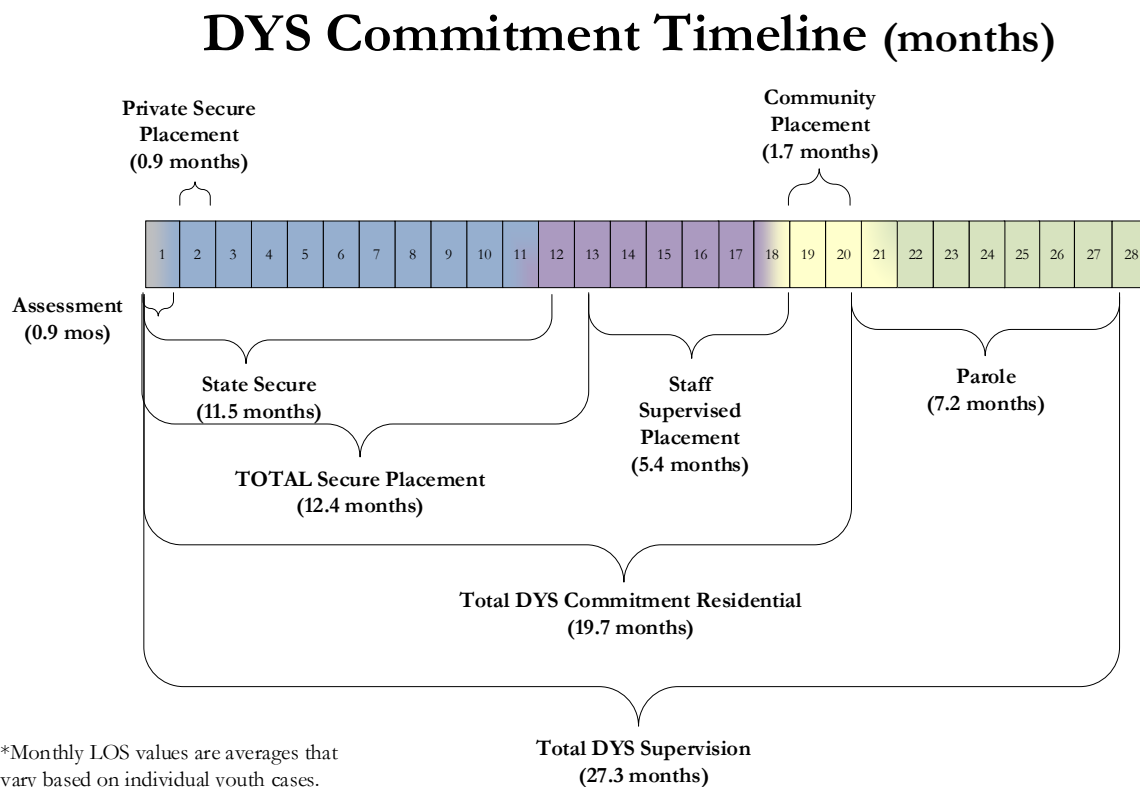
from the Analysis Cohort due to their dual recidivist and non-recidivist status (0.8% of the total population). Specifically, these nine youth committed a recidivist act within the one-year follow-up period for one of their discharges, but did not commit a recidivist act within the one-year post-discharge follow-up for another discharge from DYS. As these nine youth can be simultaneously categorized as both recidivists and non-recidivists, their presence in statistical analyses would violate the assumptions of the tests performed to identify significant relationships. For the purposes of the demographic analyses, the remaining six youth who discharged in more than one fiscal year but were exclusively either recidivists or non-recidivists in both one-year post-discharge follow-up periods were retained in the Analysis Cohort, and were only counted once to avoid "double-counting" individual static characteristics (e.g.: sex, race/ethnicity, and age at first adjudication). Thus, the final total of unique youth included in the Analysis Cohort was 1,146. The majority of the analyses that follow (excluding the one-, two-, and three-year recidivism rates and the Offense Types analysis on pages 27-31) were conducted on this Analysis Cohort as a means of minimizing the effects of a substantially shrinking population size.

**Figure 2: Thirteen-Year Discharge Population Trends**



As Figure 3 illustrates, the average total length of DYS supervision for committed youth was 27.3 months in FY 2019-20. This total commitment Length of Service (LOS-C&P) begins at the time of commitment to DYS and continues through the end of the parole period, when a youth is officially discharged and all DYS supervision ends. Although youth spent an average of 19.7 months in residential placement (the sum of all residential placements while committed), the average length of time spent in state secure youth centers is much shorter (11.5 months).

Figure 3: DYS Timeline of Care



**Youth spent an average of 11.5 months in State Secure placements during FY 2019-20.**

### STUDY DESIGN

In scientific terms, a prospective quasi-experimental observational cohort study design with a longitudinal follow-up period measured at three distinct intervals was used in the current analysis. In other words: Every youth who discharged from the Division between FY 2017-18 and FY 2019-20 was included in the study and was followed for a one-, two-, or three-year follow-up period after discharging from supervision. No youth were randomized to a control or experimental group that received specific treatment or conditions, and no youth were excluded from the study (barring the nine dual-status recidivist/non-recidivists discussed on pages 11-12). This approach allowed for non-intrusive observation of the natural progression of three cohorts of previously adjudicated delinquent youth in the community after they were discharged from DYS. The Division utilized court data from the Colorado State Judicial Department (Judicial) and Denver County Court (DCC) data to determine whether or not a youth had committed a recidivist act during the follow-up period(s) for each cohort.



Due to several safeguards related to confidentiality and data-sharing, the Division developed a Memorandum of Understanding (MOU) specifically related to this annual study with both the Office of the State Court Administrator and the Denver County Court. These MOUs serve as a data-sharing agreement that grant DYS permission to utilize the adjudication/conviction information provided for purposes of identifying youth who recidivate.

## **RECORD MATCHING**

Please see Appendix B on page 42 for a detailed description of the methods used to match DYS data to data provided by the Judicial Department and by Denver County Court.

## **RECENT METHODOLOGY CHANGES**

All discharged youth in the one-, two-, and three-year post-discharge cohorts were re-matched to the filings data provided by the Judicial Department in September of 2021 to ensure that every filing with a finding of guilt was captured for the current report. One limitation of this approach is that it is no longer possible to re-create the recidivism rates from prior years using the current data, as *the filings data provided in September of 2021 are more current and thus contain information that was not yet available in prior years*. In addition, recidivism rates will necessarily be higher using the more recent data than those reported in prior years, as more recidivist acts are detected using these new methods. For example, many filings that were “open” at the time the discharge cohorts were originally matched to the filings data in prior years (an arrest was made, charges were filed, but a formal finding of guilt or innocence was yet to be determined) will now have “closed” with a finding of guilt, and are considered to be recidivist acts. In this way, youth who were correctly identified as non-recidivists in the one-, two-, and three-year cohorts using the most current data available in prior years will now be correctly identified as recidivists within these same cohorts as a result of re-matching with more recent data. Re-matching discharged youth to Judicial filings each year provides the most current and accurate data on juvenile recidivism in Colorado available for analysis.

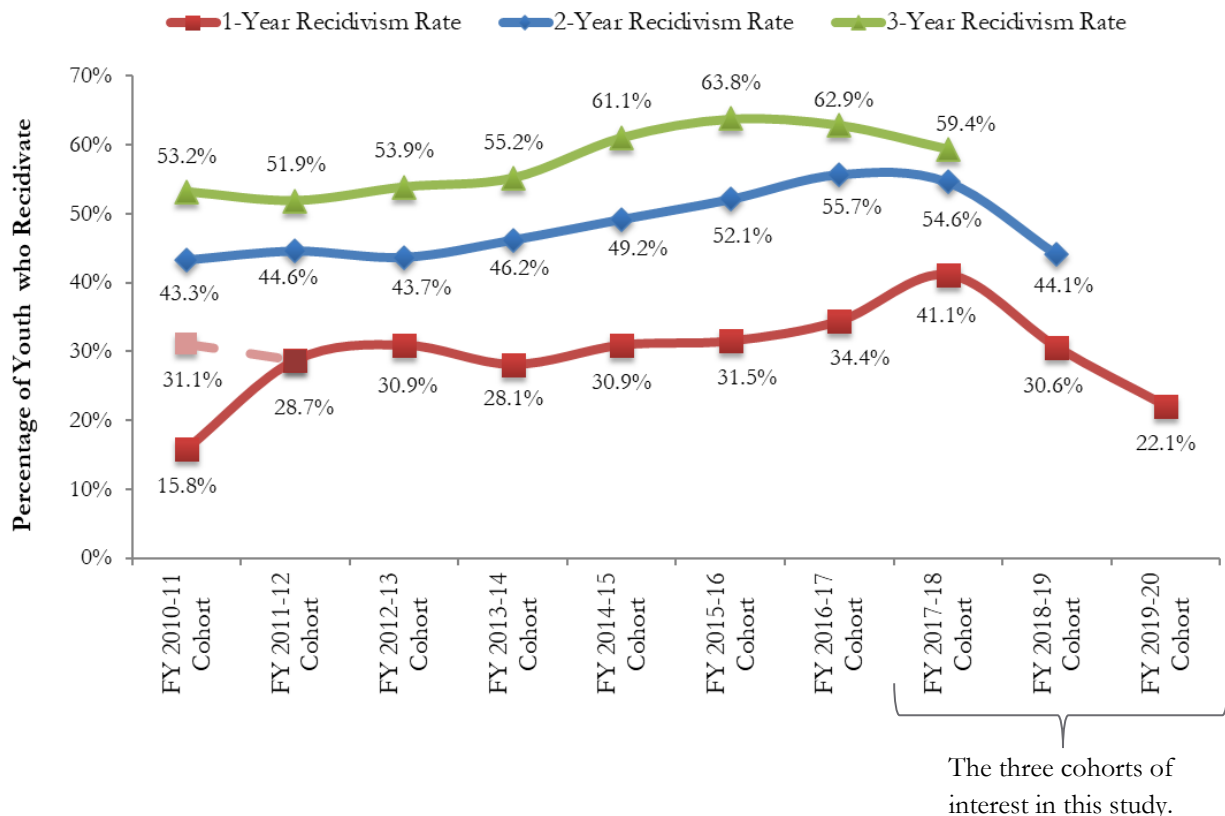
Finally, the current report marks the third year that *adult misdemeanors* filed in the Denver County Court System (DCC) were included in the analyses. DCC is the only county court system in the State whose data is not captured by the Judicial Department’s data system, the source of the data used annually to measure juvenile recidivism in Colorado. Denver County adult *felony* convictions are processed by the Denver District Court, which is a part of the Judicial Department’s data system, and *these convictions have always been included in the analyses*. Similarly, Denver Juvenile Court processes juvenile misdemeanor and felony adjudications, therefore *all juvenile adjudications from Denver have always been included in the analyses*. Many former DYS youth included in the multi-year follow-up periods are 18 years of age or older, and thus could have been convicted of a misdemeanor in DCC. In March of 2019, a Memorandum of Understanding (MOU) was reached with DCC regarding the sharing of adult misdemeanor conviction data with the Division. The adult misdemeanor convictions filed in DCC were matched by DCC staff to the list of youth in the Analysis Cohort and these matched data were provided to the Division for use in the analyses that follow. The inclusion of adult misdemeanors filed in DCC allows for a more complete analysis of juvenile recidivism in Colorado, and eliminates a long-standing limitation to reports produced in previous years.

## RECIDIVISM RATES

A decade (ten years) of recidivism rates are displayed in Figure 1. The one-year post-discharge rate decreased from 30.6% for youth discharged in FY 2018-19 to 22.1% in the current study (an 8.5 percentage point decrease). This decrease marks the lowest rate observed since FY 2013-14 (28.1%). Similarly, the two-year post-discharge recidivism rate declined from 54.6% for youth who discharged in FY 2017-18, to 44.1% in the current year, while the three-year post-discharge recidivism rate decreased from 62.9% to 59.4%.

The current one-year post-discharge rate of 22.1% falls below the 10-year average rate of 30.9%. For over a decade, the one-year post-discharge recidivism rate has consistently averaged around 31%, with the exception of the data initially reported in FY 2010-11. The recidivism rate of 15.8% originally reported in FY 2010-11 was investigated and found to be a result of a data coding and retrieval error from the newly implemented court database. The data were subsequently re-pulled from the Judicial system, and the actual one-year post-discharge recidivism rate of 31.1% was revealed. In the spirit of transparency, the rate originally published is preserved in Figure 1.

**Figure 1: Recidivism Trends Over Time (One-, Two-, and Three-Years Post-Discharge)**



Two- and three-year post-discharge recidivism rates were initially introduced to the reports published in FY 2014 and FY 2015, respectively, for youth who discharged in FY 2010-11. The two-year post-discharge recidivism rate has averaged 48.2% over nine years of measurement, with a range of 43.3% to 55.7%. The three-year post-discharge recidivism rate averaged 57.7% over eight years of measurement, with a range of 51.9% to 63.8%. In summary, over half of committed youth are convicted or adjudicated on a new felony or misdemeanor offense within three years of discharging from the Division.

## MULTI-YEAR RECIDIVISM RESULTS

Table 1 reports the recidivism rates across all three cohorts of interest in this study. The three unique cohorts of discharged youth were examined by follow-up period to see how many youth recidivated after one, two, and three years post-discharge.

**Table 1: Recidivism Rates by Discharge Cohort**

Youth Discharge Cohort	One-Year Recidivism Rate	Two-Year Recidivism Rate	Three-Year Recidivism Rate
FY 2019-20 cohort (N = 398)	22.1%	TBD*	TBD*
FY 2018-19 cohort (N = 395)	30.6%	44.1%	TBD*
FY 2017-18 cohort (N = 377)	41.1%	54.6%	59.4%

\*Rates TBD; available in forthcoming reports

### FY 2019-20 Cohort

The FY 2019-20 discharge cohort (N = 398) has currently been tracked for one year following discharge from DYS. The one-year recidivism rate for this cohort was 22.1%. The two- and three-year rates will be reported once the allotted two- and three-year time periods have concluded.

### FY 2018-19 Cohort

The FY 2018-19 discharge cohort (N = 395) has been tracked for two years following discharge from DYS. The one- and two-year recidivism rates for this cohort were 30.6% and 44.1%, respectively. The three-year recidivism rate will be reported once the allotted three-year time period has concluded.

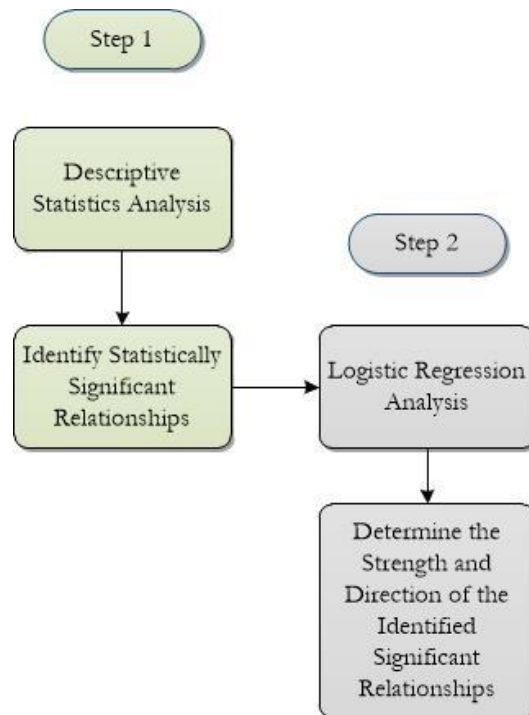
## FY 2017-18 Cohort

The FY 2017-18 discharge cohort ( $N = 377$ ) has been tracked for three years following discharge from DYS. The one-, two-, and three-year recidivism rates for this cohort were 41.1%, 54.6%, and 59.4%, respectively.

## RECIDIVISM ANALYSIS COHORT

Conducting statistical analysis is a scientific process that must, like all science, adhere to a series of procedures or steps and rules. Each of these steps is guided by the data, and the results of the analyses conducted within each step dictate what additional analyses can be conducted. Simply put, the analysis begins with basic tests of the relationships between a number of independent variables identified by the literature and larger body of juvenile justice research as contributing to recidivism (the dependent variable in this case: being a recidivist). Any variables found to have a significant relationship are thought to be a part of a “model” for accurately predicting an outcome (being a recidivist) based on the data. Next, this model is evaluated and subjected to more sophisticated analyses in order to test the strength and direction of any relationships previously identified as being statistically significant, based on the rules governing the variables (See Figure 4).

Figure 4: Statistical Analysis Steps



## Step 1: Descriptive Statistics Analysis: Summary of Descriptive Analyses

### Demographic Differences Found between Recidivists & Non-Recidivists

An extensive analysis of potentially differential demographic characteristics (variables) was conducted in order to determine which traits best characterized youth who recidivated. In other words, the analysis that follows attempts to define, in very general terms, significant differences between characteristics identified by the literature to be linked to youth who recidivate when compared to youth who did not recidivate. The 10 characteristics that generated significant findings and did not share collinearity to other characteristics (were not found to measure the same variance in recidivist status) are shown in Table 2 on page 22 and are summarized below.

#### 1. Sex

The overwhelming majority of youth in the Analysis Cohort were male (85%), and males have consistently remained around 85% of the DYS population for many years. When examined by sex, the recidivism rate was higher among males (34.1%;  $n = 332$ ) than females (26.3%;  $n = 45$ ). The relationship between sex and recidivism was statistically significant ( $p = 0.047$ ). The recidivism rates for both males and females declined from FY 2018-19 (40.4% and 29.2%, respectively). It should be noted that the number of female recidivists in the analysis sample remained very small, despite aggregating three years of one-year cohort data ( $n = 45$ ). This very small sample size excluded the possibility of performing additional within-groups analyses comparing female recidivists to their male counterparts.

#### 2. Number of Escapes

An escape, for the purposes of this study, is defined as a period of time when a youth absconds from a commitment youth center, a community placement, or from parole for four hours or longer without permission. More than half (59.0%) of all youth in the Analysis Cohort had an escape at some point prior to discharge. A larger percentage of recidivists (70.3%) had one or more escapes compared to non-recidivists (53.4%). The relationship between having a history of escapes while committed to DYS and recidivism was statistically significant ( $p < 0.000$ ).

#### 3. Average Age at First Adjudication

The average age at which youth in the Analysis Cohort were first adjudicated for a delinquent offense was 15.0 years. On average, recidivists were younger (14.8 years) than their non-recidivist counterparts (15.2 years), and this difference was statistically significant ( $p = 0.017$ ). This finding is consistent with the literature on juvenile delinquency, which finds that the likelihood of becoming an adult offender is greater among youth who demonstrate an early onset of criminality, are chronic delinquents, and commit violent offenses [2] [3] [4].

#### 4. Prior Number of Adjudications

The majority of youth in the Analysis Cohort had one or more prior adjudications (72.9%). There were fewer recidivists with zero prior adjudications (21.8%) compared to non-recidivists (29.6%), and a larger number of recidivists with one or more prior adjudications (78.2%) compared to non-recidivists (70.4%). This difference was statistically significant ( $p = 0.005$ ). Generally speaking, youth with multiple prior adjudications may possess a tolerance or acceptance for a deviant life course or trajectory, which would be consistent with behaviors associated with recidivism, and prior justice system involvement has been found to be predictive of future involvement [2] [3]. In addition, youth who have a longer history of adjudications or failed probation or deferred sentences may be more likely to receive a commitment sentence from the court than youth with no history of juvenile justice involvement.

#### 5. Parole Rating at Discharge

Juvenile offenders in Colorado have a mandatory minimum parole length of six months. Parole refers to the status of an offender conditionally released from a residential placement at the discretion of the Juvenile Parole Board (JPB). The Colorado JPB is established as a Type-1 transfer board and requires gubernatorial appointment. All rendering of findings during juvenile parole hearings are formed independently from the Executive Director of the Department of Human Services. While on parole, each youth is under the supervision of a parole officer (formerly the youth's client manager) and is required to observe the conditions of release set by the Juvenile Parole Board. The Parole Rating at discharge is the level at which the client manager determines the youth to be in regard to parole compliance at discharge (based on pre-determined criteria), with a "Satisfactory" or "Excellent" rating indicating a smooth and successful transition back into the community while on parole. The goal of the Division is that each youth earns either a Satisfactory or Excellent parole rating at discharge. Unfortunately, some youth ultimately discharge from parole with a Poor or Unsatisfactory rating (50.3% in the Analysis Cohort). A Poor or Unsatisfactory parole rating at discharge indicates a high level of non-compliance while on parole; however, the Division relinquishes all supervision and authority over youth once the parole sentence has been served and youth are discharged from the Division. A total of 103 youth did not go on parole prior to discharge and were excluded from the analyses. Some youth may discharge directly to adult corrections, turn 21 prior to parole being granted, be deported, have their sentence terminated by the court, etc.

A closer look at the youth with a Poor to Unsatisfactory rating revealed that recidivists comprised a larger percentage (63.6%) compared to non-recidivists (43.2%), and this difference was statistically significant ( $p < 0.000$ ). Conversely, recidivists represented a smaller percentage of youth earning either a Satisfactory or Excellent rating compared to non-recidivists. While 56.8% of non-recidivists earned a Satisfactory or Excellent parole rating, only 36.4% of recidivists earned this same rating.

## 6. VRA Commitment Offense

Crimes that fall under Colorado's Victim Rights Act (VRA) can generally be thought of as crimes committed against persons, and that typically include specific victims. Examples of these types of crimes include but are not limited to: Homicide, assault, sexual assault, kidnapping, and robbery. Please see Appendix G for a complete list of crimes that fall under the Victim Rights Act. The majority of youth in the Analysis Cohort were not committed to DYS for a VRA crime (52.2%), with 47.8% committed for a VRA crime. A smaller percentage of recidivists were committed to DYS for VRA crime (41.4%) compared to non-recidivists (51.0%), and this difference was statistically significant ( $p = 0.002$ ). This finding aligns with the literature on offenders who commit property crimes (which do not fall under the VRA) being more likely to recidivate, when compared to offenders who commit crimes against persons [5] [6]. This finding may be counterintuitive to some readers.

## 7. Violent Offense

Violent offenses are generally those that result in personal injury or trauma to the victim(s), and frequently involve the use of weapons and/or the threat of force in the course of a criminal act. In the Federal Bureau of Investigation's (FBI) Uniform Crime Reporting Program (UCR), violent crime is defined as four specific offenses: Murder and nonnegligent manslaughter, rape, robbery, and aggravated assault [7]. Using the FBI's UCR definition of violent crime, the majority of youth in the Analysis Cohort were not committed for a violent offense (70.6%). Fewer recidivists were committed for a violent offense (24.4%) compared to non-recidivists (31.9%), and this difference was statistically significant ( $p = 0.009$ ). This finding is consistent with criminological research that has found that adults convicted on violent offenses had lower recidivism rates upon release compared to other released offenders [7].

## 8. Assessed Substance Abuse Treatment Need

All youth under DYS supervision undergo a battery of assessments and evaluations immediately after commitment in order to develop individualized and offense-specific treatment and education plans, as well as to identify risks and protective factors associated with juvenile delinquency and the risk for recidivism. As a part of this process, committed youth are assessed for substance abuse treatment needs. Generally speaking, youth fall under one of two categories from this assessment: They are either assessed to have an identifiable substance abuse treatment need, or they are not assessed to have an identifiable substance abuse treatment need. Due to dual sentences by the court (to the Youthful Offender System or the Department of Corrections), a small number of youth are never in DYS custody to be assessed for treatment needs and case planning. A total of 11 youth in the Analysis Cohort did not have a valid assessed substance abuse treatment need score, and were omitted from the analyses. As was the case with the number of secure need factors, the vast majority of youth in the Analysis Cohort were assessed to have a substance abuse treatment need at the time of commitment (86.2%). A larger percentage of recidivists in the Analysis Cohort were assessed to have a substance abuse treatment need at commitment (89.1%) compared to non-recidivists (84.7%), and this relationship was statistically significant ( $p = 0.042$ ).

## 9. Assessed Mental Health Treatment Need

Along with substance abuse treatment needs, all youth who are committed to DYS are assessed for mental health treatment needs as a part of the larger assessment and treatment planning process. Youth mental health treatment need scores are derived from the Colorado Client Assessment Record (CCAR) administered during the assessment process. Only youth with valid assessment CCAR scores were included in the analysis ( $n = 1,126$ ; 98.3% of the Analysis Cohort). As was observed with substance abuse treatment needs, the majority of youth in the Analysis Cohort were assessed to have a mental health treatment need at the time of commitment (59.9%). While most youth arrive at DYS with an assessed mental health treatment need, fewer recidivists were assessed to have a mental health treatment need (55.8%), compared to non-recidivists (62.0%), and this relationship was statistically significant ( $p = 0.044$ ).











## 10. Program at Discharge

It is the Division's goal to have every youth engaged in either a full- or part-time program at discharge. A youth is considered to have a program in place at discharge if they are either employed, enrolled in school or vocational training, performing community service, parenting, or have other consistent pro-social responsibilities in place at least part-time. Nearly two-thirds of the youth in the Analysis Cohort had a program in place at discharge (61.2%). A smaller percentage of recidivists had a program in place at discharge (56.8%) compared to non-recidivists (63.3%), and this difference was statistically significant ( $p = 0.032$ ).

The table that follows (Table 2) illustrates some basic descriptive differences between youth who recidivated and youth who did not recidivate within one year of discharge (FYs 2017-18, 2018-19, and 2019-20 discharge cohorts combined into one, larger Analysis Cohort). All differences between recidivists and non-recidivists displayed in Table 2 were determined to be statistically significant, meaning the observed differences cannot be attributed to chance. **Only those youth demographics which demonstrated differences that were statistically significant are displayed in Table 2.** For more detailed information on these significant differences, including  $p$  values as well as information on some of the non-significant demographics examined, please refer to Appendices C and D. Taken together, these demographic differences help to describe the various characteristics that are more prevalent among recidivists and non-recidivists. Please note that due to rounding, data presented in tables and figures may not sum to 100% throughout the report.



**Table 2: Demographic Differences between Non-Recidivists and Recidivists (Analysis Cohort N= 1,146)**

Significant Differences				
Variables	Recidivists	Non-Recidivists	Compared to Non-Recidivists	Direction of Trend
1. Sex				
Male	34.1%	65.9%	More Recidivists Were Male	
Female	26.3%	73.7%		
2. Number of Escapes <sup>1</sup>				
Zero Escapes	29.7%	46.6%	More Recidivists Had One or More Escapes	
One or More Escapes	70.3%	53.4%		
3. Average Age at 1st Adjudication				
Age in Years	14.8	15.2	More Recidivists Were Younger at the Time of First Adjudication	
4. Prior Number of Adjudications				
Zero Prior Adjudications	21.8%	29.6%	More Recidivists Had One or More Prior Adjudications	
One or More Prior Adjudications	78.2%	70.4%		
5. Parole Rating at Discharge <sup>2</sup>				
Poor to Unsatisfactory	63.3%	43.2%	More Recidivists Earned a Poor to Unsatisfactory Parole Rating at Discharge	
Satisfactory to Excellent	36.4%	56.8%		
6. VRA Commitment Offense				
Non-VRA Commitment Offense	58.6%	49.0%	Fewer Recidivists Were Committed for a VRA Offense	
VRA Commitment Offense	41.1%	51.0%		
7. Violent Commitment Offense				
Non-Violent	75.6%	68.1%	Fewer Recidivists Were Committed for a Violent Offense	
Violent	24.4%	31.9%		
8. Assessed Substance Abuse Treatment Need <sup>3</sup>				
No Assessed Need	10.9%	15.3%	More Recidivists Had an Assessed Substance Abuse Treatment Need	
Assessed Need	89.1%	84.7%		
9. Assessed Mental Health Treatment Need <sup>4</sup>				
No Assessed Need	44.2%	38.0%	Fewer Recidivists Had an Assessed Mental Health Treatment Need	
Assessed Need	55.8%	62.0%		
10. Program in Place at Discharge				
No Program in Place	43.2%	36.7%	Fewer Recidivists Had a Program in Place at Discharge	
Program in Place	56.8%	63.3%		

<sup>1</sup>An escape, for the purposes of this study, is defined as a period of time when a youth absconds from a commitment youth center, a community placement, or from parole for four hours or longer without permission.

<sup>2</sup>The Parole Rating at Discharge is the level at which the client manager determines the youth to be at discharge in regard to parole compliance, which is based on pre-determined criteria. Only includes youth who actually went on parole. A total of 103 youth did not go on parole and were excluded from the analysis.

<sup>3</sup>Only youth who completed a substance abuse treatment needs assessment at the time of commitment were included in the analysis. A total of 11 youth did not complete a substance abuse treatment needs assessment and were excluded from the analysis.

<sup>4</sup>Only youth with valid CCAR Overall Problem Severity scores administered at assessment are included in the analysis. A total of 20 youth did not have a valid CCAR Overall Problem Severity score and were excluded from the analysis.

While Table 2 provides detailed information regarding those demographics found to have a significant relationship with recidivist status, it does not represent the total number of demographics examined. Each year, a wide variety of demographic variables are examined for possible significant relationships, including those of interest to current policies, initiatives, etc. In the current report, these additional variables included

*but were not limited to:* the total amount of time spent committed, the length of time spent on parole, the commitment offense type (felony or misdemeanor), average age at commitment, average age at discharge, sex offender status, where youth was placed at discharge, and whether or not a youth was assessed to have a co-occurring disorder at commitment (co-occurring disorder indicates the presence of both a mental health and a substance abuse treatment need). The results of the analysis of these variables indicated either a non-significant relationship with recidivist status, the variables shared a collinear relationship to one another, or the distribution between groups was too unequal to continue. Please see Appendix D for details on the non-significant differences between recidivists and non-recidivists.

## **Step 2: Logistic Regression Analysis**

### ***Which Characteristics Were MOST Predictive of Recidivism? (Presented as Odds Ratios)***

There were 1,146 youth in the Analysis Cohort, with 337 re-offending (recidivating) within the one-year follow-up period (32.9%). In the analyses that follow, one variable in the model that were found to have a significant relationship with being a recidivist included *only those youth who actually went on parole: Parole rating at discharge*. Two additional variables in the model were found to be significant, and included *only those youth who had valid assessed substance abuse and mental health treatment needs scores at the time of commitment*:

Excluding youth who did not ever go on parole and youth without valid substance abuse or mental health treatment needs scores was necessary to avoid falsely attributing values of “0” to these youth for inclusion in the equations. Please see the Summary of Descriptive Analyses section for details on why some youth might not go on parole or how valid assessed substance abuse or mental health treatment needs scores are determined. Thus, the sample size for the analyses that follow was 1,031, or roughly 90.0% of the total number of unique youth in the Analysis Cohort. A binomial logistic regression model was created that included seven of the ten individual-level characteristics that were found to have a significant relationship with being a recidivists described in the previous section: Sex, average age at first adjudication, parole rating at discharge, being committed for a VRA offense, having an assessed substance abuse treatment need, having an assessed mental health treatment need, and the number of prior escapes<sup>v,vi</sup>. The remaining 3 variables (prior number of adjudications, being committed for a violent offense, and having a program in place at discharge) were omitted from the logistic regression, as they were found to be collinearly related to other variables in the equation. In other words, the three variables excluded from the model were tested

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<sup>v</sup> There were three studentized residuals with values greater than two standard deviations kept in the analysis.

<sup>vi</sup> Linearity of the continuous variable with respect to the logit of the dependent variable was assessed via the Box-Tidwell procedure. A Bonferroni correction was applied using all 9 terms in the model resulting in statistical significance being accepted when  $p < 0.00556$ . Based on this assessment, the continuous independent variable was found to be linearly related to the logit of the dependent variable.

and found to violate one of the required assumptions of the binary logistic regression: That independent variables in the model are not correlated to one another. As these variables were highly correlated to additional variables in the model and measured much of the same variation in recidivist status, they not only failed to add any incremental predictive power to the model, but they were also found to be too closely related to one another to provide any new information.

The seven-variable model sought to further examine the relationship between these variables and being a recidivist, with the goal of better understanding the factors that contribute to recidivism based on the observed values of the independent variables. In this model, five of the seven variables included in the model (sex, age at first adjudication, parole rating at discharge, being committed for a VRA offense, and escapes) were found to be predictive of recidivism (see Table 3). A sixth variable, having an assessed mental health need at the time of commitment, approached significance ( $p = 0.076$ ). The significant findings are reported in the pages that follow.

**Table 3: Characteristics Predictive of Recidivism (Presented as Odds Ratios)**

<b>Characteristics Predictive of Recidivism</b>		
	<b>Recidivists</b>	<b>Odds Ratio*</b>
<b>Parole Rating at Discharge</b>	Satisfactory to Excellent	-2.0
<b>Sex</b>	Male	1.6
<b>Escapes</b>	1 or More Escapes	1.4
<b>VRA Commitment Offense</b>	VRA Offense	-1.3
<b>Average Age at First Adjudication</b>	Younger at First Adjudication	-1.1

\*The Odds Ratio represents the odds that an outcome (being a recidivist) will occur given the presence of certain characteristics.

### **PAROLE RATING AT DISCHARGE**

Earning a Satisfactory to Excellent parole rating at discharge has been consistently predictive of post-discharge success in terms of remaining crime-free for youth committed to DYS. The odds of being a recidivist for youth who discharged with a Satisfactory to Excellent parole rating were 2.0 times *lower*

compared to youth with a Poor to Unsatisfactory rating, controlling for all other variables.<sup>vii</sup> This measure includes adherence to the stipulations of parole as determined by the Juvenile Parole Board, and also includes many measures of prosocial behaviors and attitudes that have been identified as protective factors for juvenile delinquency, such as regular school attendance, avoiding antisocial or criminally involved peers, abstaining from alcohol and other illicit substances, regular employment, adhering to scheduled meetings and curfews, and participation in pro-social activities [4]. A Satisfactory or Excellent parole rating also indicates a more successful reintegration and transition back into the community. Generally speaking, the degree to which youth are able to demonstrate successful compliance with the supervision and structure of their parole has translated to their larger success in avoiding recidivism after discharge.

## **SEX**

In the Analysis Cohort, the odds of being a recidivist were 1.6 times *greater* for males compared to females, controlling for all other variables. This finding has been supported year after year in Colorado, and is consistent with national studies which have repeatedly indicated that males are more at risk for delinquency and criminality than are females, controlling for all other variables [8] [9] [10].<sup>viii</sup>

## **ESCAPES**

For youth who had a history of one or more escapes while committed, the odds of being a recidivist were 1.4 times *greater* than youth who did not have a history of escapes. Generally speaking, committed youth who do escape from supervision for four hours or longer may be demonstrating a greater degree of tolerance for deviance, a less prosocial attitude toward supervision, or poor impulse control. Each of these factors has been tied to juvenile delinquency in the literature [2] [3].<sup>ix</sup>

## **VRA COMMITMENT OFFENSE TYPE**

The odds of being a recidivist for youth who were committed for an offense that fell under the VRA were 1.3 times *lower* compared to youth who were not committed for a VRA offense., holding all other variables constant. Although this finding may be counterintuitive to some readers, it does align with the literature, which has found that offenders who commit property crimes (which generally do not fall under offenses included in the VRA) are more likely to recidivate, when compared to offenders who commit crimes against persons [7].<sup>x</sup>

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<sup>vii</sup> Satisfactory or Excellent parole rating at discharge compared to Poor or Unsatisfactory: OR = -2.0, 95% Confidence Interval (CI): 1.5-2.7,  $p < 0.000$ .

<sup>viii</sup> Males: OR = 1.6, 95% Confidence Interval (CI): 1.1-2.3,  $p = 0.022$ .

<sup>ix</sup> Escapes: OR = 1.4, 95% Confidence Interval (CI): 1.0-1.9,  $p = 0.027$ .

<sup>x</sup> VRA Commitment Offense: OR = -1.3, 95% Confidence Interval (CI): 1.0-1.7,  $p = 0.033$ .

## AGE AT FIRST ADJUDICATION

Youth in the Analysis Cohort were, on average, 15.0 years old at the time of their first adjudication. As noted in the previous section, recidivists were significantly younger than non-recidivists, averaging 14.8 years old at the time of their first adjudication. The odds of being a recidivist were 1.1 times *greater* for each one-year reduction in age at the time of adjudication among youth in the Analysis Cohort. In other words, youth who were younger at the time of their first adjudication were at greater risk of being a recidivist as compared to youth who were older. This finding is also consistent with the literature that indicates that youth who engage in delinquent or deviant activities at a younger age are at higher risk for future juvenile justice involvement compared to older youth [2] [54] [5].<sup>xi</sup>

### *Which Characteristics Were Non-Predictive?*

When controlling for all other variables, the following characteristics were non-predictive of being a recidivist:

- Assessed Substance Abuse Treatment Need ( $p = 0.25$ )
- Assessed Mental Health Treatment Need ( $p = 0.076$ )

### **A Note on Males vs. Females**

Given the small number of females ( $n = 171$  total,  $n = 45$  recidivists) in the Analysis Cohort, it was not possible to draw additional meaningful predictive comparisons between male and female recidivists and other variables (such as offense type or class, race, or ethnicity, etc.), even after aggregating three years of the one-year post-discharge cohorts into one, larger cohort. In general, descriptive terms, females comprised roughly 15% of the total one-year post-discharge population (males = 85%), and had a recidivism rate of 26.3% compared to males who had a recidivism rate of 34.1%.

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<sup>xi</sup> Age at First Adjudication: OR = -1.1, 95% Confidence Interval (CI): 1.0-1.2,  $p = 0.047$ .

# OFFENSE TYPES

## VRA AND OTHER CRIMES

This section of the analysis focuses exclusively on recidivists, and examines both the commitment offense (the offense that resulted in a DYS sentence) as well as the associated recidivist act(s). All recidivists in the one-, two-, and three-year cohorts were included in the analysis, for a total of 473 unique recidivists.<sup>xiii</sup> Collectively, the 473 unique recidivists in the three discharge cohorts were either adjudicated or convicted for 1,293 recidivist acts over the follow-up periods, or roughly 3 recidivist acts per recidivist ( $\mu = 2.7$ ). Among recidivists, nearly three-quarters, 74.4% ( $n = 352$ ) committed three or fewer recidivist acts, while a handful of outliers ( $n = 7$ ) committed 10 or more recidivist acts. Further investigation into those recidivists with the largest number of recidivist acts revealed a pattern in which each of these youth committed offenses that resulted in multiple same-day filings for a single court case number. In addition, most of these youth committed more severe offenses (e.g.: felonies, aggravated offenses, violent assaults, controlled substance offenses, aggravated felonies and weapons offenses, etc.) which resulted in a large number of same-day filings for a single court case number (eight same-day filings is the largest outlier). Fortunately, these seven (7) outliers represent just 1.5% of recidivists, and fewer than 1% of all youth who discharged from DYS between FY 2017-18 and FY 2019-20.

### Type of Commitment Offenses vs. Recidivist Offenses

The following analysis examines the type of offense for which a youth was committed to DYS and compares it to the recidivist offense(s) that occurred during the follow-up periods. The types of offenses examined delineate between those that fall under the VRA, and other felonies and misdemeanors.

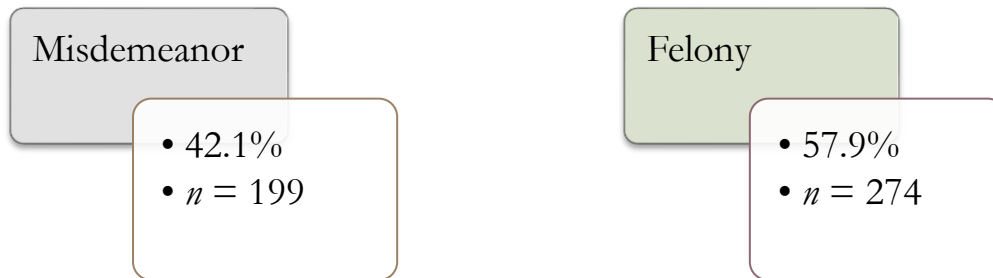
Of the 473 *recidivists* in the three discharge cohorts followed for one, two, and three years post-discharge, the majority were originally sentenced to DYS on felony adjudications: 57.9% felony vs. 42.1% misdemeanor adjudications (see Figure 5). Of these same commitment offenses, the majority were crimes that did not fall under the VRA (57.3%;  $n = 271$ ), while 42.7% ( $n = 202$ ) were VRA offenses (see Figure

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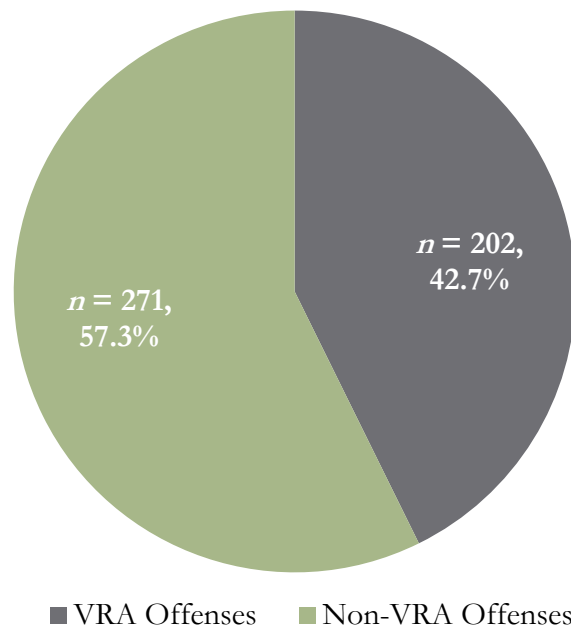
<sup>xiii</sup> The recidivists analyzed in this section are not the same as those in the Analysis Cohort presented in previous sections. The analysis in this section includes all youth identified as recidivists in the one-, two-, and three-year post discharge cohorts, and follows them for *one, two, and three years post-discharge*, respectively. The Analysis Cohort follows all youth who discharged from the Division over three Fiscal Years for *one year post-discharge*, and does not follow youth out to three years post discharge. Thus, data presented in this section will not match previously presented data as it was drawn from a different data set and covers a different period of time. There were four recidivist youth who discharged in more than one year. For these youth, only their most recent commitment and subsequent discharge were included in the analysis.

6). This finding is consistent with those described in previous reports, where property crimes (which do not fall under the VRA) were consistently found to be the most common commitment offense.

**Figure 5: Commitment Offense for Recidivists: Felonies and Misdemeanors (N= 473)**



**Figure 6: Commitment Offense for Recidivists: VRA and Other Offenses (N= 473)**



A further examination of non-VRA commitment offenses ( $n = 271$ ) revealed that the majority (59.8%,  $n = 162$ ) were felony offenses (see Figure 7). Looking specifically at those 202 commitment offenses that fell under the VRA, the majority (55.4%) were felonies compared to misdemeanors (44.6%) (see Figure 8).

Figure 7: Commitment Offense for Recidivists: Non-VRA Offenses ( $N = 271$ )

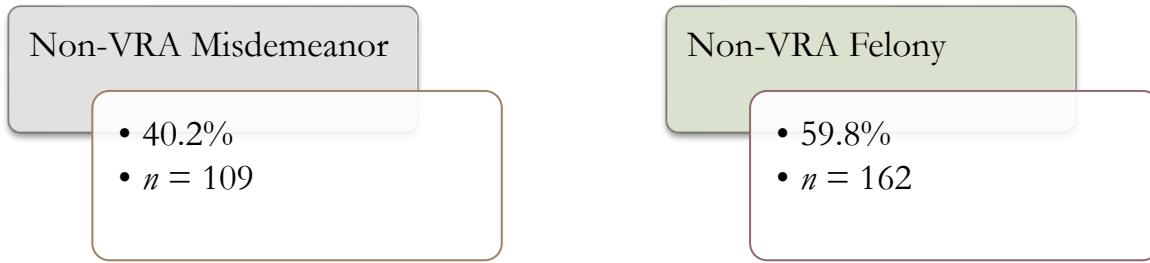
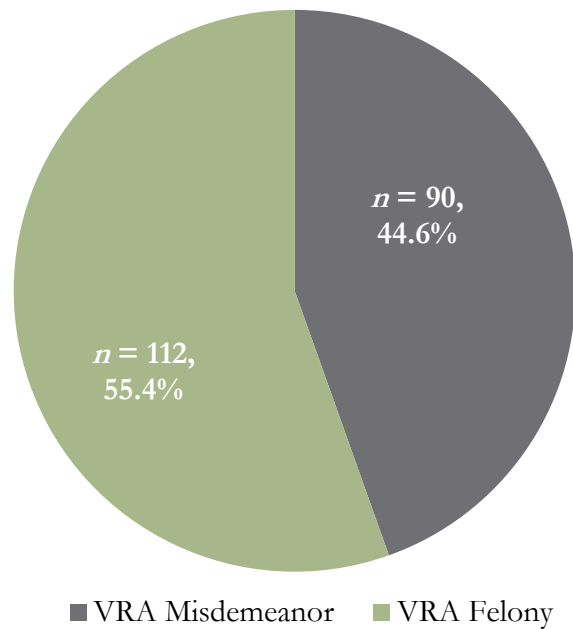


Figure 8: VRA Commitment Offense for Recidivists ( $N = 202$ )



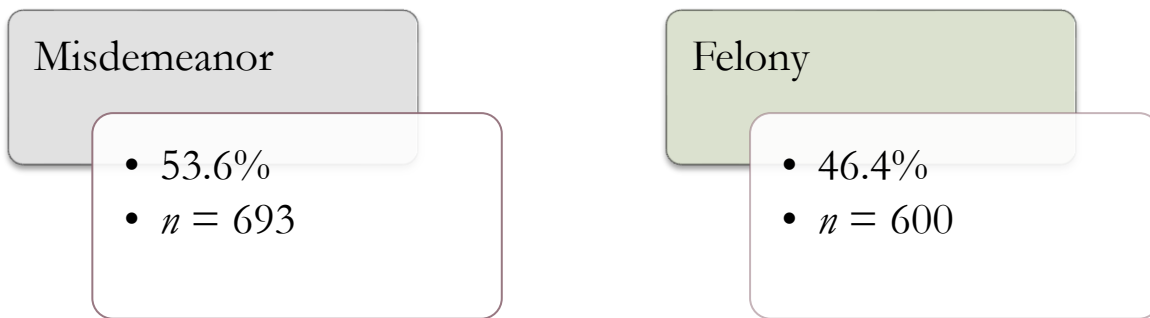
A single commitment offense was examined for all youth in this report, while recidivists can and do commit multiple recidivist acts. Thus, the number of recidivist acts reported in this section ( $n = 1,293$ ) will naturally be greater than the number of commitment offenses in each category examined. Contrary to what was observed with commitment offenses, the majority of recidivist acts committed over each of the follow-up time periods were misdemeanors (53.6%) compared to felonies (46.4%) (see Figure 9). This finding represents a positive outcome for the Division; among youth who recidivate, the majority reoffend with less serious crimes than their commitment offenses. Generally speaking, misdemeanors are considered to be less serious offenses than felonies.



**Among youth who reoffend, the majority of recidivist acts were less serious than commitment offenses (53.6% misdemeanors vs. 57.9% felonies, respectively).**

Relatively few recidivist acts were crimes that fell under the VRA (27.5%), with nearly three-quarters (72.5%) of all recidivist acts being non-VRA offenses (see Figure 10). Looking at those 938 recidivist acts that did not fall under the VRA, the majority were misdemeanors (57.0%) compared to felonies (43.0%) (see Figure 11).

**Figure 9: Recidivist Acts (N= 1,293)**



**Figure 10: Recidivist Acts: VRA and Other Offenses (N= 1,293)**

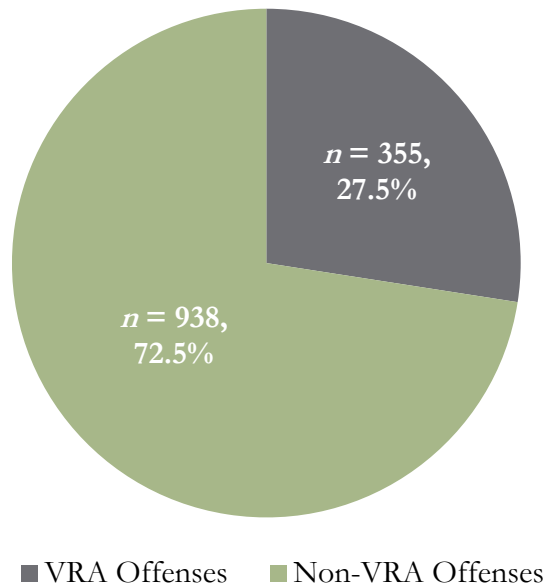
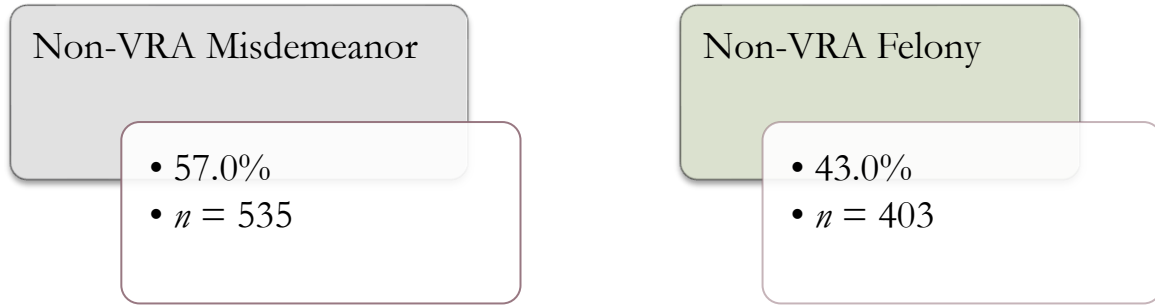
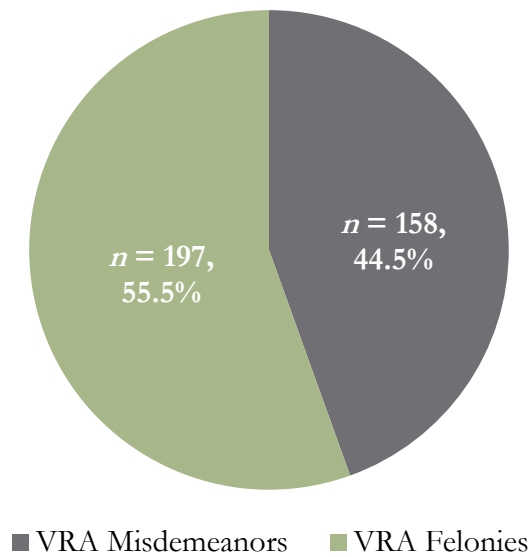


Figure 11: Non-VRA Recidivist Acts ( $N = 938$ )



Looking exclusively at those 355 recidivist acts that fell under the VRA, the majority were felonies (55.5%) compared to misdemeanors (44.5%) (see Figure 12).

Figure 12: VRA Recidivist Acts ( $N = 355$ )



## NATIONAL COMPARISON

The following section provides a comparison of Colorado’s one-, two-, and three-year post-discharge juvenile recidivism rates to other states that utilize the same definition of recidivism and employ a similar research methodology in order to achieve a better understanding of how Colorado compares nationally. Specific examples of some of the different definitions of recidivism used in other states include, but are not limited to: a return to secure custody for a new juvenile commitment (excludes all offenses that result in any alternatives to juvenile incarceration and all adult offenses), new criminal filings (includes those where charges were dismissed or an individual is acquitted of charges), new adjudications (excludes any adult convictions), etc. Similarly, other states frequently utilize a different research methodology for their recidivism studies, such as restricting the population to only youth who discharged with a “successful” rating (thus excluding “unsuccessful” completers, who may be at increased risk for recidivism), excluding those who discharge to adult jail or corrections, using a follow-up period that includes community-based supervision or parole services, including only individuals charged with felony offenses, or those charged in certain courts. None of these, or other, types of research methods are comparable to those used in Colorado.

**One in Four states does not regularly collect or report juvenile recidivism data, and fewer than 50% provide a comprehensive picture of juvenile reoffending. *Colorado is among the minority of states that does both.***

A 2013 study of how juvenile recidivism is measured and reported in the United States conducted by the Pew Charitable Trusts surveyed executive branch agencies responsible for juvenile state commitment facilities in each of the 50 states and the District of Columbia.<sup>xiii</sup> The extensive Pew study examined current practices in the data collection, measurement, performance, and reporting of juvenile recidivism data. The results found that executive branch agencies within individual states utilize very different definitions and methods to study juvenile recidivism, and revealed a need for more policy-relevant data collection and reporting practices. [12] Approximately one in four states does not regularly collect and

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<sup>xiii</sup> It should be noted that states may have more than one executive branch agency reporting juvenile recidivism data, such as municipalities that serve youth exclusively in their communities, individual youth centers or programs within a larger juvenile justice system, etc. In this way, the term “executive branch agencies” is not equivalent to individual states, nor are these terms mutually exclusive.

report juvenile recidivism data, and fewer than half use measures that provide a comprehensive picture of youth reoffending. In this context, a comprehensive measure of youth reoffending refers to comparing youth to previous cohorts, following youth through adult corrections and probation, and tracking youth beyond the juvenile parole period (e.g.: utilizing a longitudinal research design). Using these terms as defined by the Pew study, Colorado is one of the few states conducting regular research with rigorous data collection, measurement, performance evaluation, and reporting of juvenile recidivism information.

More recently, the bipartisan Juvenile Justice Reform Act (JJRA) of 2018 was signed into law in December 2018. This bill reauthorized the Juvenile Justice and Delinquency Prevention Act (JJDP) for the first time since 2002, and included a requirement that the federal Office of Juvenile Justice and Delinquency Prevention (OJJDP) develop a comprehensive national system for measuring recidivism [13]. This forthcoming national system may include a universal definition and uniform method for data collection; however, individual states currently differ in a number of key factors in terms of defining, measuring, and reporting juvenile recidivism [12]. These differences can complicate between-states comparisons, as outlined in Table 4.

**Table 4: Recidivism Data Collection and Reporting Practices in Juvenile Corrections**

<b>Defining Recidivism</b>	
<b>Measures of Reoffending</b>	<b>Number of Agencies<sup>1,2</sup></b>
Arrest	16
Adjudication or Conviction	28 <sup>3</sup>
Commitment (juvenile or adult)	25
<b>Length of Follow-Up</b>	
12 months	21 <sup>3</sup>
24 months	15 <sup>3</sup>
36 months	19 <sup>3</sup>
<b>Follow Offenders into the Adult System</b>	
	30 <sup>3</sup>
<b>Measuring Performance</b>	
Compare to the Previous Year Release Cohorts	32 <sup>3</sup>
Compare Rates by Offender Risk	21 <sup>3</sup>
<b>Reporting</b>	
At Least Annually	33 <sup>3</sup>
Results Released to All Three Branches of Government	21 <sup>3</sup>

<sup>1</sup>Executive branch agencies should not be confused with individual states

<sup>2</sup>Sub-categories are not mutually exclusive

<sup>3</sup>Indicates methods currently used in Colorado

## Methods of National Comparison

The comparison process involved an extensive review of currently available juvenile recidivism reports or publications that conveyed each state’s juvenile recidivism rates and research methodology. A state was considered ideal for comparison if it met the following conditions: 1) utilized a similar methodology to those used in Colorado, 2) had a similar definition of a recidivist act, 3) reported on multiple years of recidivism, and 4) maintained consistency in how recidivism measures were reported in the most recent years. Data from youth who discharged in FY 2017-18 through FY 2019-20 were used in the national comparison.

## Results of National Comparison

Each state identified as a possibility for comparison varied in its definition of recidivism, the time period used to capture recidivism, and in the overall availability of data on recidivism rates. It is important to acknowledge that for the purposes of this analysis, definitions of recidivism were matched as closely as possible rather than exactly. Each juvenile correctional system, however, may be structured differently or have population-specific considerations which make it unique.

Table 5 represents the five other states that were identified as methodologically comparable to Colorado in terms of defining and measuring juvenile recidivism. The District of Columbia is not a state, but it regularly reports juvenile recidivism rates that were deemed to be comparable to those used in Colorado and was included with state-level data. Respective recidivism rates are reported for each state in ascending order. Several states, including the District of Columbia, Florida, and Idaho, do not regularly release two- and three-year recidivism rates.

**Table 5: National Comparison of Recidivism Rates over Time by Year of Discharge**

States with Comparable Juvenile Recidivism Measures			
State	One-Year Recidivism Rate	Two-Year Recidivism Rate	Three-Year Recidivism Rate
Maryland <sup>1</sup>	18.4%	23.9%	N/A
Colorado	22.1%	44.1%	59.3%
Idaho <sup>2,3</sup>	24.0%	N/A	N/A
Florida <sup>2</sup>	38.0%	N/A	N/A
Virginia <sup>4</sup>	50.7%	67.1%	72.9%
District of Columbia <sup>2</sup>	TBD <sup>5</sup>	N/A	N/A

<sup>1</sup>Maryland reports reconvictions/adjudications with a two-year lag, thus the reported one-year rate corresponds to committed youth who were released from programs in FY18-19. A three-year rate is not yet available.

<sup>2</sup>State tracks youth for a one-year follow-up time period.

<sup>3</sup>Idaho defines "discharge" as the start of parole; the recidivism measurement period includes parole.

<sup>4</sup>Virginia reported reconviction rates for parole releases between 2017 - 2019. More recent data was not available.

<sup>5</sup>The one-year recidivism rate was not available at the time this report was published.

When comparing the one-year post-discharge recidivism rates between comparable states, Colorado's rate (22.1%) resides in the top half of the performance range (18.4% - 50.7%). Maryland had a rate lower than Colorado (18.4%). The District of Columbia did not have a recidivism rate available for comparison at the time this report was published.

It is important to note that Idaho currently defines "discharge" as the start of parole, as their juvenile parole services are handled at the county level rather than by the Idaho Department of Juvenile Corrections. Thus, youth on parole are considered "discharged" from their agency and are currently included in their recidivism data collection process. While this difference in when the one-year post-discharge recidivism follow-up period begins clearly differs from Colorado's, it was determined that there were sufficient similarities and adequate rigorous design elements to warrant keeping Idaho among the pool of states with similar research methodologies. Both Maryland and Virginia have a two-year lag period for their respective recidivism rates. While the rates reported in Table 5 are updated with the most current data available from these states, the data represents youth data compiled from FY 2018-19 (Maryland) and FY 2017-19 (Virginia).

In addition, many states re-extract filings and adjudication or conviction records each year and re-match them to their list of youth who have discharged in a given FY. Re-matching records increases the accuracy of capturing any youth who had an open case without a finding of guilt at the time the original data was extracted, but has since been adjudicated or convicted, and correctly identifying these youth as recidivists in the appropriate FY. While this method is more accurate, it effectively re-calculates the one-, two-, and three-year rates produced in prior years. Thus, individual state data presented in Table 5 may not always match data reported in prior years, as they are obtained directly from each state's official data released and reported in the most recent year.


Data from all other states (not shown in Table 5) were sought out and examined when available, but were ultimately excluded because they could not be found; did not report a recidivism rate; or due to significant differences in their population, definition, or measurement of recidivism. For instance, Ohio defines a recidivist act as a "return to the Department of Youth Services (DYS) or incarcerated in the Ohio Department of Rehabilitation and Correction within one, two, and three years of release from a DYS correctional facility." Using this definition might result in a misinterpretation of the true comparability of this state's recidivism rate and Colorado's. Similarly, other states may serve a very different population than those served in Colorado. For example, some states may only serve youth until they reach the age of majority (17 to 19 years of age, depending on the state), may only serve a specific sub-set of offenders, or may include probation or diversion youth.

## RECOMMENDATIONS

### Recommendations Resulting from the Current Study

The results derived from this current study indicated that five characteristics were the most predictive of recidivism, for committed youth in Colorado. These five predictive characteristics are listed in order of their respective influence in Table 6 that follows.

**Table 6: The Five Most Predictive Characteristics of Juvenile Recidivists**

Recidivist Characteristic	Predictive Influence	Odds Ratio	Static or Dynamic
<b>Satisfactory to Excellent Parole Rating at Discharge</b>		-2.0	Dynamic
Male Sex		1.6	Static
<b>One or More Escapes</b>		1.4	Dynamic
VRA Commitment Offense		-1.3	Static
Age at First Adjudication		-1.1	Static

Three of the five characteristics that were most predictive of recidivism were static, and as such, are not subject to impact, change or improvement by the Division’s efforts (male sex, having a VRA commitment offense, and age at first adjudication). Conversely, the remaining two factors were dynamic and held the potential for improvement, if targeted by Division services, programming, and initiatives (parole rating at discharge and number of escapes while committed). These characteristics directly measure a youth’s success or compliance while on parole and, generally speaking, while committed. Earning a Poor or Unsatisfactory parole rating at discharge place youth at greater risk for recidivism, and is a variable that can be addressed with transitional services and treatment. Parole supervision and a subsequent successful transition back to the community holds great potential for impacting recidivism rates and deserves special attention. Similarly, supporting and encouraging youth to engage with treatment and services rather than “walking away” from a youth center, community placement, or while on parole can reduce subsequent risk for recidivism.

*What can the Division do, or what is already being done, in relation to these areas?*

*Where can the greatest “bang for the buck” be made as it relates to potential recidivism reduction?*

## **Poor or Unsatisfactory Parole Rating at Discharge**

The results of this study indicated that youth with a Poor or Unsatisfactory parole rating at time of discharge were twice as likely to recidivate as youth with a satisfactory to excellent parole rating. This factor clearly points to the importance of the parole transition period and the overall community re-integration process. Successful and smooth community re-entry is key to preventing recidivism. The Division already operates under the notion that “Transition planning begins at Assessment,” and strives to identify, invite, and maintain the participation of a multi-disciplinary team of professionals and other important members in the parole planning process: the youth, their family, clinical staff, education staff, client manager/parole officer, parole board, community ties, mentors, program staff, etc. This proactive approach puts parole planning front and center, as a priority for all parties involved.

Another important element to highlight is the Division’s efforts over the last five fiscal years to implement a more advanced Parole Practice Framework that allows for targeted responses (e.g.: services, interventions, incentives, and privileges) to youth behavior exhibited while on parole. This framework allows for monitoring youth success and compliance while on parole, and includes a menu of responses that coincide with both violation behavior and positive behavior. To guide parole officers in the use of graduated responses during community supervision, examples of potential behaviors and responses have been created. Behaviors and responses are categorized together, with positive behavior eliciting positive responses and violation behavior eliciting violation responses. The Parole Practice framework standardizes the expectations of parolee behavior and conforms to best practices for long-term behavior change.

How a youth adjusts to living in the community has been a consistent predictor of recidivism for nearly two decades. The results of many years of analyses, including the current analysis, have pointed to the importance of this parole adjustment period (and rating thereof) in predicting future recidivism. Currently, the Division’s client managers/parole officers assign this rating to youth upon discharge. If a similar rating system could be implemented earlier in the parole process (perhaps mid-way through parole, or even 30-60 days into parole), youth flagged as “adjusting” Poor or Unsatisfactorily to the parole period could potentially have certain services bolstered or new services put in place to improve the re-entry process. These additional services or interventions may impact future discharge ratings and ultimately, the likelihood of future offending.

## **One or More Escapes during Commitment**

Youth in the Analysis Cohort who had a history of one or more escapes during their commitment were 1.4 times more likely to recidivate compared to youth without a history of escapes. Youth who abscond from a youth center, community placement, or from parole for four or more hours may simply be demonstrating a lack of impulse control or poor judgement skills that are frequently present among both committed and non-juvenile justice-involved youth. Conversely, a history of escapes may indicate a larger issue of program refusal, failure, or unwillingness to engage in meaningful treatment. In general, youth who escape are more likely to “walk away” from a community placement or be absent for a period of time while on parole. Some youth who “walk away” from community placements or from parole actively



choose to return on their own without reoffending or being apprehended by law enforcement. Alternatively, some youth who escape from supervision remain at large for extended periods of time.

The Division strives to develop individualized treatment plans and to place youth in the least restrictive placement possible based on the specific needs and associated risk present for individual youth as well as to the community at large. Each youth committed to the Division is assessed for specific treatment and/or offense-specific needs, as well as for risk and protective factors associated with the risk for recidivism. For the current cohorts of youth discharged during FY 2017-18 through 2019-20, the Colorado Juvenile Risk Assessment (CJRA) was used to assess both overall risk for recidivism and domain-specific risks and protective factors over time (typically at assessment, parole, and at discharge). In addition, the CJRA was also used as a tool in the development of the individualized treatment plan for each committed youth. More recently, the Division has moved toward using the YASI (Youth Assessment and Screening Instrument) to assess risk and to assist in targeted, individualized treatment planning. Future recidivism reports will include outcome measures specific to the YASI assessment, as these data become available for youth in future discharge cohorts.

Ultimately, placements and treatment plans are determined giving weight to the proximity to family and prosocial community support (among other factors), with the ultimate goal of successful reintegration back into the community in mind. These considerations in terms of youth placement attempt to increase the likelihood of family and community support engagement in treatment, including maintaining regular visits and contacts, with the hope of a smooth transition from the residential care offered by DYS to a return to the home community. By actively engaging each youth's available support network from family to community members, coaches, teachers, etc., DYS strives to engage youth in their treatment and thus ensure a more active investment. It is hoped that by fostering an investment in their treatment and providing supportive assets both within DYS and in the community, youth will be less likely to disengage with treatment by escaping or "walking away" from community placements or parole.

## **The True Recidivism Rate is Unknown**

Recidivism is defined by Colorado’s youth services system as a new felony or misdemeanor conviction or adjudication for an offense committed within a specified follow-up time period. Given this definition, recidivism rates are close estimates. The rates reported are as close to the true rate as is currently possible; however, they are still an underestimate. Several challenges exist that reduce the accuracy of these estimates.

### ***1) Offenses Committed in Other States Not Captured***

This study only uses data for offenses committed within the state of Colorado; therefore, if a youth commits an offense in another state, it remains undetected and is not included in the analysis. While it would be ideal to include offenses committed in other states, obtaining highly confidential data annually from 49 states, most of which do not measure juvenile recidivism regularly, is simply not possible.

### ***2) Time-at-Risk (actual increases)***

Time-at-risk increases when follow-up periods are extended (such as the two- and three-year follow-up periods). Increased time-at-risk results in “net widening,” during which more re-offending behavior is detected, and results in increased recidivism rates. For example, in a one-year follow-up period, a youth has 365 days at-risk, or one year’s opportunity to re-offend. Similarly, in a two-year follow-up period, that same youth has twice as much time-at-risk, thus doubling the opportunity to re-offend (730 days). It has been demonstrated that with increased time-at-risk, an increased number of youth recidivate. Further, as time passes and youth gain a longer distance from the services and treatment they received during their commitment to DYS, the less of an impact those protective factors have compared to more current and potentially negative peer or social influences.

### ***3) Judicial Process Delays Affect Recidivism Rates***

A recidivist act, as described in the methodology section of this analysis, is determined by a guilty finding leading to a new adjudication or conviction. The Judicial process involved in obtaining a guilty finding includes committing an offense, being arrested, having the offense filed in court, various court proceedings (hearings, trials, etc.) and then being found guilty by the court. This process can take a substantial amount

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<sup>xiv</sup> Please refer to reports published in prior years for a list of long-standing limitations and recommendations.

of time, and due to several possible delays, many filings remain open when the data used to create this report is extracted from the Judicial database.

#### ***4) Impact of the Global COVID-19 Pandemic***

The impact of the pandemic on recidivism is largely unknown at this point in time. Future evaluations and analyses may lend insight as more data is collected and reviewed in the coming years. Criminologists around the nation and the world will undoubtedly be studying the impact of the COVID-19 pandemic on offending behavior and public safety metrics for years to come. As the post-pandemic era unfolds, additional insights and observations will be possible as states and agencies are able to contextualize and analyze data collected during the pandemic.

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### **RECORD MATCHING BETWEEN DYS AND JUDICIAL**

Matching records provided by the Judicial Department to youth discharged from DYS is a complex and labor-intensive process that is challenged by an inability of data systems across State agencies to “talk” to one another using a common identifier, such as an identification number. In addition, typical matching techniques used in identifying adult offenders are simply not applicable to a juvenile population. Specifically, the typical forms of identification commonly present in the adult population (e.g.: driver’s license, social security number, etc.), are often rare or nonexistent for system-involved juveniles. Although DYS client managers ensure that the vast majority of youth discharge with these critical documents in-hand (state issued photo identification or driver’s license, social security number, birth certificate, etc.), these forms of identification are frequently absent from Judicial records. Thus, youth discharged from DYS must be matched to a multitude of Judicial filings using less straightforward means. For this study, youth were matched between these two data systems through a two-step process. This process is both automated and manual, utilizing DYS data for discharged youth during the time period of interest, and seven FYs of filings data provided to DYS by Judicial Department staff. Initially, youth are matched by DYS staff through an algorithm that compares elements of a youth’s name and date of birth. Next, any remaining youth who do not match are identified by hand until all discharged DYS youth are accounted for in the Judicial dataset. This hand-matching process is hindered by the vast number of aliases; misspellings; hyphenated names; attempts at intentional misrepresentation of identity; and data entry errors for dates of birth, social security numbers, etc. present in both data sets. Finally, all cases in the analysis data are reviewed to ensure the automated portion of the match did not result in any “false matches” in which two separate youth with similar names and identical dates of birth are incorrectly matched together. As a fidelity measure, each youth’s commitment case is identified in the Judicial dataset, thus providing great confidence that all youth are being appropriately matched across systems.

### **RECORD MATCHING BETWEEN DYS AND DENVER COUNTY COURT**

The annual recidivism report also includes DCC data in order to identify adult misdemeanor recidivist acts that are processed through Denver County Court. As a part of the data sharing MOU developed to include these records, DCC performs all records matching between filings data and youth who have discharged from DYS. Upon completion of the matching process, DCC provides a completed list of discharged DYS youth with adult misdemeanor convictions in Denver County Court for inclusion in the analysis. Any questions regarding the methods used to perform this matching process should be directed toward DCC.

## APPENDIX C – Significant Findings – Analysis Cohort

	Non-Recidivists		Recidivists		<i>p</i> -value <sup>1</sup>	% of Total
	<i>n</i>	%	<i>n</i>	%		
<b>Total (<i>N</i> = 1,146)<sup>2</sup></b>	<b>769</b>	<b>100%</b>	<b>377</b>	<b>100%</b>		<b>100%</b>
<b>1. Sex</b>						
Male	643	65.9%	332	34.1%	0.047	85.1%
Female	126	73.7%	45	26.3%		14.9%
<b>2. Number of Escapes<sup>3</sup></b>						
None	358	46.6%	112	29.7%	< 0.000	41.0%
One or more	411	53.4%	265	70.3%		59.0%
<b>3. Mean Age at First Adjudication</b>						
	15.2		14.8		0.017	15.0
<b>4. Prior Number of Adjudications</b>						
None	228	29.6%	82	21.8%	0.005	27.1%
One or more	541	70.4%	295	78.2%		72.9%
<b>5. Parole Rating at Discharge<sup>4,5</sup></b>						
Poor to Unsatisfactory	294	43.2%	231	63.6%	< 0.000	50.3%
Satisfactory to Excellent	386	56.8%	132	36.4%		49.7%
<b>6. VRA Commitment Offense</b>						
Non-VRA Offense	377	49.0%	221	58.6%	0.002	52.2%
VRA Offense	392	51.0%	156	41.4%		47.8%
<b>7. Violent Commitment Offense</b>						
Non-Violent	524	68.1%	285	75.6%	0.009	70.6%
Violent	245	31.9%	92	24.4%		29.4%
<b>8. Assessed Substance Abuse Treatment Need<sup>6</sup></b>						
No Assessed Need	116	15.3%	41	10.9%	0.042	13.8%
Assessed Need	642	84.7%	336	89.1%		86.2%
<b>9. Assessed Mental Health Treatment Need<sup>7</sup></b>						
No Assessed Need	286	38.0%	165	44.2%	0.044	40.1%
Assessed Need	467	62.0%	208	55.8%		59.9%
<b>10. Program in Place at Discharge</b>						
No Program in Place	282	36.7%	163	43.2%	0.032	38.8%
Program in Place	487	63.3%	214	56.8%		61.2%

<sup>1</sup>*p* < 0.05 indicates a statistically significant difference.

<sup>2</sup>Fifteen youth had more than one discharge during the follow-up periods. Of these 15 youth, six were found to be exclusively identified as either a recidivist or a non-recidivist in both discharge years, and were included in the analyses. These six youth were only counted once within the demographics analyses. The remaining nine "dual status" youth were excluded as they could be simultaneously described as both recidivists and non recidivists.

<sup>3</sup>An escape is defined as a period of time when a youth absconds from a commitment facility, a community placement, or from parole for four hours or longer without permission.

<sup>4</sup>The Parole Discharge Rating is the level at which the dient manager determines the youth to be at discharge in regard to parole compliance, which is based on pre-determined criteria.

<sup>5</sup>Includes youth who went on parole. A total of 103 youth did not go on parole and were excluded from the analyses.

<sup>6</sup>Includes only those youth with a valid substance abuse treatment needs assessment at commitment. Eleven youth were excluded from the analysis.

<sup>7</sup>Includes only those youth with valid CCAR Overall Problem Severity scores administered at assesment. Twenty youth were excluded from the analysis.

## APPENDIX D – Non-Significant Findings – Analysis Cohort

	Non-Recidivists		Recidivists		<i>p</i> -value <sup>1</sup>	Total	
	<i>n</i>	%	<i>n</i>	%			
<b>Total (N= 1,146)</b>	<b>769</b>	<b>100%</b>	<b>377</b>	<b>100%</b>		<b>100%</b>	
<b>Age at Discharge</b>	19.2		19.0		0.96	19.2	
<b>Age at Commitment</b>	16.9		16.8		0.92	16.9	
<b>Length of Service Total Commitment<sup>2</sup></b>	27.5		26.7		0.64	27.3	
<b>Length of Service Parole<sup>3</sup></b>	7.2		6.8		0.51	7.1	
<b>Commitment Offense Type</b>							
	Felony	467	60.7%	215	57.0%	0.23	59.5%
	Misdemeanor	302	39.3%	162	43.0%		40.5%
<b>CJRA Overall Risk Level at Discharge<sup>4</sup></b>							
	Not High	198	29.4%	94	28.0%	0.63	28.9%
	High	475	66.2%	242	72.0%		71.1%
<b>Minority/Non-Minority Ethnicity</b>							
	White	290	37.7%	139	36.9%	0.78	37.4%
	Non-White	479	62.3%	238	63.1%		62.6%
<b>Discharge Placement</b>							
	Parents/Guardian or Independent Living	321	41.7%	168	44.6%	0.37	42.7%
	Other Placement	448	58.3%	209	55.4%		57.3%
<b>Co-Occurring Disorder<sup>5</sup></b>							
	No co-occurring disorder at commitment	356	47.0%	190	50.4%	0.28	48.1%
	Co-occurring disorder at commitment	402	53.0%	187	49.6%		59.9%

<sup>1</sup>*p* < 0.05 indicates a statistically significant difference.

<sup>2</sup>Length of Service Total Commitment includes all time spent under DYS supervision from the date of commitment, including time spent in community placements, through the end of parole (discharge).

<sup>3</sup>Includes youth who went on parole. A total of 103 youth did not go on parole and were excluded from the analyses.

<sup>4</sup>Only valid CJRAs administered at discharge were included in the analysis. A discharge CJRA is considered to be valid if it is both complete and was administered within 90 days of discharge. A total of 1,009 youth in the Analysis Cohort had a valid discharge CJRA (88%).

<sup>5</sup>Includes youth with both a valid substance abuse treatment and mental health needs assessments administered at commitment.

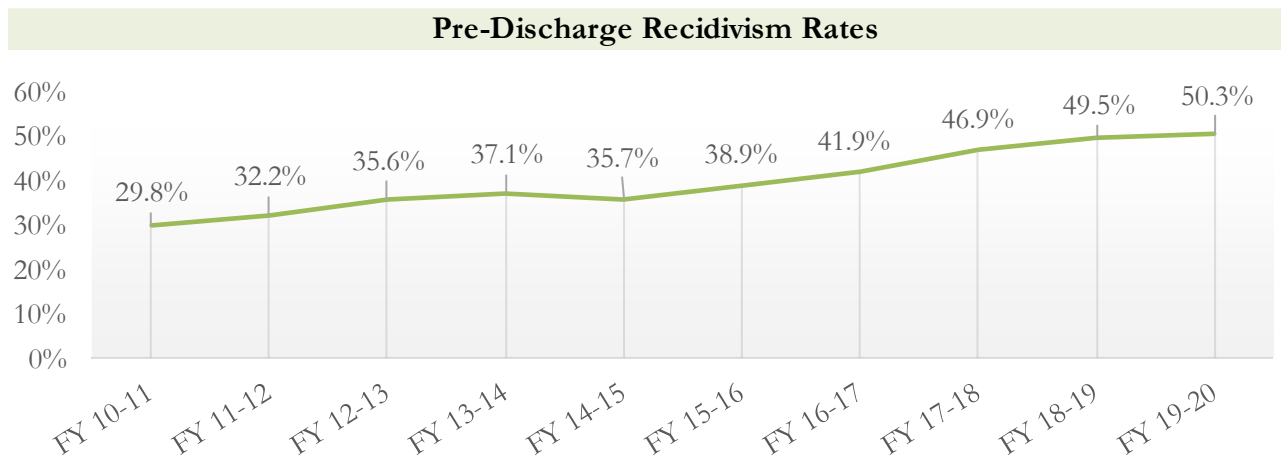
Additional variables were examined for analysis, but were not tested as the distribution of data between groups was either nonlinear, too unequal to continue, or the variables were closely correlated to one another and, in essence, measured the same variance in the dependent variable (recidivist status). These variables included, *but were not limited to*: number of secure need factors, sex offender status, commitment offense type (person or other), commitment type (special or not special sentence), number of recommitments, number of parole suspensions, and number of parole revocations.

## APPENDIX E – Pre-Discharge Recidivism Rates

In May 2019, Senate Bill 19-108 was signed into Colorado law, creating a Juvenile Justice Reform Committee (JJRC) that was responsible for implementing reforms to state agencies serving juvenile justice-involved youth populations. As a part of this bill, a common definition of recidivism was required among agencies, along with requirements for shared outcome measures for youth served by Diversion, Juvenile Probation, and the Division of Youth Services. The shared definition of recidivism that was adopted remained consistent with the Division’s existing definition of pre- and post-discharge recidivism.

Pre-discharge recidivism is defined as a new deferred agreement, adjudication, or conviction for a felony or misdemeanor offense that occurs between the date of commitment to and the date of discharge from the Division of Youth Services.

Ten years of pre-discharge recidivism rates are presented below.





## APPENDIX F – Terms and Definitions

**Disclaimer:** *These definitions are provided for quick reference purposes only. Please refer to the Colorado Revised Statutes for more complete definitions of legal categories and conditions.*

**Adjudication** - The result of an adjudicatory hearing in which the court determines that it has been proven beyond a reasonable doubt that a juvenile has committed a delinquent act, or that a juvenile has pleaded guilty to committing a delinquent act.

**Assessment** - Youth committed to DYS are assessed to determine a youth's classification and risk level, as well as needs for appropriate services, placement, and program referral.

**Colorado Juvenile Risk Assessment (CJRA)** - An assessment tool used to determine risk of recidivism. The comprehensive, empirically validated risk assessment allows the Division to identify and respond to the criminogenic factors directly contributing to youth offending behavior.

**Commitment** - Commitments are dispositions of juvenile cases resulting in the transfer of legal custody to the Department of Human Services by the court as a result of an adjudicatory hearing on charges of delinquent acts committed by the youth.

**Community Residential Placement** - DYS contracts with a number of private vendors to provide community-based programs to youth presenting the lowest risk of re-offending and youth transitioning from more secure programs.

**Discharge** - Time at which youth have completed their commitment and are no longer under the supervision and custody of the Division; most often directly following the completion of the parole period.

**Length of Service: Commitment (LOS-C)** - All commitment LOS figures are measured in months and are calculated for those discharged youth who spent time in the residential program for which LOS is reported (e.g., assessment, secure, staff secure, and community programs). LOS-C figures should be interpreted with caution. LOS-C is the sum of all residential placement time youth experience over the course of their commitment, but does not equate to time spent in state secure youth centers. LOS-C is the aggregate of time spent in all program types and levels.

**Length of Service: Commitment & Parole (LOS-C&P)** - The average amount of time in DYS custody and under DYS supervision (sentence start date to discharge date, including parole time), for all youth discharged from DYS during the reporting period, not including escape time.

**Length of Service: Parole (LOS-P)** - The average amount of time spent on parole status. Parole LOS is measured in months and is based on discharged youth.

**Length of Service: State Secure (LOS-SS)** - The amount of time spent in a state secure commitment youth center during the reporting period. All commitment LOS figures are measured in months and are based on discharged youth.

***New Commitment*** - Commitment of youth who were not previously committed, or who were previously committed but had been discharged from DYS.

***Other Residential*** - Placements include Job Corps, Group Homes, Hospitalization, etc.

***Parole*** - The status of an offender conditionally released from a residential setting by discretion of the Juvenile Parole Board. Colorado juvenile offenders have a mandatory minimum parole length of 6 months. While on parole a youth is placed under the supervision of a parole officer and is required to observe conditions of release set by the parole officer and the Juvenile Parole Board.

***Parole Revocation*** - The administrative action of the Juvenile Parole Board, which removes a youth from parole status in response to a violation of lawfully required conditions of parole, including the prohibition against commission of a new offense.

***Parole Suspension*** - The administrative action of the Juvenile Parole Board, which removes a youth from parole status in response to a violation of lawfully required conditions of parole, including the prohibition against commission of a new offense. Reconsideration of parole must occur within 90 days on a date determined by the Juvenile Parole Board.

***Pre-Discharge Recidivism*** – A new adjudication, or conviction for a felony or misdemeanor offense that occurred between the date of commitment and the date of discharge from the Division of Youth Services.

***Prior Adjudications*** - Adjudications that occurred prior to the current detention or current commitment sentence.

***Recidivism*** - An adjudication or conviction for a new felony or misdemeanor offense that occurred within one, two, or three years following discharge from the Division of Youth Services.

***Regional Management Structure*** - Decentralized DYS management structure comprised of four geographic regions in the state.

***Residential Programs*** - Programs that provide 24-hour care.

***Secure Residential Youth Center*** - A youth center with physical security features such as locked doors, sally-ports, and correctional fencing.

***Staff-Supervised Residential Program*** - Privately owned and operated, staff-supervised programs provide 24-hour line of sight supervision of youth.

***Youthful Offender System (YOS)*** - a maximum security prison in Pueblo, Colorado, that houses male and female offenders between ages 14–25. Inmates at YOS have all been convicted of a felony (for crimes committed when youth were between 14 – 19 years old) and sentenced as adults (prior to their 21<sup>st</sup> birthday) to the state's Department of Corrections system.

***YTD*** - Year to Date

## APPENDIX G – Crimes that Fall Under C.R.S., 24-4.1-302(1)

### CRIMES THAT FALL UNDER COLORADO'S VICTIM RIGHTS ACT

- Murder in the first degree, in violation of section 18-3-102;
- Murder in the second degree, in violation of section 18-3-103;
- Manslaughter, in violation of section 18-3-104;
- Criminally negligent homicide, in violation of section 18-3-105;
- Vehicular homicide, in violation of section 18-3-106;
- Assault in the first degree, in violation of section 18-3-202;
- Assault in the second degree, in violation of section 18-3-203;
- Assault in the third degree, in violation of section 18-3-204;
- Vehicular assault, in violation of section 18-3-205;
- Menacing, in violation of section 18-3-206;
- First degree kidnapping, in violation of section 18-3-301;
- Second degree kidnapping, in violation of section 18-3-302;
- (I) Sexual assault, in violation of section 18-3-402;
- (II) Sexual assault in the first degree, in violation of section 18-3-402, as it existed prior to July 1, 2000;
- Sexual assault in the second degree, in violation of section 18-3-403, as it existed prior to July 1, 2000;
- (I) Unlawful sexual contact, in violation of section 18-3-404; or
- (II) Sexual assault in the third degree, in violation of section 18-3-404, as it existed prior to July 1, 2000;
- Sexual assault on a child, in violation of section 18-3-405;
- Sexual assault on a child by one in a position of trust, in violation of section 18-3-405.3;
- Sexual assault on a client by a psychotherapist, in violation of section 18-3-405.5;
- Invasion of privacy for sexual gratification, in violation of section 18-3-405.6;
- Robbery, in violation of section 18-4-301;
- Aggravated robbery, in violation of section 18-4-302;
- Aggravated robbery of controlled substances, in violation of section 18-4-303;
- Incest, in violation of section 18-6-301;
- Aggravated incest, in violation of section 18-6-302;
- Child abuse, in violation of section 18-6-401;
- Sexual exploitation of children, in violation of section 18-6-403;
- Crimes against at-risk adults or at-risk juveniles, in violation of section 18-6.5-103;

Last Updated: January 2018

- Any crime identified by law enforcement prior to the filing of charges as domestic violence, as defined in section 18-6-800.3;
- An act identified by a district attorney in a formal criminal charge as domestic violence, as defined in section 18-6-800.3;
- Any crime, the underlying factual basis of which has been found by the court on the record to include an act of domestic violence, as defined in section 18-6-800.3, pursuant to section 18-6-801;
- Stalking, in violation of section 18-3-602 or 18-9-111;
- A bias-motivated crime, in violation of section 18-9-121;
- Careless driving, in violation of section 42-4-1402, that results in the death of another person;
- Failure to stop at the scene of an accident, in violation of section 42-4-1601, where the accident results in the death or serious bodily injury of another person;
- Any criminal attempt, as described in section 18-2-101, any conspiracy, as described in section 18-2-201, any criminal solicitation, as described in section 18-2-301, and any accessory to a crime, as described in section 18-8-105, involving any of the crimes specified in 24-4.1-302(1);
- Intimidating a witness or a victim, in violation of section 18-8-704;
- Retaliation against a witness or victim, in violation of section 18-8-706, Retaliation against a judge, in violation of section 18-8-615, Retaliation against a juror, in violation of section 18-8-706.5;
- Retaliation against a prosecutor, in violation of section 18-8-616;
- Aggravated intimidation of a witness or a victim, in violation of section 18-8-705;
- Tampering with a witness or victim, in violation of section 18-8-707;
- Indecent exposure, in violation of section 18-7-302; or
- Violation of a protection order issued under section 18-1-1001, against a person charged with committing sexual assault, in violation of section 18-3-402, sexual assault on a child, in violation of section 18-3-405, sexual assault on a child by one in a position of trust, in violation of section 18-3-405.3, sexual assault on a client by a psychotherapist, in violation of section 18-3-405.5, or stalking in violation of section 18-3-602;
- Human trafficking, in violation of section 18-3-503 or 18-3-504;
- First degree burglary, in violation of section 18-4-202;
- Child prostitution, in violation of section 18-7-40; Soliciting for child prostitution, in violation of section 18-7-402; Procurement of a child for sexual exploitation, in violation of section 18-6-404; Pimping of a child, in violation of section 18-7-405; Inducement of child prostitution, in violation of section 18-7-405.5; or Patronizing a prostituted child, in violation of section 18-7-406.
- Posting a private image for harassment in violation of section 18-7-107 or posting a private image for pecuniary gain in violation of section 18-7-108;

**Last Updated: January 2018**

**Any questions concerning the data presented in this report may be directed to:**

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Denver, CO 80236  
(303) 866-7956

Colorado Department of Human Services

Office of Children, Youth & Families

Division of Youth Services

**<https://cdhs.colorado.gov/about-cdhs/news/cdhs-publications-and-reports>**