2016 Juvenile Recidivism Report

Robyn Dumont MPPM
University of Southern Maine, Muskie School of Public Service, Maine Statistical Analysis Center

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2016
Juvenile Recidivism Report

University of Southern Maine
Muskie School of Public Service
2016 Juvenile Recidivism Report

Issued by the Maine Department of Corrections,
Division of Juvenile Services, and produced by the
Muskie School of Public Service, Maine Statistical Analysis Center

Author
Robyn Dumont

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Table of Contents

Executive Summary ................................................................. 1
  Key Findings ........................................................................ 2

I. Diverted Youth .................................................................. 4
  Introduction ....................................................................... 4
  2012 Cohort Description ...................................................... 4
  Trends ................................................................................. 6
  Recidivism ........................................................................ 10
  County and Region Analysis .............................................. 16

II. Supervised Youth ............................................................... 21
  Introduction ....................................................................... 21
  2012 Cohort Description ...................................................... 21
  Trends ................................................................................. 22
  Recidivism ........................................................................ 26
  County Analysis .................................................................. 34

III. Committed Youth ............................................................... 40
  Introduction ....................................................................... 40
  2012 First Release Cohort Description ................................ 40
  Trends ................................................................................. 43
  Community Reintegration and Return .................................. 47
  Discharge and Recidivism .................................................... 55

Appendix A ............................................................................ 64
Appendix B ............................................................................ 65
Appendix C ............................................................................ 66
Appendix D ............................................................................ 67
Appendix E ............................................................................ 68
Executive Summary

This report summarizes the data for three groups of youth involved with the Department of Juvenile Services between 2008 and 2012. The three groups are as follows:

**Diverted youth:** Diversion occurs when a referred youth is formally diverted by a Juvenile Community Corrections Officer (JCCO) from the juvenile justice system. Diversion may take the form of an informal adjustment,\(^1\) including sole sanction,\(^2\) or no further action. Youth who are successfully diverted do not continue on through the juvenile justice system. They may, however, be placed back into the justice system if they do not fulfill the terms of diversion.

**Supervised youth:** These youth had formal charges brought against them, were adjudicated by a judge, and subsequently placed under Department of Juvenile Services (DJS) supervision in the community (i.e., probation). Some of these youth may have spent a period of their supervision detained in a Youth Development Center yet were not committed.

**Committed youth:** Prior to release, these youth were adjudicated and were either sentenced by a judge to commitment within one of Maine’s secure facilities or were sentenced to probation terms which were subsequently revoked.

This report includes analysis of youth demographics (including gender, age, and race/ethnicity), offense class and type, facility, length of supervision (months to release and/or discharge), Youth Level of Service/Case Management Inventory (YLS-CMI) risk levels when available, and participation in Community Reintegration when applicable.

For the purpose of this report, recidivism is defined as whether an adjudicated youth is re-adjudicated (as a juvenile) or convicted (as an adult) for an offense committed following diversion or discharge from DOC supervision (e.g., probation or commitment).

Civil class\(^3\) adjudications or convictions are not included as recidivism events in this report.

---

\(^1\) An informal adjustment is a condition and/or assignment (such as an act of community service) that a youth must fulfill, following which the case is closed without a court hearing.

\(^2\) A sole sanction is a single condition and/or assignment that a youth must fulfill, following which the case is closed without a court hearing.

\(^3\) Unlike misdemeanor and felony offenses, which are criminal offenses, civil class offenses are non-criminal. The vast majority (99.7%) of civil offenses are drug and/or alcohol offenses.
Key Findings

Diverted Youth

- The overwhelming majority of diverted youth (93.3%) do not recidivate. Only a small proportion (6.7%) of diverted youth recidivated within a year of diversion.

- Youth with some offense types are less likely to recidivate than others. Youth who were diverted with property offenses were 1.2 times less likely than those diverted with personal offenses to recidivate. Youth diverted with drug/alcohol offenses were 1.7 times less likely than those diverted with personal offenses to recidivate.

- Diversion type (informal adjustment or no further action) appears to have no impact on recidivism. Youth who were diverted with no conditions to fulfill or assignments to complete were no more likely to recidivate than those who did have conditions or assignments.

Supervised Youth

- The number of youth supervised by MDOC has decreased. This number decreased by 36.4%, from 642 youth in 2008 to 408 youth in 2012.

- The proportion of adjudicated youth who are supervised has remained the same, at approximately 51.9%.

- Recidivism rates have remained stable. One-year recidivism rates for supervised youth remained statistically unchanged from 2008 to 2012, averaging 25.0%.

- Youth who recidivate do so quickly. A little over a quarter (26%) of supervised youth who were tracked for two years and recidivated within that period did so within the first three months of their initial adjudication.
Maine’s risk assessment appears to be accurately predicting the risk of recidivating for youth overall. Among supervised youth, those who were assessed as moderate risk were 2.8 times more likely than those assessed as low risk to recidivate. Youth who were assessed as high risk were 3.3 times more likely than those assessed as low risk to recidivate.

Risk assessment appears to be less accurate for females and youth of color. The correlation between risk level and recidivism is stronger for males than females and stronger for white youth than youth of color.

Committed Youth

A little more than half of the youth who are released to Community Reintegration are successfully reintegrated on first release. Of those youth who were committed to a facility and then released to Community Reintegration, 46.2% were returned to a facility for engaging in new criminal activity or otherwise not abiding by the conditions of their release.

Those who are not successfully reintegrated on Community Reintegration are returned to a facility quickly. More than half of the committed youth (60%) who were released to Community Reintegration and then returned to a facility within a year were returned within three months of release; approximately three-quarters (77%) were returned within 6 months.

Offense type appears to influence the likelihood that youth will be returned to a facility. Youth who were originally committed with property offenses and then released to Community Reintegration were 4.0 times more likely than those committed with personal offenses to be returned to a facility.

Committed youth are spending longer periods of time under DJS supervision. On average, committed youth spent 21.0 months under various forms of DJS supervision prior to final discharge, but this measure changed over time from an average of 18.3 in 2008 to 22.4 in 2012.

A little more than a third of committed youth recidivate within a year, and a little more than a half recidivate within two years. Of the 492 committed youth who were discharged and tracked for one year, 36.8% recidivated. Of the 413 committed youth who were discharged and tracked for two years, 53.8% recidivated.

Older youth are more likely to recidivate than younger youth. Youth who were 17 years of age at commitment were 2.3 times more likely than youth ages 15 and younger at commitment to recidivate within two years of discharge.
I. Diverted Youth

Introduction
This report analyzes data for youth who were referred for the first time and diverted at some point during the 2008 to 2012 calendar years. Diversion occurs when a referred youth is formally diverted by a Juvenile Community Corrections Officer (JCCO) from the juvenile justice system. Diversion may take the form of an informal adjustment, including sole sanction, or no further action. Youth who are successfully diverted do not continue on through the juvenile justice system. They may, however, be placed back into the justice system if they do not fulfill the terms of diversion.

This report includes analysis of youth demographics, offense class and type, recidivism rates, and county- and region-level analysis. For the purpose of this report, recidivism is defined in terms of whether a diverted youth is adjudicated (as a juvenile) or convicted (as an adult) for an offense committed in the one- or two-year time period following diversion. Unless otherwise stated, civil class adjudications or convictions are not included as recidivism events in this report.

2012 Cohort Description
The 2012 cohort is the most recent cohort for which recidivism data are available. That is, all of this cohort were diverted and had been tracked for a full year at the time the data were extracted for this analysis.

Demographics
Almost two-thirds (62.8%) of the youth in this cohort were male, while the remaining youth were female (37.2%). Youth 17 years of age made up the largest age group of diverted youth at 31.6%, followed by 16-year-olds (24.1%), youth ages 14 and younger (23.7%), 15-year-olds (16.0%), and youth ages 18 and older (4.5%). White youth made up 91.6% of diverted youth, youth of color made up 6.8%, and 1.6% of youth in the dataset had no race/ethnicity recorded.
Section I: Supervised Youth

Offense Class and Type
While youth may have had more than one offense at the time or referral, this analysis focuses on the most serious offense associated with each referral. Thus, if a youth was referred with both misdemeanor and civil offenses, only the misdemeanor offense is reflected here.

The majority of offenses (53.0%) associated with diversion were misdemeanor offenses. More than half (60.7%) of these misdemeanor offenses were property offenses, 24.9% were personal offenses, 7.5% were drug and alcohol offenses, and 6.9% were other offenses.7

Another 40.8% of offenses associated with diversion were civil offenses, and the vast majority of these, 99.9%, were drug and alcohol offenses. The remaining 6.2% of offenses associated with diversion were felony offenses. Approximately 57.1% of felonies were property offenses, 24.1% were personal offenses, 17.0% were drug and alcohol offenses, and the remaining 1.8% were other offenses.

Diversion Types
There are two types of diversion—no further action, which requires, as its name suggests, no further action on the part of the youth, and informal adjustments, which do require some type of action.8 A little more than a quarter (26%) of diversions were no further action; the remainder were informal adjustments (74%).

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7 Please see Appendix E for a list of offenses and offense types, including offenses categorized as “other.”
8 This may involve a behavior, such as abiding by a curfew or attending school regularly, or a service, such as community service or restitution.
Offense Description and Diversion Type
The distribution of offenses was quite similar for both types of diversion (informal adjustments and no further action). For both types, the most common offense categories associated with diversion were liquor (26% and 30%, respectively)\(^9\), followed by theft (23% and 22%), drugs (20% and 15%), and assault/threaten (11% and 12%). These four offenses made up approximately four-fifths (80% and 79%) of the charges with which diverted youth were referred.

Trends
Number of Diverted Youth and Average Number of Charges
From 2008 to 2012, the number of diverted youth decreased by 19% (from 2219 youth to 1808), resulting in approximately 400 fewer youth diverted in 2012 compared to 2008. This decrease can be attributed to the corresponding decrease in the number of youth who were referred to the juvenile justice system—a decrease of 26%. Furthermore, because the decrease in referrals was greater than the decrease in diversion, the proportion of diverted youth increased slightly, from 69% in 2008 to 75% in 2012. This increase is statistically significant.\(^{10}\)

---

\(^9\) Approximately 53% of liquor offenses were for possession; 37% were for consuming; and the remaining liquor offenses were for allowing minors to possess, furnishing, etc.

\(^{10}\) \(X^2(4, 14296) = 42.448, p < .001; \text{Phi} = .054\)
Average Number of Charges
The average number of offenses with which diverted youth were referred was 1.2, and this average remained relatively unchanged across the five year study period. Approximately 86% of youth had one offense, an additional 11% of youth had two offenses, and the remaining 3% had three or more offenses.

Offense Class
From 2008 to 2012, the proportion of diverted youth referred with civil offenses increased by 15%, while the proportion of youth referred with misdemeanor offenses decreased by 8%. The changes in civil and misdemeanor offenses are statistically significant.\(^\text{11}\) By 2012, 53% of diverted youth were referred with misdemeanors, and 41% were referred with civil offenses. The proportion of youth referred with felony offenses remained relatively unchanged at around 7% over the five year period.

\(^{11}\) \(X^2(4, 9656) = 13.328, p = .010; \Phi = .037\)
Offense Type

From 2008 to 2012, the proportion of youth diverted with drug or alcohol offenses increased by 16% while those with property offenses decreased by 14%. The proportions of personal and other crimes remained relatively unchanged at 15% and 5% respectively. The change in offense type is related to the change in offense class (above), since civil drug or alcohol offenses constitute the largest single intersection category between offense class and type. In 2008, 35% of diverted youth were referred with civil drug or alcohol offenses; by 2012, that proportion had increased to 41%.

12 These changes were statistically significant: property offenses: \( X^2(4, 10328) = 38.70, p < .001; \) Cramer’s V = .061
drug and alcohol offenses: \( X^2(4, 10328) = 20.24, p < .001; \) Cramer’s V = .044
Race/Ethnicity
The proportion of diverted youth that were youth of color increased over the years of the study, composing 4.4% of the 2008 cohort and 6.8% of the 2012 cohort. The proportion of youth of color within the diverted population increased by 56% over the time period included in this study, but did not reach parity with the proportion of youth of color in the overall Maine population (7.7%) which likewise increased, albeit at a slower rate. Reaching parity in 2012 would have required that an additional 17 youth of color be diverted for a total of 140.

![Figure I-6: Race/Ethnicity, Diverted Youth](image)

Gender
The proportion of diverted youth that was female has fluctuated over the years of the study, composing on average 38.1% of diverted youth. Comparatively speaking, females composed a larger proportion of the diverted youth population than supervised youth (22% female) or committed youth (11%). Females composed the highest proportion of diverted youth in cohorts 2008 and 2010 at 39.5% and the lowest proportion in cohort 2011 at 36.4%. The difference between these two rates is small but statistically significant.

![Figure I-7: Gender, Diverted Youth](image)

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13 Population data for Maine were obtained from the Easy Access to Juvenile Populations website for youth ages 10-17, accessed at [http://www.ojjdp.gov/ojstatbb/ezapop](http://www.ojjdp.gov/ojstatbb/ezapop).
14 $X^2(1, 3898) = 4.056, p = .044; \text{Phi} = .032$
Recidivism\textsuperscript{15}

One- and Two-Year Rates

Only a small proportion (6.7\%) of diverted youth recidivated within one year of diversion;\textsuperscript{16} the overwhelming majority (93.3\%) did not.\textsuperscript{17} While the one-year recidivism rate for the 2012 cohort is currently the lowest, that rate is likely to increase slightly as updates become available.\textsuperscript{18} One-year rates for previous years, which are unlikely to change, remained relatively stable at approximately 6.7\%.

A larger proportion of diverted youth recidivated within two years of diversion. The two-year rates for the 2011 and 2012 cohorts may change as updates become available, but the average recidivism rate for the previous years, which are unlikely to change, was 12.3\%.

\textbf{FIGURE I-8: ONE- AND TWO-YEAR RECIDIVISM RATES, DIVERTED YOUTH}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{recidivism_rates.png}
\caption{One-Year Recidivism and Two-Year Recidivism Rates, Diverted Youth}
\end{figure}

\textbf{Time to Recidivate}

One quarter of those who recidivated within the two-year tracking period did so within the first six months of the start of diversion. A little more than half (56\%) recidivated within the first year.

\textsuperscript{15} Civil class recidivating offenses are not included in recidivism rates in this report.

\textsuperscript{16} When the recidivating event occurs before the diverted youth turns 18, the recidivating offense information comes from CORIS records, and the date of the offense is used as the date of recidivism. When the recidivating event occurs after the age of 18, the recidivating offense information comes from DPS records, and the date of arrest is used as the date of recidivism.

\textsuperscript{17} These rates do not include the 2012 cohort since these rates are likely to change. Some of this cohort may have committed offenses during the one-year time period that had not yet been adjudicated at the time of data collection.

\textsuperscript{18} See previous footnote.
FIGURE I-9: TIME TO RECIDIVATE, DIVERTED YOUTH

Time to Recidivate by Cohort
The following table presents numbers and rates of recidivism for each of the 2008 through 2011 cohorts at the six-month, one-year, eighteen-month, and two-year time marks. A number of youth in the 2012 cohort had not yet been tracked for more than one year at the time these data were extracted, so the rates for that cohort are not final. On average, youth who recidivated took 10.7 months to do so, and there were no differences between cohorts.

Notably, 88.0% of youth did not recidivate at all during the two-year tracking period.

<table>
<thead>
<tr>
<th></th>
<th>Did Not Recidivate Within Two Years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>2008</td>
<td>1930</td>
<td>87.0%</td>
</tr>
<tr>
<td>2009</td>
<td>2097</td>
<td>87.3%</td>
</tr>
<tr>
<td>2010</td>
<td>1842</td>
<td>89.0%</td>
</tr>
<tr>
<td>2011</td>
<td>1631</td>
<td>89.2%</td>
</tr>
<tr>
<td>Total</td>
<td>7500</td>
<td>88.0%</td>
</tr>
</tbody>
</table>

Recidivism by Demographics
Of those youth who were tracked for a full two years\(^{19}\), approximately 11.8% recidivated within that time period, but there were demographic differences in the rate. First, a higher proportion of males recidivated compared to females—13.8% versus 8.5%.

\(^{19}\) This includes all youth from the 2008 to 2011 cohorts and a small portion of those from the 2012 cohort.
Also, younger youth recidivated at higher rates than older youth, with approximately 16.5% of youth ages 14 and younger recidivating compared to 13.0% of those age 15, 10.5% of those age 16, 9.3% of those age 17, and 8.3% of those ages 18 and older. Lastly, youth of color recidivated at a higher rate than white youth—16.9% versus 11.5%. All these differences were statistically significant.

Furthermore, each of these demographic differences persist when controlling for other factors. This means, for instance, that any given female, when matched to a male in terms of all other characteristics (age, race/ethnicity, offense class, and offense type) is less likely to recidivate than the male. (See Recidivism Rate by Multiple Variables section of this report, page 15.)

![Figure I-10: Recidivism by Demographic Characteristics, Diverted Youth](image)

**Recidivism and Offense Class**

While 6.4% of youth diverted from the 2008 to 2011 cohorts recidivated within one year, there were differences based on the severity of the original offense for which youth were referred. Youth referred with misdemeanor offenses were more likely than youth referred with civil or felony offenses to recidivate. Approximately 7.3% of those with misdemeanor offenses were adjudicated for offenses committed within a year of diversion, compared to 5.2% of those referred with felony offenses and 5.3% of those referred with civil offenses.

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20 A small proportion of records (1.5%) contained no race/ethnicity data. Recidivism for this group of “unknowns” is not included here.

21 Gender: \(X^2(1, 9022) = 56.11, p < .001; \) Phi = .061

Age: \(X^2(4, 9022) = 71.32, p < .001; \) Cramer’s V = .089

Race: \(X^2(2, 9022) = 14.57, p = .001; \) Cramer’s V = .040
Recidivism and Changes in Offense Class

Youth who recidivate may reoffend with offenses similar to their original offenses, less severe offenses, or more severe offenses. The majority of youth (56.4%) who recidivated within two years did so with similar offenses. A little more than a quarter (27.4%) recidivated with more severe offenses, and a smaller proportion (16.2%) recidivated with less severe offenses.

While felonies made up a slightly larger proportion (7.4%) of recidivating offenses compared to original offenses (5.4%), the majority of recidivating felony offenses (61.5%) were committed by youth who were originally referred with misdemeanor offenses.

<table>
<thead>
<tr>
<th>Recidivating Offense</th>
<th>Original Offense</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil</td>
<td>Civil</td>
<td>165</td>
<td>11.8%</td>
<td>160</td>
<td>11.5%</td>
<td>8</td>
<td>0.6%</td>
<td>333</td>
<td>23.9%</td>
</tr>
<tr>
<td></td>
<td>Misdemeanor</td>
<td>288</td>
<td>20.6%</td>
<td>613</td>
<td>43.9%</td>
<td>58</td>
<td>4.2%</td>
<td>959</td>
<td>68.7%</td>
</tr>
<tr>
<td></td>
<td>Felony</td>
<td>31</td>
<td>2.2%</td>
<td>64</td>
<td>4.6%</td>
<td>9</td>
<td>0.6%</td>
<td>104</td>
<td>7.4%</td>
</tr>
<tr>
<td>Total</td>
<td>Civil</td>
<td>484</td>
<td>34.7%</td>
<td>837</td>
<td>60.0%</td>
<td>75</td>
<td>5.4%</td>
<td>1396</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The table above shows the distribution of recidivism and changes in offense class among diverted youth. The colors represent the nature of change: light blue for an increase in severity, dark blue for no change, and white for a decrease in severity.

---

22 This piece of analysis includes civil class adjudications and/or convictions.
Recidivism and Offense Type
Approximately 8.2% of diverted youth referred with personal offenses recidivated within one year, similar to the rate at which youth with “other” offenses recidivated—9.1%. 23 A smaller proportion of youth referred for property offenses recidivated (6.7%), and those referred with drug or alcohol offenses were least likely to recidivate—only 5.2% of these youth were adjudicated for offenses committed within a year of diversion.

Recidivism and Changes in Offense Type 24
Overall, youth who recidivated within two years tended not to recidivate with the same types of offenses with which they were originally referred. Only 43.8% of diverted youth who recidivated within two years did so with the same types of offenses. Two groups, however, did tend to recidivate with the same types; these groups were those whose original offenses were drug or alcohol offenses and those whose original offenses were property offenses. These two groups accounted for 19.1% and 18.5% of the two-year recidivism events. An additional 13.6% and 10.5% of recidivating events were accounted for by youth who were referred with one of these offenses (drug/alcohol or property) and then reoffended with the other.

### Table I-5: Recidivism and Changes in Offense Type, Diverted Youth

<table>
<thead>
<tr>
<th>Recidivating Offense</th>
<th>Original Offense</th>
<th>Personal</th>
<th>Property</th>
<th>Drugs/Alcohol</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td>76</td>
<td>5.4%</td>
<td>93</td>
<td>6.7%</td>
<td>64</td>
</tr>
<tr>
<td>Property</td>
<td></td>
<td>102</td>
<td>7.3%</td>
<td>258</td>
<td>18.5%</td>
<td>190</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
<td></td>
<td>45</td>
<td>3.2%</td>
<td>146</td>
<td>10.5%</td>
<td>267</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>26</td>
<td>1.9%</td>
<td>27</td>
<td>1.9%</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>249</td>
<td>17.8%</td>
<td>524</td>
<td>37.5%</td>
<td>542</td>
</tr>
</tbody>
</table>

23 Please see Appendix E for a list of offenses categorized as “other.”
24 This piece of analysis includes civil class adjudications and/or convictions.
Recidivism Rate by Multiple Variables

The preceding sections of this report looked at recidivism rates by a number of independent variables (age, gender, etc.). While this type of analysis (bivariate analysis) gives a snapshot of the impact that one variable has on recidivism, it does not give the clearest picture of which variables are associated with recidivism because it cannot account for the simultaneous impact of each of the other variable. For instance, bivariate analysis might reveal that older youth are less likely to recidivate, but it cannot tell whether these youth might also be lower risk or whether a greater proportion of them are male—attributes which might have a hidden impact, making it appear that age is a factor when it is not.

In order to achieve this, logistic regression must be used. Creating a logistic regression model involves testing all the variables that might reasonably be thought to have an impact on the dependent variable in order to identify those that have a direct impact, those that have a controlling impact, and those that have little or no impact. In this analysis, age at diversion, days on supervision, diversion region, diversion type (informal adjustment or no further action), gender, number of charges, offense class, offense type, race/ethnicity, and type of diversion (no further action vs. informal adjustment) were explored to determine their impact on recidivism. Of these, only two variables were found to have no impact: days on supervision and diversion type. The impact of each of the remaining variables was as follows:

- **Gender**: Males were 1.6 times more likely than females to recidivate.
- **Age at diversion**: Youth who were 14 years of age or younger at the time of diversion were 1.8 times more likely than youth aged 17 to recidivate.
- **Race/ethnicity**: Youth of color were 1.5 times more likely than white youth to recidivate.
- **Offense type**: Youth who were diverted with drug/alcohol offenses were 1.7 times less likely than those diverted with personal offenses to recidivate. Youth diverted with property offenses were 1.2 times less likely than those diverted with personal offenses to recidivate.
- **Offense class**: Youth who were diverted with misdemeanor offenses were 1.4 times more likely than those diverted with felony offenses to recidivate. Youth diverted with civil offenses were 1.7 times more likely than those diverted with felony offenses to recidivate.
- **Region**: Youth who were diverted in Region 2 were 1.3 times more likely than those diverted in Region 1 to recidivate. Youth who were diverted in Region 3 were 1.3 times more likely than those diverted in Region 1 to recidivate.
- **Number of Charges**: Each additional charge increases the odds of a youth recidivating by 10%.  

25 The overall model is significant at the .01 level, predicts 87.5% of the responses correctly, and has a Nagelkerke R Square of .035. Logistic regression results table is presented in Appendix A.
It is particularly interesting to note that the type of diversion (informal adjustment or no further action) had no impact on recidivism. Youth who were diverted with no conditions to fulfill or assignments to complete were no more likely to recidivate than those who did have conditions or assignments.

This finding also held true for youth who whose most serious initial charges were drug and/or alcohol—diversion type was not related to recidivism.²⁶

County and Region Analysis

The following analyses focus on diversion and recidivism in each of Maine’s sixteen counties. Because some of the counties are relatively small in terms of population and because rates calculated on small numbers can fluctuate greatly from one year to another, these analyses use the average of the three most recent years (2010 to 2012). This approach achieves a balance between focusing on the most recent year and using enough data to achieve reliable rates.

**Diversion Rates by County and Region (2010 to 2012)**

Before youth are diverted from the juvenile justice system, they are first referred to it. The following table presents the rates of youth from each county who were referred and the rates of referred youth from each county who were subsequently diverted from the juvenile justice system.

<table>
<thead>
<tr>
<th>County</th>
<th>Average # Youth Referred per Year</th>
<th>Average # Youth Diverted per Year</th>
<th>Diversion Rate (per 10 youth referred) per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Androscoggin</td>
<td>246</td>
<td>164</td>
<td>6.7</td>
</tr>
<tr>
<td>Cumberland</td>
<td>487</td>
<td>336</td>
<td>6.9</td>
</tr>
<tr>
<td>Washington</td>
<td>35</td>
<td>25</td>
<td>7.1</td>
</tr>
<tr>
<td>Sagadahoc</td>
<td>71</td>
<td>52</td>
<td>7.3</td>
</tr>
<tr>
<td>Kennebec</td>
<td>194</td>
<td>144</td>
<td>7.4</td>
</tr>
<tr>
<td>Knox</td>
<td>62</td>
<td>47</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Statewide</strong></td>
<td><strong>2293</strong></td>
<td><strong>1750</strong></td>
<td><strong>7.6</strong></td>
</tr>
<tr>
<td>York</td>
<td>424</td>
<td>326</td>
<td>7.7</td>
</tr>
<tr>
<td>Hancock</td>
<td>65</td>
<td>50</td>
<td>7.7</td>
</tr>
<tr>
<td>Lincoln</td>
<td>45</td>
<td>35</td>
<td>7.8</td>
</tr>
<tr>
<td>Aroostook</td>
<td>127</td>
<td>105</td>
<td>8.3</td>
</tr>
<tr>
<td>Franklin</td>
<td>41</td>
<td>34</td>
<td>8.3</td>
</tr>
<tr>
<td>Oxford</td>
<td>105</td>
<td>88</td>
<td>8.4</td>
</tr>
<tr>
<td>Somerset</td>
<td>97</td>
<td>82</td>
<td>8.5</td>
</tr>
<tr>
<td>Penobscot</td>
<td>194</td>
<td>173</td>
<td>8.9</td>
</tr>
<tr>
<td>Waldo</td>
<td>75</td>
<td>67</td>
<td>8.9</td>
</tr>
<tr>
<td>Piscataquis</td>
<td>25</td>
<td>23</td>
<td>9.2</td>
</tr>
</tbody>
</table>

²⁶ Regression results available upon request.
The highest diversion rate occurred in Piscataquis, where on average 9.2 of every 10 referred youth were diverted. Waldo and Penobscot likewise had high rates—both 8.9. The lowest diversion rates were observed in Androscoggin, Cumberland, and Washington counties, at 6.7, 6.9, and 7.1, respectively.

The following table presents the rates of youth from each of Maine’s three juvenile corrections regions who were referred and the rates of referred youth from each region who were subsequently diverted. While Region 1 had the highest referral rate, at 1.9, it had the lowest diversion rate, at 7.3.

### Table I-7: Referral and Diversion Rates by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Average # Youth Referred per Year</th>
<th>Average # Youth Diverted per Year</th>
<th>Diversion Rate (per 10 youth referred) per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
<td>912</td>
<td>661</td>
<td>7.3</td>
</tr>
<tr>
<td>Region 2</td>
<td>763</td>
<td>563</td>
<td>7.4</td>
</tr>
<tr>
<td>Statewide</td>
<td>2,293</td>
<td>1,750</td>
<td>7.6</td>
</tr>
<tr>
<td>Region 3</td>
<td>618</td>
<td>525</td>
<td>8.5</td>
</tr>
</tbody>
</table>

**Average Recidivism Rates**

Diverted youth in Lincoln, Franklin, and Cumberland counties had the lowest rates of two-year recidivism at 9.6%, 9.8%, and 9.9% respectively. Waldo, Androscoggin, and Sagadahoc counties had the highest rates at 18.1%, 17.5%, and 16.7% respectively.

---

27 Juvenile corrections regions are divided by county, as follows:
Region 1: Cumberland and York
Region 2: Androscoggin, Franklin, Kennebec, Knox, Lincoln, Oxford, and Sagadahoc
Region 3: Aroostook, Hancock, Penobscot, Piscataquis, Somerset, Waldo, and Washington
At 10.5%, Region 1 had the lowest two-year recidivism rate among diverted youth. Regions 2 and 3 had recidivism rates of 13.6% and 13.5% respectively. The difference between the regions is statistically significant.\

**Average Time to Recidivate**
The average amount of time it took youth who recidivated within the two year tracking period was 10.7 months. This time varied from county to county. While the data from this analysis encompasses several years, the number of youth who recidivated in some counties is small—fewer than 20 youth,

\[ X^2(2, 8116) = 16.65, p < .001; \Phi = .045 \]
and rates based on such small numbers should be interpreted with caution. Despite this caveat, there were differences among counties in the average time in which youth recidivated, from Washington youth at 9.4 months to Franklin youth at 12.3 months.

**Figure I-15: Average Time to Recidivate by County, Diverted Youth**

On average, youth from Region 2 who recidivated within two years of diversion did so one month faster than youth from Region 1 (10.2 months compared to 11.1), but this difference was not statistically significant.

**Figure I-16: Average Time to Recidivate by Region, Diverted Youth**

* Fewer than 20 diverted youth recidivated from these counties.
IN SUMMARY – DIVERTED YOUTH

- The overwhelming majority of diverted youth (93.3%) do not recidivate. Only a small proportion (6.7%) of diverted youth recidivated within a year of diversion.

- Youth with some offense types are less likely to recidivate than others. Youth who were diverted with property offenses were 1.2 times less likely than those diverted with personal offenses to recidivate. Youth diverted with drug/alcohol offenses were 1.7 times less likely than those diverted with personal offenses to recidivate.

- Diversion type (informal adjustment or no further action) appears to have no impact on recidivism. Youth who were diverted with no conditions to fulfill or assignments to complete were no more likely to recidivate than those who did have conditions or assignments.
II. Supervised Youth

Introduction
This report analyzes data on youth who were supervised for the first time at some point during the 2008 to 2012 calendar years. In this context, supervised refers to youth who had formal charges brought against them, were adjudicated by a judge, and subsequently placed under Department of Juvenile Services (DJS) supervision in the community (i.e., probation). This report includes analysis of youth demographics, offense class and type, Youth Level of Service/Case Management Inventory (YLS-CMI) completion rates and risk levels, recidivism rates, and county-level analysis. For the purpose of this report, recidivism is defined as whether an adjudicated youth is re-adjudicated (as a juvenile) or convicted (as an adult) for an offense committed following placement on supervision. Civil class\textsuperscript{29} adjudications or convictions are not included as recidivism events in this report.

2012 Cohort Description
The 2012 cohort is the most recent cohort for which recidivism data are available. That is, all of this cohort were placed on supervision and tracked for a full year at the time data were extracted for this analysis.

Demographics
A little more than three-quarters (76.5\%) of the youth in this cohort were male, a little less than three-quarters (72.1\%) were between the ages of 15 and 17, and the majority (90.7\%) were white. Altogether, white males between the ages of 15 and 17 composed nearly half (49.5\%) of the 2012 cohort. Females composed nearly a quarter (23.5\%) of all youth in the 2012 cohort. Approximately one-fifth (19.9\%) of youth were 14 or younger, whereas only 8.1\% of all youth were 18 or older. Youth of color composed 9.1\% of the 2012 cohort.

Offense Type and Class
While youth may be adjudicated for more than one offense at the time of supervision, this report focuses on the most serious offense associated with supervision.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
\textbf{Gender} & \# & \% \\
\hline
Female & 96 & 23.5\% \\
Male & 321 & 76.5\% \\
\hline
Total & 408 & 100.0\% \\
\hline
\end{tabular}
\caption{Table II-1: Demographic Distributions, Supervised Youth, 2012 Cohort}
\end{table}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
\textbf{Age groups} & \# & \% \\
\hline
\leq 14 & 81 & 19.9\% \\
15 & 100 & 24.5\% \\
16 & 95 & 23.3\% \\
17 & 99 & 24.3\% \\
\geq 18 & 33 & 8.1\% \\
\hline
Total & 408 & 100.0\% \\
\hline
\end{tabular}
\caption{Table II-2: Demographic Distributions, Supervised Youth, 2012 Cohort}
\end{table}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
\textbf{Race/ethnicity} & \# & \% \\
\hline
White & 370 & 90.7\% \\
Youth of color & 37 & 9.1\% \\
Unknown & 1 & 0.2\% \\
\hline
Total & 408 & 100.0\% \\
\hline
\end{tabular}
\caption{Table II-3: Demographic Distributions, Supervised Youth, 2012 Cohort}
\end{table}

\textsuperscript{29} See footnote 3.
Thus, if a youth was adjudicated for both misdemeanor and felony offenses, only the felony offense is reflected here. It is important to note that youth may be charged with more serious offenses than those for which they are adjudicated because youth may plead down. Thus, the distributions reported here may not accurately reflect the severity of the offenses committed by supervised youth. The majority of offenses (85.8%) associated with supervision for the 2012 cohort were misdemeanor offenses. Almost half (48.9%) of misdemeanors were property offenses, 35.4% were personal offenses, 8.6% were drug or alcohol offenses, and 7.1% were “other” offenses.30

<table>
<thead>
<tr>
<th>Offense Type and Class, Supervised Youth, 2012 Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Misdemeanor (85.8%)</strong></td>
</tr>
<tr>
<td>Personal</td>
</tr>
<tr>
<td>124</td>
</tr>
<tr>
<td>35.4%</td>
</tr>
<tr>
<td>Property</td>
</tr>
<tr>
<td>171</td>
</tr>
<tr>
<td>48.9%</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>8.6%</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>7.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>350</td>
</tr>
<tr>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Felony (14.2%)</strong></td>
</tr>
<tr>
<td>Personal</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>25.9%</td>
</tr>
<tr>
<td>Property</td>
</tr>
<tr>
<td>39</td>
</tr>
<tr>
<td>67.2%</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3.4%</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>58</td>
</tr>
<tr>
<td>100.0%</td>
</tr>
</tbody>
</table>

Approximately 14.2% of offenses associated with supervision were felony offenses. A little over two-thirds (67.2%) of all felonies were property offenses, about a quarter (25.9%) were personal offenses, 3.4% were drug or alcohol offenses, and the same proportion (3.4%) were “other” offenses.31

**Trends**

**Number of Supervised Youth**

The number of youth placed on supervision decreased by 36.4%, from 642 youth in 2008 to 408 youth in 2012. This decrease was primarily due to a decrease in the number of youth adjudicated for the first time; from 2008 to 2012, the number of these youth decreased by 37.6%. The proportion of adjudicated youth who were supervised remained relatively unchanged between 2008 and 2012 at approximately 51.9%.

30 Please see Appendix E for a list of offenses and offense types, including offenses categorized as “other.”
31 In the 2012 cohort, no youth were supervised for civil offenses.
TABLE II-3: NUMBER OF ADJUDICATED AND SUPERVISED YOUTH

<table>
<thead>
<tr>
<th>Year</th>
<th>Total number adjudicated youth</th>
<th>Total number adjudicated and supervised youth</th>
<th>Percent supervised youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1253</td>
<td>642</td>
<td>51.2%</td>
</tr>
<tr>
<td>2009</td>
<td>1043</td>
<td>530</td>
<td>50.8%</td>
</tr>
<tr>
<td>2010</td>
<td>1056</td>
<td>553</td>
<td>52.4%</td>
</tr>
<tr>
<td>2011</td>
<td>951</td>
<td>503</td>
<td>52.9%</td>
</tr>
<tr>
<td>2012</td>
<td>782</td>
<td>408</td>
<td>52.2%</td>
</tr>
</tbody>
</table>

Number of Offenses
The mean number of offenses for which supervised youth were adjudicated remained relatively unchanged from one year to the next. The average number of offenses from 2008 to 2012 was 2.17, but this average was skewed by a number of outliers. The majority of youth (53.1%) were charged with one offense, and an additional 24.7% were charged with two offenses, so that more than three-quarters of youth (77.8%) were charged with one or two offenses.

<table>
<thead>
<tr>
<th># Charges</th>
<th>%</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>53.1%</td>
<td>53.1%</td>
</tr>
<tr>
<td>2</td>
<td>24.7%</td>
<td>77.8%</td>
</tr>
<tr>
<td>3</td>
<td>9.8%</td>
<td>87.7%</td>
</tr>
<tr>
<td>4</td>
<td>5.3%</td>
<td>93.0%</td>
</tr>
<tr>
<td>≥ 5</td>
<td>7.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Offense Class
From 2008 to 2012, the number of felony charges decreased by about half (52.1%), while the number of misdemeanor charges decreased by about a third (32.8%). Thus, the proportion of youth charged with felonies changed, ranging from a high of 18.8% in 2008 to a low of 14.1% in 2011. The difference between these two rates is statistically significant.\(^32\)

\(^{32}\) Because there was only one record associated with a civil charge in these two years, civil charges were not included in this analysis. \(X^2(1, 1144) = 4.46, p = .035;\) Phi = .062
Section II: Supervised Youth

Offense Type
Property offenses made up the largest category of offenses for first adjudicated, supervised youth; overall, they accounted for about half (49.2%) of offenses between 2008 and 2012. An additional 36.7% of all offenses were personal offenses. Drug or alcohol and “other” offenses34 accounted for 7.6% and 6.5% respectively. The proportions of offenses in each category have remained relatively stable over the 5-year period.

FIGURE II-3: OFFENSE TYPE, SUPERVISED YOUTH

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33 Civil charges not included.
34 Please see footnote 7.
Race/Ethnicity
On average, 9.4% of supervised youth were youth of color, and while there appear to be some differences from one year to another, these differences are due to the small sample size and are not statistically significant. For each of the years from 2008 to 2012, youth of color were disproportionately represented among supervised youth. The proportion of youth of color in the overall Maine population increased between 2008 and 2012; by 2012 the proportion was 7.7%. Achieving parity in 2012 would have required supervising 6 fewer youth of color (supervising 31 youth of color in 2012 rather than 37).

Figure II-4: Race/Ethnicity, Supervised Youth

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35 Population data for Maine were obtained from the Easy Access to Juvenile Populations website for youth ages 10-17, accessed at http://www.ojjdp.gov/ojstatbb/ezpop/
Recidivism
While the majority (75.0%) of youth who were first adjudicated and supervised from 2008 to 2012 did not recidivate, a small proportion (25.0%) did. The following analyses focus on this small proportion.

One-Year Rates
One-year recidivism rates remained statistically unchanged from 2008 to 2012, averaging 25.0%. While the rate for the 2012 cohort is currently the lowest rate of the past four years, that rate may change as updates become available.

Time to Recidivate
A little over a quarter (26%) of those who were tracked for two years and recidivated within that period did so within the first three months of their initial adjudication. An additional 19% recidivated between four and six months after initial adjudication, 14% recidivated between seven and nine months, and 10% recidivated between ten and twelve months. A total of 70% of those who recidivate within 2 years do so in the first year following initial adjudication.

---

36 Measured from first adjudication date to subsequent offense date for youth who recidivate before the age of 18; measured from first adjudication date to arrest date for those who recidivate after the age of 18.
37 Some youth may have committed offenses during the one-year time period that had not yet been adjudicated at the time of data collection.
Time to Recidivate by Cohort
The following table presents numbers and rates of recidivism for each of the five cohorts. Less than a third (29.4%) of the 2012 had been tracked for two years at the time these data were extracted, so the rates for that cohort are not final. On average, youth who recidivated with the two-year time period took 8.14 months to do so, but there were differences between cohorts. The 2008 cohort had the longest average recidivism time at 9.47 months, and the 2011 cohort had the shortest time at 7.05 months. The difference between these two measures is statistically significant.  

---

38 Independent t-test: \( t(382.3) = 3.543, p < 0.001 \)
Recidivism by Demographic Characteristics
Of those youth who were tracked for a full two years, approximately 35.6% recidivated within that time period (24.9% within the first year, 10.7% within the second), but there were demographic differences in the rate. First, a higher proportion of males recidivated compared to females—36.8% versus 31.4%. Also, youth who were younger at the start of supervision recidivated at higher rates than older youth, with approximately 44.8% of youth ages 14 and younger recidivating compared to 37.6% of those age 15, 33.0% of those age 16, 30.9% of those age 17, and 30.1% of those ages 18 and older. Lastly, youth of color recidivated at a higher rate than white youth—44.0% versus 35.0%.\(^{39}\) All these differences were statistically significant.

![Figure II-8: Recidivism by Demographic Characteristics, Supervised Youth](image)

Recidivism by Offense Class
There were no differences in either the one- or two-year recidivism rates by offense class.

Recidivism and Changes in Offense Class\(^{40}\)
Youth who recidivate may reoffend with offenses similar to their original offenses, less severe offenses, or more severe offenses. The majority of youth (64.6%) who recidivated within two years did so with similar offenses. A little less than a quarter (24.2%) recidivated with less serious offenses, and a relatively small proportion (11.2%) recidivated with more serious offenses.

Felonies made up 15.4% of original offenses and 15.5% of recidivating offenses. While these rates are very similar, the majority of recidivating felony offenses (71.7%) were committed by youth who originally committed misdemeanor offenses. The majority of youth whose original offense was a felony (62.3%) recidivated with a misdemeanor offense.

\(^{39}\) A small proportion of records (<1%) contained no race/ethnicity data. Recidivism for this group of “unknowns” is not included here.

\(^{40}\) This piece of analysis includes civil class adjudications and/or convictions.
Section II: Supervised Youth

TABLE II-5: RECIDIVISM AND CHANGES IN OFFENSE CLASS, SUPERVISED YOUTH

<table>
<thead>
<tr>
<th>Recidivating Offense</th>
<th>Original Offense</th>
<th>Civil</th>
<th>Misdemeanor</th>
<th>Felony</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Civil</td>
<td>1</td>
<td>0.1%</td>
<td>129</td>
<td>13.1%</td>
<td>14</td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>1</td>
<td>0.1%</td>
<td>590</td>
<td>60.1%</td>
<td>94</td>
</tr>
<tr>
<td>Felony</td>
<td>0</td>
<td>0.0%</td>
<td>109</td>
<td>11.1%</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>0.2%</td>
<td>828</td>
<td>84.4%</td>
<td>151</td>
</tr>
</tbody>
</table>

increase in severity
no change
decrease in severity

Recidivism by Offense Type

While 25.0% of supervised youth recidivated within one year, there were differences by offense type.\(^{41}\) Approximately 18.4% of youth whose original offenses were drug or alcohol offenses recidivated, compared to 26.7% and 26.9% respectively of those whose original offenses were property or “other” offenses. A total of 23.7% of youth whose original offenses were personal offenses recidivated; however, this rate was not statistically different from any of the other rates.

\(^{41}\) $X^2(3, 2636) = 7.836$, $p = .050$; Phi = .055
Recidivism and Changes in Offense Type

Overall, youth who recidivated within two years tended not to recidivate with the same types of offenses for which they were supervised. Only 42.8% of supervised youth who recidivated within two years did so with the same types of offenses. Two groups, however, did tend to recidivate with the same types—those whose original offenses were drug or alcohol offenses and those whose original offense were property offenses.

Together, the four original offense types and the four recidivating offense types result in sixteen offense pairings. Three of these pairings account for more than half of the recidivating offenses (51.3%). These pairs were property/property (at 27.4%), personal/personal (11.9%), and personal/property (11.9%).

Recidivism by Risk Level

Completion rates for the Youth Level of Service/Case Management Inventory (YLS-CMI) for supervised youth at intake ranged from a low of 77.6% in 2010 to a high of 84.3% in 2012. The increase in completion rates between these two years is statistically significant. The overall YLS-CMI completion rate for 2008 to 2012 was 79.6%.
Of those youth who were assessed, approximately 39.7% were assessed as low risk, 49.2% were assessed as moderate risk, and 11.1% were assessed as high risk.\(^{44}\) The average (mean) risk score was 11.76 and the median score was 11.00.

A total of 24.7% of assessed youth recidivated within one year, but there were differences in the rate of recidivism by risk level: 14.0% of low risk youth recidivated, 30.8% of moderate risk youth recidivated, and 36.2% of high risk youth recidivated. The difference in recidivism between low risk youth and moderate risk youth was statistically significant;\(^ {45}\) the difference in recidivism between moderate and high risk youth was not.\(^ {46}\)

**Recidivism by Risk Level and Gender**

There were differences between males and females in terms of assessed risk. The average score for males was 11.29, while the average score for females was 13.51. This difference is statistically significant.\(^ {47}\) This difference between genders was also observed in risk levels.

\(^{44}\) While the YLS-CMI specifies a very high risk category comprising scores from 35 to 42, very few youth in the eligible data set (n<10) had scores that fell within this range. This category was combined with the high risk category for analysis.

\(^{45}\) \(x^2(1, 1865) = 72.470, p < .001; \) Phi = .197

\(^{46}\) This may be partially attributable to the small number of youth who scored high on the risk assessment.

\(^{47}\) Independent t-test: \(t(2095) = 5.299, p < .001\)
While 55.8% of females were assessed at moderate risk, 47.5% of males were, and while 14.5% of females were assessed at high risk, 10.1% of males were. These differences were also statistically significant.\(^48\)

Despite the females’ higher risk assessments, they were not more likely to recidivate. In fact, females who were assessed at moderate risk were less likely to recidivate than their male counterparts (21.1% compared to 33.8%). Low risk males and females recidivated at similar rates, as did high risk males and females.

While risk levels are predictive of recidivism for both males and females, the correlation between risk and recidivism is stronger for males than females.\(^49\)

\(^{48}\) \(x^2(2, 2097) = 25.0111, p < .001; \Phi = .109\)

\(^{49}\) Males: \(x^2(2, 1656) = 89.727, p < .001, \Phi = .233\)

Females: \(x^2(2, 441) = 11.789, p = .003, \Phi = .164\)
Section II: Supervised Youth

Recidivism by Risk Level and Race/Ethnicity

There were differences between white youth and youth of color in terms of assessed risk. The average score for white youth was 11.51, while the average score for youth of color was 14.40. This difference is statistically significant.\(^{50}\) A difference between white youth and youth of color was also observed in risk levels. While 16.5% of youth of color were assessed at high risk, 10.6% of white youth were, and while 27.6% of youth of color were assessed at low risk, 40.8% of white youth were. These differences were also statistically significant.\(^{51}\)

**FIGURE II-16: RECIDIVISM BY RISK LEVEL AND RACE/ETHNICITY, SUPERVISED YOUTH**

When separated by risk level, white youth and youth of color recidivate at similar rates. Nevertheless, the correlation between risk and recidivism is stronger for white youth than for youth of color.\(^{52}\)

**FIGURE II-17: RECIDIVISM BY RISK LEVELS AND RACE/ETHNICITY, SUPERVISED YOUTH**

---

\(^{50}\) Independent t-test: \(t(2082) = -4.942, p < .001\)

\(^{51}\) \(\chi^2(2, 2084) = 15.608, p < .001; \Phi = .087\)

\(^{52}\) White youth: \(\chi^2(2, 1885) = 79.550, p < .001; \Phi = .205\)

Youth of color: \(\chi^2(2, 199) = 7.142, p = .028; \Phi = .189\)
Recidivism Rate by Multiple Variables
The preceding sections of this report looked at recidivism rates by a number of independent variables (age, gender, etc.). While this type of analysis (bivariate analysis) gives a snapshot of the impact that one variable has on recidivism, it does not give the clearest picture of which variables are associated with recidivism because it cannot account for the simultaneous impact of each of the other variable. For instance, bivariate analysis might reveal that older youth are less likely to recidivate, but it cannot tell whether these youth might also be lower risk or whether a greater proportion of them are male—attributes which might have a hidden impact, making it appear that age is a factor when it is not.

In order to achieve this, logistic regression must be used. Creating a logistic regression model involves testing all the variables that might reasonably be thought to have an impact on the dependent variable in order to identify those that have a direct impact, those that have a controlling impact, and those that have little or no impact. In this analysis, age at adjudication, gender, number of charges, offense class, offense type, race/ethnicity, region of adjudication, and YLS-CMI risk assessment level were explored to determine their impact on recidivism. Of these, four variables were found to have an impact: age at adjudication, gender, offense type, and YLS-CMI risk assessment level. The impact of each of these variables was as follows:

- **Age at adjudication**: Males were 1.4 times more likely than females to recidivate.
- **Gender**: Youth who were 14 years of age or younger at the time of adjudication were 1.7 times more likely than youth ages 18 and older to recidivate.
- **Offense type**: Youth who were adjudicated with property offenses were 1.3 times more likely than those adjudicated with personal offenses to recidivate.
- **YLS-CMI risk assessment level**: Youth who were assessed as moderate risk were 2.8 times more likely than those assessed as low risk to recidivate. Youth who were assessed as high risk were 3.3 times more likely than those assessed as low risk to recidivate.53

County Analysis
The following analyses focus on supervision and recidivism in each of Maine’s sixteen counties. Because some of the counties are relatively small in terms of population, and because rates calculated on small numbers can fluctuate greatly from one year to another, these analyses use the average of the data from the three most recent years (2010 to 2012). This approach achieves a balance between focusing on the most recent year and using enough data to achieve reliable rates.

53 The overall model is significant at the .01 level, predicts 67.0% of the responses correctly, and has a Nagelkerke R Square of .102. Logistic regression results table is presented in Appendix B.
Supervision Rates by County and Region
Before youth are sentenced to be supervised by the DJS, they must first be adjudicated for an offense. The following table presents the rates of youth from each county who were adjudicated and the rates of adjudicated youth from each county who were subsequently sentenced to supervision in the community.

The lowest rate of adjudication occurred in Oxford, where on average, 4.2 of every 1,000 youth were adjudicated per year. Cumberland and Penobscot likewise had low rates at 5.3 and 5.7, respectively. The highest adjudication rates were observed in Sagadahoc, Knox, and Waldo counties, with rates of 15.9, 10.8, and 9.8, respectively.

The lowest supervision rate occurred in Androscoggin, where on average, 2.9 of every 10 adjudicated youth were sentenced to supervision in the community. Oxford and Hancock likewise had low rates at 3.0 and 3.2, respectively. The highest supervision rates were observed in York, Lincoln, and Sagadahoc counties, with rates of 7.8, 7.3, and 7.1, respectively.

<table>
<thead>
<tr>
<th>County</th>
<th>Average 10- to 17-Year-Old Population per Year</th>
<th>Average # Youth First Adjudicated per Year</th>
<th>Average # Youth Supervised per Year</th>
<th>First Adjudicated Rate per 1,000 Population</th>
<th>Supervised Rate per 10 Youth Adjudicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Androscoggin</td>
<td>10,620</td>
<td>103</td>
<td>30</td>
<td>9.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Oxford</td>
<td>5,970</td>
<td>25</td>
<td>8</td>
<td>4.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Hancock</td>
<td>4,556</td>
<td>36</td>
<td>12</td>
<td>8.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Washington</td>
<td>2,997</td>
<td>27</td>
<td>10</td>
<td>9.1</td>
<td>3.8</td>
</tr>
<tr>
<td>Franklin</td>
<td>2,860</td>
<td>22</td>
<td>10</td>
<td>7.7</td>
<td>4.4</td>
</tr>
<tr>
<td>Somerset</td>
<td>5,366</td>
<td>48</td>
<td>21</td>
<td>8.9</td>
<td>4.4</td>
</tr>
<tr>
<td>Penobscot</td>
<td>13,810</td>
<td>79</td>
<td>35</td>
<td>5.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Piscataquis</td>
<td>1,656</td>
<td>14</td>
<td>7</td>
<td>8.3</td>
<td>4.9</td>
</tr>
<tr>
<td><strong>Statewide</strong></td>
<td><strong>128,117</strong></td>
<td><strong>930</strong></td>
<td><strong>488</strong></td>
<td><strong>7.3</strong></td>
<td><strong>5.2</strong></td>
</tr>
<tr>
<td>Kennebec</td>
<td>11,917</td>
<td>100</td>
<td>53</td>
<td>8.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Cumberland</td>
<td>27,595</td>
<td>147</td>
<td>78</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Waldo</td>
<td>3,824</td>
<td>37</td>
<td>20</td>
<td>9.8</td>
<td>5.4</td>
</tr>
<tr>
<td>Aroostook</td>
<td>6,863</td>
<td>56</td>
<td>32</td>
<td>8.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Knox</td>
<td>3,606</td>
<td>39</td>
<td>24</td>
<td>10.8</td>
<td>6.2</td>
</tr>
<tr>
<td>Sagadahoc</td>
<td>3,374</td>
<td>54</td>
<td>38</td>
<td>15.9</td>
<td>7.1</td>
</tr>
<tr>
<td>Lincoln</td>
<td>3,086</td>
<td>20</td>
<td>15</td>
<td>6.5</td>
<td>7.3</td>
</tr>
<tr>
<td>York</td>
<td>20,017</td>
<td>122</td>
<td>95</td>
<td>6.1</td>
<td>7.8</td>
</tr>
</tbody>
</table>
The following table presents the rates of youth from each of Maine’s three juvenile corrections regions who were adjudicated and the rates of adjudicated youth from each region who were subsequently sentenced to supervision. While Region 1 had the lowest adjudication rate, at 5.6, it had the highest supervision rate, at 6.4.

### Table II-7: Adjudication and Supervision Rates by Region, Supervised Youth

<table>
<thead>
<tr>
<th>County</th>
<th>Average 10- to 17-Year-Old Population per Year</th>
<th>Average # Youth First Adjudicated per Year</th>
<th>Average # Youth Supervised per Year</th>
<th>First Adjudicated Rate per 1,000 Population</th>
<th>Supervised Rate per 10 Youth Adjudicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 3</td>
<td>39,073</td>
<td>298</td>
<td>138</td>
<td>7.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Region 2</td>
<td>41,432</td>
<td>363</td>
<td>177</td>
<td>8.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Statewide</td>
<td>128,117</td>
<td>930</td>
<td>488</td>
<td>7.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Region 1</td>
<td>47,612</td>
<td>269</td>
<td>173</td>
<td>5.6</td>
<td>6.4</td>
</tr>
</tbody>
</table>

### Average Recidivism Rates

Supervised youth in Washington, Lincoln, and Franklin counties had the lowest rates of two-year recidivism at 22.2%, 23.7%, and 24.0% respectively. Androscoggin, Knox, and Sagadahoc counties had the highest rates at 43.9%, 41.5%, and 40.2% respectively. Interestingly, five of these six counties, representing both the lowest and highest recidivism, are located in Region 2.
At 31.5%, Region 1 had the lowest two-year recidivism rate among supervised youth. Regions 2 and 3 had recidivism rates of 36.5% and 34.7% respectively.

**Average Time to Recidivate**

For the 2010 to 2012 cohorts, the average amount of time it took youth who recidivated within the two year tracking period to recidivate was 7.7 months. This time varied from county to county. While the data from this analysis encompass several years, the number of youth who recidivated in some counties is small—fewer than 20 youth, and rates based on such small numbers should be interpreted with caution.
Despite this caveat, there were differences among counties in the average time in which youth recidivated, from Washington youth at 4.3 months to Lincoln youth at 11.6 months. There were no differences in time to recidivate by region.

**FIGURE II-20: AVERAGE TIME TO RECIDIVATE BY COUNTY, SUPERVISED YOUTH**

<table>
<thead>
<tr>
<th>County</th>
<th>Time to recidivate (in months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington*</td>
<td>4.3</td>
</tr>
<tr>
<td>Oxford*</td>
<td>5.6</td>
</tr>
<tr>
<td>Hancock*</td>
<td>5.6</td>
</tr>
<tr>
<td>Penobscot</td>
<td>6.1</td>
</tr>
<tr>
<td>Piscataquis*</td>
<td>6.5</td>
</tr>
<tr>
<td>Knox</td>
<td>7.0</td>
</tr>
<tr>
<td>Kennebec</td>
<td>7.1</td>
</tr>
<tr>
<td>Sagadahoc</td>
<td>7.1</td>
</tr>
<tr>
<td>Franklin*</td>
<td>7.5</td>
</tr>
<tr>
<td>Cumberland</td>
<td>7.7</td>
</tr>
<tr>
<td>York</td>
<td>7.7</td>
</tr>
<tr>
<td>Statewide</td>
<td>7.7</td>
</tr>
<tr>
<td>Aroostook</td>
<td>8.0</td>
</tr>
<tr>
<td>Androscoggin</td>
<td>8.6</td>
</tr>
<tr>
<td>Somerset*</td>
<td>9.5</td>
</tr>
<tr>
<td>Waldo*</td>
<td>11.5</td>
</tr>
<tr>
<td>Lincoln*</td>
<td>11.6</td>
</tr>
</tbody>
</table>

* Fewer than 20 supervised youth recidivated from these counties.
### IN SUMMARY – SUPERVISED YOUTH

- The number of youth supervised by MDOC has decreased. This number decreased by 36.4%, from 642 youth in 2008 to 408 youth in 2012.

- The proportion of adjudicated youth who are supervised has remained the same, at approximately 51.9%.

- Recidivism rates have remained stable. One-year recidivism rates for supervised youth remained statistically unchanged from 2008 to 2012, averaging 25.0%.

- Youth who recidivate do so quickly. A little over a quarter (26%) of supervised youth who were tracked for two years and recidivated within that period did so within the first three months of their initial adjudication.

- Maine’s risk assessment appears to be accurately predicting the risk of recidivating for youth overall. Among supervised youth, those who were assessed as moderate risk were 2.8 times more likely than those assessed as low risk to recidivate. Youth who were assessed as high risk were 3.3 times more likely than those assessed as low risk to recidivate.

- Risk assessment appears to be less accurate for females and youth of color. The correlation between risk level and recidivism is stronger for males than females and stronger for white
III. Committed Youth

Introduction
This report analyzes data on youth who were released from a facility at some point during the 2008 to 2012 calendar years. Prior to release, these youth were adjudicated and were either sentenced by a judge to commitment within one of Maine’s secure facilities (Long Creek Youth Development Center or Mountain View Youth Development Center) or were sentenced to probation terms which were subsequently revoked. All of the youth represented in this analysis had been released from a facility at the time the data were queried. Release from a facility took one of several forms:

- Some of these youth had been released from a facility and placed on a less restrictive form of supervision within the community, a type of release known as Community Reintegration (CR). This study follows these youth to determine a rate of return. (Youth who do not comply with the terms of their community supervision may be returned to a facility.)
- Some youth had been released from supervision altogether. This study follows these youth to determine a rate of recidivism.
- Some youth had been both released to CR and subsequently released from supervision at the time data were queried. These youth show up in both return and recidivism analyses.
- Some youth had been discharged from a facility without having been released to CR. These youth are compared to youth who were released to CR in the recidivism section of this report.

This report includes analysis of youth demographics (including gender, age, and race/ethnicity), offense class and type, facility, length of supervision (months to release and/or discharge), Youth Level of Service/Case Management Inventory (YLS-CMI) risk levels, and participation in Community Reintegration. For the purpose of this report, recidivism is defined as whether an adjudicated youth is re-adjudicated (as a juvenile) or convicted (as an adult) for an offense committed following discharge. Civil class adjudications or convictions are not included as recidivism events in this report.

2012 First Release Cohort Description
The 2012 cohort is the most recent cohort for which recidivism data are available. That is, all of this cohort were released for the first time in 2012 (either to Community Reintegration or discharged) and tracked for a full year at the time the data were extracted for this analysis.

55 See footnote 3.
Demographics
The majority of the 97 youth in this cohort (88.7%) were male, while just 11.3% were female. Youth 17 years of age made up the largest group of committed youth at 37.1%. White youth made up 79.4% of the cohort, and youth of color made up the remaining 20.6%.

<table>
<thead>
<tr>
<th>Table III-1: Demographic Distributions, Committed Youth, 2012 Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>Age at Commitment</strong></td>
</tr>
<tr>
<td>≤ 15</td>
</tr>
<tr>
<td>16</td>
</tr>
<tr>
<td>17</td>
</tr>
<tr>
<td>≥ 18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Youth of color</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Offense Class and Type
While youth may be adjudicated and committed for more than one offense, this report focuses on the most serious offense associated with the commitment. Thus, if a youth was committed on both misdemeanor and felony offenses, only the felony offense is reflected here. It is important to note that youth may initially have been charged with more serious offenses than those for which they were adjudicated and committed because the original charges may have been pled down. The distributions reported here reflect the severity of the offenses for which youth were adjudicated, not necessarily the severity of the offenses committed.

More than two-thirds (68.0%) of the offenses associated with commitment for the 2012 first release cohort were misdemeanor offenses. Of these, almost half (48.5%) were personal offenses, 39.4% were property offenses, 6.5% were drug or alcohol offenses, and 6.5% were “other” offenses.56

Almost one-third (32.0%) of the offenses associated with commitment were more serious felony offenses. A little over half of these (54.8%) were property offenses, 32.3% were personal offenses, 6.5% were drug or alcohol offenses, and 6.5% were “other” offenses.57

56 Please see Appendix E for a list of offenses and offense types, including offenses categorized as “other.”
57 Seven records in the 2012 cohort were missing offense variables (along with three records from other cohorts). These values were copied from another dataset provided to Muskie by DOC for a prior study.
TABLE III-2: OFFENSE TYPE AND CLASS, COMMITTED YOUTH, 2012 COHORT

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Misdemeanor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td>32</td>
<td>48.5%</td>
</tr>
<tr>
<td>Property</td>
<td>26</td>
<td>39.4%</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
<td>4</td>
<td>6.5%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>6.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>66</td>
<td>100.0%</td>
</tr>
<tr>
<td><strong>Felony</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td>10</td>
<td>32.3%</td>
</tr>
<tr>
<td>Property</td>
<td>17</td>
<td>54.8%</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
<td>2</td>
<td>6.5%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>6.5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**First Release Types**
Youth who were released for the first time in 2012 were released in one of two ways. More than half (57.7%) were released to community reintegration while remaining under DJS supervision; the remaining 42.3% were discharged with no further supervision.

TABLE III-3: RELEASE TYPE, COMMITTED YOUTH, 2012 COHORT

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Reintegration</td>
<td>56</td>
<td>57.7%</td>
</tr>
<tr>
<td>Discharge from supervision</td>
<td>41</td>
<td>42.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>97</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Trends
The following analyses attempt to identify any trends across the 2008 to 2012 cohorts.

Release to Community Reintegration
Between 2008 and 2012, a total of 496 youth were fully discharged from DJS supervision. Of this number, 64.9% were released to community reintegration (CR) at some point prior to discharge.\(^5\) While this proportion appeared to fluctuate slightly from year to year, the differences were not statistically significant.

\[\text{FIGURE III-1: RELEASE TO COMMUNITY REINTEGRATION}\]

Releasing Facility
Between 2008 and 2012, a total of 504 youth were either released or discharged from one of Maine’s two youth development center facilities, Long Creek or Mountain View. Approximately 6% of release records were missing the variable indicating release facility, leaving a total of 475 records for analysis. Of these, a little more than half (54.7%) of released youth were released from Long Creek, and the remaining 45.3% were released from Mountain View. While these proportions fluctuated slightly over the years, the differences were not statistically significant.

\[\text{58 This proportion may be a slight undercount. An audit of two years’ worth of data (cohorts 2010 and 2012) found that a small number of records (2 in 2010 and 4 in 2012) were not properly notated for CR.}\]
TABLE III-4: COMMITMENT FACILITY

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th></th>
<th>2009</th>
<th></th>
<th>2010</th>
<th></th>
<th>2011</th>
<th></th>
<th>2012</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>LCYDC</td>
<td>52</td>
<td>55.9%</td>
<td>49</td>
<td>51.0%</td>
<td>60</td>
<td>54.1%</td>
<td>46</td>
<td>57.5%</td>
<td>53</td>
<td>55.8%</td>
<td>260</td>
</tr>
<tr>
<td>MVYDC</td>
<td>41</td>
<td>44.1%</td>
<td>47</td>
<td>49.0%</td>
<td>51</td>
<td>45.9%</td>
<td>34</td>
<td>42.5%</td>
<td>42</td>
<td>44.2%</td>
<td>215</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100%</td>
<td>96</td>
<td>100%</td>
<td>111</td>
<td>100%</td>
<td>80</td>
<td>100%</td>
<td>95</td>
<td>100%</td>
<td>475</td>
</tr>
</tbody>
</table>

Time Spent on Supervision
Youth discharged between 2008 and 2012 spent varying amounts of time under DJS supervision.

- Youth who were released into the community prior to discharge (n=322) spent an average of 12.2 months under DJS supervision within a facility prior to discharge, but this average increased over time. In 2008, the average length of time spent under supervision prior to release was 10.7 months; in 2012, the average time was 13.6 months, an increase of almost three months. This difference is statistically significant.\(^{59}\)
- Youth who were released to community reintegration continued to be supervised in the community until discharge, creating another metric of comparison—total time of supervision before discharge.\(^{60}\) While the average across all years was 23.4 months of total supervision, this average likewise increased over time. In 2008, the average length of total supervision time was 19.7 months; in 2012, the average length of total supervision time was 26.1 months, an increase of 6.4 months. This difference is also statistically significant.\(^{61}\)
- Youth who were discharged (n=174) with no CR spent the entirety of their supervised time in a facility. On average, these youth spent 16.6 months under supervision, and this remained stable over the years of study. (See Figure 2 on the following page for graph of these three measures.)

A comparison of these three metrics shows that youth who were discharged from a facility with no CR spent less total time on supervision compared to youth who were released into the community prior to discharge. In 2012, this was a difference of 9.0 months. On the other hand, discharged youth with no prior CR spent more time supervised in a facility prior to their first release (discharge) than youth who were released to community reintegration. In 2012, this difference was 3.5 months.

Youth who were discharged with no prior CR differed from youth who were released into the community prior to discharge in one significant way—they were older at the time of commitment. On average, youth who were discharged with no CR were 16 years and 10 months old at the time of commitment, while youth who were released to the community prior to discharge were 16 years and

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\(^{59}\) Independent t-test: \(t(103.3) = 2.871, p = .005\)

\(^{60}\) Some youth will be returned to a facility following release. In these cases, supervision occurs once again in a facility, but the total time of supervision remains the same.

\(^{61}\) Independent t-test: \(t(93.8) = 3.808, p < .001\)
5 months old at the time of commitment. While this difference (5 months) may not appear large, it is nevertheless statistically significant\(^{62}\) and may have a bearing on whether youth choose to work through the levels necessary to earn early release.

**FIGURE III-2: LENGTH OF SUPERVISION (IN MONTHS)**

![Figure III-2 Length of Supervision](image)

**Offense Class**

The proportion of released and straight discharged youth who were initially committed with felonies was 43.1\% from 2008 to 2012, but the proportion decreased in that time span. In 2008, 49.5\% of youth had been committed with felonies, but by 2012 that proportion stood at 32.0\%. This decrease is statistically significant.\(^{63}\)

**FIGURE III-3: OFFENSE CLASS**

![Figure III-3 Offense Class](image)

\(^{62}\) Independent t-test: \(t(424.4) = 4.160, p < .001\)

\(^{63}\) \(X^2(1, 202) = 6.427, p = .011\); Phi = .178
Offense Type
The proportion of released and discharged youth who were initially committed with property offenses was, on average, 51.0% over the years of the study. The proportion with personal offenses was 36.9%, the proportion with drug or alcohol offenses was 6.5%, and the proportion with “other” offenses was 5.6%. These proportions remained stable over the years of the study.

![Figure III-4: Offense Type](image)

Race/Ethnicity
An average of 15.7% of the youth released and discharged between 2008 and 2012 were youth of color. While this proportion fluctuated over the years, the changes were not statistically significant. The average proportion of committed youth that were youth of color was higher than the proportion of all Maine youth that were youth of color. The proportion of Maine youth that were youth of color increased slightly from 2008 to 2012, from 6.5% to 7.7%. Reaching parity in 2012 would have required committing 14 fewer youth of color for a total of 6 youth of color (rather than 20).

![Figure III-5: Race/Ethnicity](image)
Community Reintegration and Return

Community Reintegration by Demographics
From 2008 to 2012, 64.9% of youth were released to the community prior to discharge (n=496). There were no differences by gender or race/ethnicity, but there were statistically significant differences by age. Youth committed at the age of 17 were the least likely of all age groups to have been released to the community prior to discharge. Only 59% of this age group were released prior to discharge, compared with 80% of youth ages 15 and younger. (While those from the 18 and older age group also appear to be less likely to be released to CR, this is a smaller cohort with a slightly higher rate, and a statistically significant difference between this group and others cannot be established.)

**Figure III-6: Release by Demographic Characteristics**
![Graph showing release by demographic characteristics]

Gender Age at Commitment Race/Ethnicity

Community Reintegration by Facility
Mountain View and Long Creek released statistically comparable proportions of youth to CR prior to discharge. While the proportions appear to fluctuate over the years of analysis, this fluctuation was due to small numbers.

---

64 $X^2(3, 496) = 18.164, p < .001; \text{Cramer’s } V = .191$
Section III: Committed Youth

**Length of Stay**

The two facilities did differ, however, in how quickly they released youth to CR. On average youth were released to CR from Long Creek after 13.3 months and released to CR from Mountain View after 11.8 months—approximately 1.5 months (or 45 days) faster than Long Creek. This difference is statistically significant.65

Some of this difference can be explained by risk level.66 Youth who were released from Long Creek scored higher on their initial YLS-CMI risk assessment by an average of 3.7 points. This difference was statistically significant,67 but it does not entirely explain the difference in release time. When comparisons of release time are made at each risk level, differences between facilities disappear for low68 and moderate risk youth but not for high risk youth. Mountain View released high risk youth approximately two and a half (2.6) months earlier than Long Creek. Mountain View appeared to release high risk youth more quickly than low or medium risk youth, but the differences are small and not statistically significant. In fact, Mountain View released youth after approximately the same length of time regardless of risk level. Furthermore, earlier release of these high risk youth does not appear to impact their chances of succeeding on CR; 40.9% of high risk youth released from Mountain View were returned, and 50.6% of high risk youth released from Long Creek were returned. These rates are not statistically different.

---

65 Independent t-test: \( t(312.3) = 2.366, p = .019 \)
66 Because not all youth had an initial YLS performed within 365 days prior to commitment, this analysis is based on a smaller sample, \( n=277 \).
67 Independent t-test: \( t(254.5) = 4.076, p < .001 \)
68 A total of 11 low risk youth were released between 2008 and 2012—8 from Mountain View and 3 from Long Creek.
Regardless of risk level, time to release increased between 2008 and 2012, from an average of 11.1 in 2008 to an average of 13.5 in 2012. This increase, however, was driven by Mountain View, which increased the time to release by 3.1 months over this time period. These increases are statistically significant.\(^{69}\)

**Return Rate**

Youth who are released to CR may be returned to a facility if they engage in new criminal activity or otherwise do not abide by the conditions of their release while they are in the community. From 2008 to 2012, a total of 329 youth had been released to CR and tracked for one year. Of these youth, 46.2\% were returned to a facility. The rate of return decreased, however, from the 2009 release cohort to the 2012 cohort, and this decrease was statistically significant.\(^{70}\) A total of 57.6\% were returned in 2009, and a total of 37.5\% were returned in 2012—a decrease of 20.1 percentage points.

---

\(^{69}\) Independent t-test: \(t(105.4) = 2.670, p = .009; t(65.7) = 1.266, p = .012\)

\(^{70}\) \(X^2(1, 122) = 4.889, p = .027; \Phi = .200\)
While a greater number of youth were released from Long Creek and subsequently returned, the proportion of youth returned was not statistically different for Long Creek and Mountain View.

Return Rate by Risk Level
The majority of youth released to CR (57%) were assessed as moderate risk at the time of release, a little over a third (36%) were assessed as low risk, and 7% were assessed as high risk. Youth who were assessed as low risk were less than half as likely to be returned to a facility within a year as those assessed as high risk—33% versus 75%, respectively. While there was only a small number of youth assessed as high risk (n=12), the difference in return rates is statistically significant. Approximately 48% of youth assessed as moderate risk were returned—a rate that is not statistically different from either low or high risk youth.

---

71 Because risk level is being used in this context to “predict” return, only records indicating that the assessment was done within 90 days of release were included. Without this precautionary step, assessments may reflect (rather than predict) the behavior that triggered return.

72 \(X^2(2, 161) = 8.293, \text{ Cramer’s } V = .227\)
Return Rate by Demographic
While the overall rate of return to a facility was 46.2%, there were differences by age group. Those who were committed at 16 years of age or younger were more likely than those committed at age 17 and older to be returned to a facility (57% versus 35%). This difference was statistically significant. There were no differences by gender or race/ethnicity.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Return Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>56.4%</td>
</tr>
<tr>
<td>Male</td>
<td>44.8%</td>
</tr>
<tr>
<td>15 or younger</td>
<td>65.9%</td>
</tr>
<tr>
<td>16</td>
<td>51.2%</td>
</tr>
<tr>
<td>17</td>
<td>34.7%</td>
</tr>
<tr>
<td>18 or older</td>
<td>31.7%</td>
</tr>
<tr>
<td>White</td>
<td>45.3%</td>
</tr>
<tr>
<td>YOC</td>
<td>51.0%</td>
</tr>
</tbody>
</table>

Overall rate = 46.2%

Return Rate by Offense Type and Class
There were no differences in return rates by offense class or type.

Return Rate by Multiple Variables
The preceding sections of this report looked at return rates by a number of independent variables (age, risk level, etc.). While this type of analysis (bivariate analysis) gives a snapshot of the impact that one variable has on return, it does not give the clearest picture of which variables are associated with return because it cannot account for the simultaneous impact of each of the other variable. For instance, bivariate analysis might reveal that older youth are less likely to be returned, but it cannot tell whether these youth might also be lower risk or whether a greater proportion of them are male—attributes which might have a hidden impact, making it appear that age is a factor when it is not.

In order to achieve this, logistic regression must be used. Creating a logistic regression model involves testing all the available variables that might reasonably be thought to have an impact on the dependent variable in order to identify those that have a direct impact, those that have a controlling impact, and those that have little or no impact. In this analysis, age at commitment, facility, gender, months to release, offense class, offense type, race/ethnicity, and YLS level at release were explored to determine their impact. Of these, only three variables were found to have a direct impact on return to a facility: age at commitment, race/ethnicity, and offense type. YLS risk level at release was retained in the model as a control variable—its presence in the model ensured that youth of the same risk level were being compared.
The impact of each of the variables was as follows:

**Age at commitment:** Youth who were 17 years of age at commitment were 5.4 times less likely than youth ages 15 and younger at commitment to be returned to a facility. Youth who were 18 years of age at commitment were 3.4 times less likely than youth ages 15 and younger at commitment to be returned to a facility.

**Race/ethnicity:** Youth of color were 4.4 times more likely than white youth to be returned to a facility.

**Offense type:** Youth who were originally committed with property offenses were 4.0 times more likely than those committed with personal offenses to be returned to a facility.73

While these were the only variables that were identified as having an impact on return rate, it’s important to note that there are certainly other characteristics that would have been shown to have an impact had they been available as variables in the regression model. For instance, socioeconomic status, homelessness, and the availability of therapeutic treatments programs all likely impact the rate of return, but this information was not available in variable format and therefore was not included in the analysis.

The absence of relevant variables from the regression model may cause other variables to appear to have an impact when they do not. In the above regression results, race/ethnicity appears to directly impact return rate, but if youth of color were more likely than their white counterparts to come from low socioeconomic families, the relationship between race/ethnicity and return may be, in statistical terms, a “spurious” one.

**Time to Return**
Youth who were returned to a facility were returned relatively quickly. More than half of the youth (60%) who were returned to a facility within a year were returned within three months of release, and approximately three-quarters (77%) were returned within 6 months.74

---

73 The overall model is significant at the .01 level, predicts 75.2% of the responses correctly, and has a Nagelkerke R Square of .285. Logistic regression results table is presented in Appendix C.

74 While a two-year return rate was also explored, the vast majority (99%) of youth who were returned within two years were, in fact, returned within the first year.
Section III: Committed Youth

Change in Risk Score
Youth who were released to CR had two risk assessments—one done around the time of commitment and another following release. The average initial risk assessment score for released youth was 20.70 and the reassessment score was 11.25. Overall, then, the average change score was a decrease of 9.45 points. This decrease was not uniform across risk levels, however:

- Youth who were initially assessed as high risk (scores of 23 and higher) had an average initial risk score of 27.94 and a reassessment score of 11.97, a decrease of 15.97 points. These youth were no longer high risk but moderate risk at the time of reassessment.
- Youth who were initially assessed as moderate risk (scores of 9-22) had an average initial risk score of 15.42 and a reassessment score of 10.92, a decrease of 4.50 points. These youth remained moderate risk.
- Youth who were initially assessed as low risk (scores of 0-8) had an average initial score of 5.50 and a reassessment score of 8.25, an increase of 2.75 points. Furthermore, these youth were no longer low risk but moderate risk at the time of reassessment.

75 This analysis includes youth who were assessed initially within 365 days prior to commitment and reassessed within 90 days of release from a facility (n=132).

76 There were only a small number of youth who were initially assessed as low risk (n=8), and small numbers can be easily skewed by outliers, but this was not the case in this analysis. All but one youth scored higher at the time of release than at time of commitment. Also, while the average release score was 8.25, a number which could be rounded down to 8 (low risk), the majority of these youth were, in fact, medium risk at the time of release. Since “medium risk” best describes this small cohort, the decision was made to round the score up and classify them as such.
Section III: Committed Youth

Return Reason
When youth were returned to a facility, one of three possible reasons was entered in the CORIS database for the return—technical violation, new criminal conduct, or juvenile welfare. For a number of records (almost half, in fact), this field was left blank, leaving 81 records to analyze. Of these, 61.7% records indicated that the return was made for a technical violation, 34.6% indicated new criminal conduct, and 3.7% indicated juvenile welfare.\(^77\)

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\(^77\) A policy to return youth only in instances in which new criminal conduct occurred was implemented subsequent to the time period covered in this analysis, so this distribution is likely to change in the years that follow.
Discharge and Recidivism

Discharge by Demographics
From 2008 to 2012, 492 youth were discharged from supervision and tracked for one year. The majority of these youth were male (89%) and white (84%). Age at commitment varied, with 17-year-olds making up the largest proportion, at 37%. Age at discharge was primarily 18 or 19 years of age, at 35% for each of these age groups.

Figure III-15: Discharge Distribution by Demographic Characteristic

Discharge by Facility
Of the 492 records of youth discharged from supervision and tracked between 2008 and 2012, 51% indicated commitment at Long Creek, 43% indicated Mountain View, and 6% were missing this information.

Figure III-16: Commitment Facility
Section III: Committed Youth

Time to Discharge
On average, committed youth spent 21.0 months under various forms of DJS supervision prior to final discharge. This rate remained constant across facility, but it increased over time from an average of 18.3 in 2008 to an average of 22.4 in 2012. This increase of 4.2 months is statistically significant.78

![Figure III-17: Time to Discharge by Discharge Cohort](image)

One-Year Recidivism Rate
From 2008 to 2012, the one-year recidivism rate was 36.8%. However, because recidivism is defined here in terms of re-adjudication (or conviction, if occurring after age 18), the rate for the 2012 discharge cohort may not yet be final.79 The overall rate omitting this cohort was 39.5%. While recidivism rates appear to be decreasing over time, the differences between rates for the 2008 to 2011 cohorts are not statistically significant.

![Figure III-18: One-Year Recidivism by Discharge Cohort](image)

---

78 Independent t-test: t(169.9) = 3.071, p = .002

79 Although all of these youth were tracked for one year following discharge, youth who were discharged at the end of 2012 and committed recidivating offenses at the end of 2013 were likely not yet adjudicated/convicted for those offenses at the time data were queried in April of 2014.
Section III: Committed Youth

Two-Year Recidivism Rate
From 2008 to 2012, 413 youth were discharged from supervision and tracked for two years.\(^{80}\) From 2008 to 2012, the two-year recidivism rate was 53.8%. Again, because recidivism is defined here in terms of re-adjudication (or conviction, if occurring after age 18), the rates for the 2011 and 2012 discharge cohorts may not yet be final.\(^{81}\) The overall rate omitting these two cohorts was 55.3%. While recidivism rates appear to be decreasing over time, the differences between rates for the 2008 to 2010 cohorts are not statistically significant.

![Figure III-19: Two-Year Recidivism by Discharge Cohort](image)

One-Year Recidivism by Facility
There was no difference in recidivism rate by facility.

One-Year Recidivism by Demographic
While the overall one-year recidivism rate was 36.8%, there were differences by gender and age. Males were more likely than females to recidivate; 39.4% of males recidivated compared to 16.1% of females. Also, at 65.9%, youth who were committed at 17 years of age were more likely to recidivate than youth from the youngest age group (≤ 15 years of age) or youth from the oldest age group (≥ 18 years of age); these youth recidivated at rates of 31.4% and 27.7%, respectively. There was no difference in recidivism by race/ethnicity.

---

\(^{80}\) These youth are the same youth represented by the one-year recidivism rate with the exception of the 2012 cohort—fewer of these youth had been released and tracked two full years at the time data were queried for this analysis.

\(^{81}\) Although all of these youth were tracked for two year following discharge, youth who were discharged at the end of 2011 and committed recidivating offenses at the end of 2013 were likely not yet adjudicated/convicted for those offenses at the time data were queried in April of 2014.
Two-Year Recidivism by Demographic
While the overall two-year recidivism rate was 53.8%, there were differences by gender and age. Males were more likely than females to recidivate within a two year time period; 56.7% of males recidivated compared to 30.4% of females. Also, at 62.4%, youth who were committed at 17 years of age were more likely to recidivate than youth from the younger age groups; 43.1% of those ages 15 and younger recidivated, and 50.0% of those age 16 recidivated. These differences are statistically significant.82

Of interest here is the rate for those 18 years of age and older. The one-year recidivism rate for this age group was low—the lowest of the four groups. The two-year rate for this age group, however, is the second highest. This suggests that this age group recidivates more slowly than younger youth.

There was no difference in recidivism by race/ethnicity.

---

82 Gender: $X^2(1, 492) = 11.663, \( p = .001 \); \( \Phi = .154 \)
Age at commitment: $X^2(3, 492) = 10.545, \( p = .014 \); Cramer’s V = .146
Section III: Committed Youth

There were not many differences in recidivism by offense type or class. The only significant difference occurred between those with drug/alcohol offenses and those with property offenses. Those with drug/alcohol offenses were the least likely to recidivate within one year, at 17.9%, while those with property offenses were the most likely to recidivate, at 40.1%. This difference was statistically significant.\(^8\) While other rates appear to be different (for instance, the rates of drugs/alcohol and other offenses), this cannot be established statistically due to the small number of cases involved. There was no difference in recidivism by offense class.

---

\(^8\) \(X^2(1, 275) = 5.282, p = .022; \) Phi = .139
Section III: Committed Youth

Two-Year Recidivism by Offense Type and Class
When looking at two-year recidivism rates by type and class, the only difference occurred between those with property offenses and those with personal offenses. Those with property offenses were more likely to recidivate, at 59.7%, than those with personal offenses, at 48.1%. These differences were statistically significant. Of interest here is the increase in the two-year rate for the drugs/alcohol group over the one-year rate. While the rate is expected to increase given the longer timeframe, the increase in this rate was 143%. In comparison, rates for personal, property, and other offenses increased by 37%, 49%, and 24% respectively. There was no difference in recidivism by offense class.

![Figure III-23: Two-Year Recidivism by Type and Class](image)

Recidivism by Participation in Community Reintegration
Participation in Community Reintegration made no difference in recidivism rates. Youth who previously had been released to CR recidivated at a rate similar to that of youth who were discharged with no prior CR. This was true of both one- and two-year recidivism rates.

Two-Year Recidivism Rate by Multiple Variables
In this analysis, age at commitment, facility, gender, months to discharge, offense class, offense type, prior release to CR, race/ethnicity, and YLS level at time of commitment were explored to determine their impact on recidivism using logistic regression. Of these, only three variables were found to have a direct impact on the two-year recidivism rate: gender, age at commitment, and offense type.

---

84 \( \chi^2(1, 369) = 4.919, p = .027; \Phi = .115 \)
The impact of each of the variables was as follows:

**Gender**: Females were 2.7 times less likely than males to recidivate within two years of discharge.

**Age at commitment**: Youth who were 17 years of age at commitment were 2.3 times more likely than youth ages 15 and younger at commitment to recidivate within two years of discharge.

**Offense type**: Youth who were committed with property offenses were 1.6 times more likely than those committed with personal offenses to recidivate within two years of discharge.\(^{85}\)

**Time to Recidivate, One-Year Recidivism**
Those who recidivate do so relatively quickly. Over a quarter (27%) of those who recidivate within a year do so within the first two months, and almost two-thirds (65%) do so within the first six months.

---

\(^{85}\) The overall model is significant at the .01 level, predicts 53.8% of the responses correctly, and has a Nagelkerke R Square of .079. Logistic regression results table is presented in Appendix D.
Time to Recidivate, Two-Year Recidivism
When the timeframe is expanded from one year to two, more recidivating events are captured. The majority of them (71%), however, still occur within the first year.

Note that the average time to recidivate for discharged youth was longer than the average time to return for youth released to CR. On average, recidivating youth who were tracked for two years recidivated an average of 3.4 months after discharge, while returned youth who were tracked for two years were returned an average of 8.3 months after release.

Change in Offense Severity, Two-Year Recidivism
Youth who recidivate may reoffend with offenses similar to their original offenses, less severe offenses, or more severe offenses. The majority of youth (52.3%) who recidivated within two years did so with similar offenses. A little more than a third (37.8%) recidivated with less severe offenses, and a smaller proportion (9.9%) recidivated with more severe offenses. Consequently, felonies made up a smaller proportion of recidivating offenses (20.3%) than original offenses (48.2%).

Table III-5: Change in Offense Severity, Two-Year Recidivism

<table>
<thead>
<tr>
<th>Recidivating Offense</th>
<th>Original Offense</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Misdemeanor</td>
<td>Felony</td>
</tr>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>93</td>
<td>41.9%</td>
</tr>
<tr>
<td>Felony</td>
<td>22</td>
<td>9.9%</td>
</tr>
<tr>
<td>Total</td>
<td>115</td>
<td>51.8%</td>
</tr>
</tbody>
</table>

increase in severity
no change
decrease in severity
Section III: Committed Youth

**Change in Offense Type, Two-Year Recidivism**

The majority of those who recidivated (91.0%) were originally committed for property and personal offenses (56.8% and 34.2%, respectively). The majority of these youth recidivated with property offenses, regardless of original offense type. Therefore, personal offenses made up a smaller proportion of recidivating offenses (25.7%) than original offenses (34.2%). A little over two-thirds (68.5%) of all original/recidivating events fall within personal and property combination categories (i.e., personal/personal, personal/property, property/personal, property/property).

<table>
<thead>
<tr>
<th>Original Offense</th>
<th>Personal</th>
<th>Property</th>
<th>Drugs/Alcohol</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Personal</td>
<td>22</td>
<td>9.9%</td>
<td>33</td>
<td>1</td>
<td>0.5%</td>
</tr>
<tr>
<td>Property</td>
<td>31</td>
<td>14.0%</td>
<td>66</td>
<td>2</td>
<td>0.9%</td>
</tr>
<tr>
<td>Drugs/Alcohol</td>
<td>14</td>
<td>6.3%</td>
<td>13</td>
<td>3</td>
<td>1.4%</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>4.1%</td>
<td>14</td>
<td>4</td>
<td>1.8%</td>
</tr>
<tr>
<td>Total</td>
<td>76</td>
<td>34.2%</td>
<td>126</td>
<td>10</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

**IN SUMMARY – COMMITTED YOUTH**

- A little more than half of the youth who are released to Community Reintegration are successfully reintegrated on first release. Of those youth who were committed to a facility and then released to Community Reintegration, 46.2% were returned to a facility for engaging in new criminal activity or otherwise not abiding by the conditions of their release.

- Those who are not successfully reintegrated on Community Reintegration are returned to a facility quickly. More than half of the committed youth (60%) who were released to Community Reintegration and then returned to a facility within a year were returned within three months of release; approximately three-quarters (77%) were returned within 6 months.

- Offense type appears to influence the likelihood that youth will be returned to a facility. Youth who were originally committed with property offenses and then released to Community Reintegration were 4.0 times more likely than those committed with personal offenses to be returned to a facility.

- Committed youth are spending longer periods of time under DJS supervision. On average, committed youth spent 21.0 months under various forms of DJS supervision prior to final discharge, but this measure changed over time from an average of 18.3 in 2008 to 22.4 in 2012.

- A little more than a third of committed youth recidivate within a year, and a little more than a half recidivate within two years. Of the 492 committed youth who were discharged and tracked for one year, 36.8% recidivated. Of the 413 committed youth who were discharged and tracked for two years, 53.8% recidivated.
Appendix A

Logistic Regression Analysis, **Diverted** Youth, Two-Year Recidivism

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>$\beta$</th>
<th>s.e.</th>
<th>Sig.</th>
<th>Exp($\beta$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (reference group = female)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>.481</td>
<td>.076</td>
<td>.000</td>
<td>1.618</td>
</tr>
<tr>
<td>Age (reference group = ages ≥ 18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age ≤ 14</td>
<td>.586</td>
<td>.200</td>
<td>.003</td>
<td>1.796</td>
</tr>
<tr>
<td>Age 15</td>
<td>.383</td>
<td>.203</td>
<td>.060</td>
<td>1.466</td>
</tr>
<tr>
<td>Age 16</td>
<td>.212</td>
<td>.201</td>
<td>.291</td>
<td>1.236</td>
</tr>
<tr>
<td>Age 17</td>
<td>.105</td>
<td>.198</td>
<td>.595</td>
<td>1.111</td>
</tr>
<tr>
<td>Race/ethnicity (reference group = white)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YOC</td>
<td>.418</td>
<td>.129</td>
<td>.001</td>
<td>1.519</td>
</tr>
<tr>
<td>Offense type (reference group = personal)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>-.220</td>
<td>.095</td>
<td>.021</td>
<td>.802</td>
</tr>
<tr>
<td>Drugs/alcohol</td>
<td>-.521</td>
<td>.188</td>
<td>.005</td>
<td>.594</td>
</tr>
<tr>
<td>Other</td>
<td>.050</td>
<td>.155</td>
<td>.748</td>
<td>1.051</td>
</tr>
<tr>
<td>Offense class (reference group = felony)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Misdemeanor</td>
<td>.364</td>
<td>.147</td>
<td>.013</td>
<td>1.440</td>
</tr>
<tr>
<td>Civil</td>
<td>.550</td>
<td>.219</td>
<td>.012</td>
<td>1.734</td>
</tr>
<tr>
<td>Regions (reference group = Region 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Region 2</td>
<td>.295</td>
<td>.084</td>
<td>.000</td>
<td>1.343</td>
</tr>
<tr>
<td>Region 3</td>
<td>.307</td>
<td>.084</td>
<td>.000</td>
<td>1.359</td>
</tr>
<tr>
<td>Number of charges</td>
<td>.098</td>
<td>.049</td>
<td>.046</td>
<td>1.103</td>
</tr>
<tr>
<td>Constant</td>
<td>-3.038</td>
<td>.268</td>
<td>.000</td>
<td>.048</td>
</tr>
</tbody>
</table>

**Indicates statistical significance**

Model $\chi^2 = 150.694 \quad p < .001$

Nagelkerke $R^2 = .035$

n = 8,001

Note: The dependent variable in this analysis is two-year recidivism where 0 = no and 1 = yes.
## Appendix B

Logistic Regression Analysis, *Supervised* Youth, Two-Year Recidivism

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>β</th>
<th>s.e.</th>
<th>Sig.</th>
<th>Exp(β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (reference group = ages ≥ 18)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age ≤ 14</td>
<td>.503</td>
<td>.237</td>
<td>.033</td>
<td>1.654</td>
</tr>
<tr>
<td>Age 15</td>
<td>.089</td>
<td>.239</td>
<td>.711</td>
<td>1.093</td>
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<tr>
<td>Age 16</td>
<td>-.103</td>
<td>.236</td>
<td>.663</td>
<td>.902</td>
</tr>
<tr>
<td>Age 17</td>
<td>-.129</td>
<td>.237</td>
<td>.585</td>
<td>.879</td>
</tr>
<tr>
<td>Gender (reference group = female)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>.343</td>
<td>.130</td>
<td>.008</td>
<td>1.409</td>
</tr>
<tr>
<td>Offense type (reference group = personal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>.228</td>
<td>.110</td>
<td>.039</td>
<td>1.256</td>
</tr>
<tr>
<td>Drugs/alcohol</td>
<td>-.259</td>
<td>.215</td>
<td>.227</td>
<td>.772</td>
</tr>
<tr>
<td>Other</td>
<td>.149</td>
<td>.214</td>
<td>.486</td>
<td>1.161</td>
</tr>
<tr>
<td>YLS-CMI risk level (reference group = low risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate risk</td>
<td>1.037</td>
<td>.114</td>
<td>.000</td>
<td>2.820</td>
</tr>
<tr>
<td>High risk</td>
<td>1.190</td>
<td>.168</td>
<td>.000</td>
<td>3.288</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.747</td>
<td>.259</td>
<td>.000</td>
<td>.174</td>
</tr>
</tbody>
</table>

*Indicates statistical significance*

Model $\chi^2 = 142.349 \quad p < .001$

Nagelkerke $R^2 = .102$

$n = 1,850$

**Note:** The dependent variable in this analysis is two-year recidivism where 0 = no and 1 = yes.
## Appendix C

Logistic Regression Analysis, **Committed** Youth, Return to a Facility (Within One Year)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>β</th>
<th>s.e.</th>
<th>Sig.</th>
<th>Exp(β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (reference group = ages ≤ 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 16</td>
<td>-.333</td>
<td>.520</td>
<td>.521</td>
<td>.716</td>
</tr>
<tr>
<td>Age 17</td>
<td>-.168</td>
<td>.551</td>
<td>.002</td>
<td>.185</td>
</tr>
<tr>
<td>Age ≥18</td>
<td>-.123</td>
<td>.602</td>
<td>.041</td>
<td>.292</td>
</tr>
<tr>
<td>Risk level (reference group = low risk)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>.688</td>
<td>.392</td>
<td>.079</td>
<td>1.989</td>
</tr>
<tr>
<td>High</td>
<td>1.360</td>
<td>.782</td>
<td>.082</td>
<td>3.895</td>
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<tr>
<td>Race/ethnicity (reference group = white)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth of color</td>
<td>1.475</td>
<td>.587</td>
<td>.012</td>
<td>4.371</td>
</tr>
<tr>
<td>Offense type (reference group = personal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>1.386</td>
<td>.422</td>
<td>.001</td>
<td>3.998</td>
</tr>
<tr>
<td>Drugs/alcohol</td>
<td>-.161</td>
<td>.891</td>
<td>.857</td>
<td>.851</td>
</tr>
<tr>
<td>Other</td>
<td>1.193</td>
<td>.841</td>
<td>.156</td>
<td>3.296</td>
</tr>
<tr>
<td>Constant</td>
<td>-.851</td>
<td>.525</td>
<td>.105</td>
<td>.427</td>
</tr>
</tbody>
</table>

[Indicates statistical significance]

Model $\chi^2 = 38.575 \quad p < .001$
Nagelkerke $R^2 = .285$
n = 161

**Note:** The dependent variable in this analysis is return to a facility where 0 = no return and 1 = return.
Appendix D

Logistic Regression Analysis, Committed Youth, Two-Year Recidivism

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>β</th>
<th>s.e.</th>
<th>Sig.</th>
<th>Exp(β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (reference group = male)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-0.993</td>
<td>0.350</td>
<td>0.005</td>
<td>0.370</td>
</tr>
<tr>
<td>Age (reference group = ages ≤ 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 16</td>
<td>0.298</td>
<td>0.317</td>
<td>0.347</td>
<td>1.347</td>
</tr>
<tr>
<td>Age 17</td>
<td>0.824</td>
<td>0.299</td>
<td>0.006</td>
<td>2.280</td>
</tr>
<tr>
<td>Age ≥ 18</td>
<td>0.331</td>
<td>0.337</td>
<td>0.325</td>
<td>1.393</td>
</tr>
<tr>
<td>Offense type (reference group = personal)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>0.488</td>
<td>0.220</td>
<td>0.026</td>
<td>1.630</td>
</tr>
<tr>
<td>Drugs/alcohol</td>
<td>-0.042</td>
<td>0.469</td>
<td>0.929</td>
<td>0.959</td>
</tr>
<tr>
<td>Other</td>
<td>0.107</td>
<td>0.484</td>
<td>0.825</td>
<td>1.113</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.443</td>
<td>0.291</td>
<td>0.128</td>
<td>0.642</td>
</tr>
</tbody>
</table>

Indicates statistical significance

Model $\chi^2 = 25.210 \quad p = 0.001$

Nagelkerke $R^2 = 0.079$

$n = 413$

Note: The dependent variable in this analysis is two-year recidivism where 0 = no and 1 = yes.
## Appendix E

### Offenses by Type

#### Personal
- Aggravated assault
- Aggravated reckless conduct
- Assault
- Assault on an emergency medical care provider
- Assault on an officer
- Criminal restraint
- Criminal threatening
- Criminal threatening w/ dangerous weapon
- Criminal use of disabling chemicals
- Criminal use of explosives
- Criminal use of laser pointer
- Dissemination of sexually explicit material
- Domestic viol reckless conduct
- Domestic violence assault
- Domestic violence assault priors dv
- Domestic violence criminal threatening
- Domestic violence criminal threatening,
- Domestic violence terrorizing
- Elevated aggravated assault
- Endangering the welfare of a child
- Endangering the welfare of a dependent person
- Felony murder
- Gross sexual assault
- Harassment
- Harassment by telephone
- Manslaughter
- Possess sexual explicit material of minor under 12
- Possession of sexually explicit material
- Protective order from harassment violation
- Reckless conduct
- Refusing to submit to arrest or detent,
- Refusing to submit to arrest or detention
- Robbery
- Sexual abuse of minor
- Sexual exploitation of a minor
- Sexual exploitation of minor under 12
- Solicitation of child by computer
- Solicitation to commit a class a crime
- Stalking
- Terrorizing
- Unlawful sexual contact
- Unlawful sexual touching
- Violation of privacy
- Violation of protective order

#### Property
- Acquiring drugs by deception
- Aggravated furnishing of schedule W drug
- Aggravated furnishing of schedule X drug
- Aggravated furnishing of schedule Y drug
- Aggravated furnishing of schedule Z drug
- Aggravated furnishing of scheduled drugs
- Aggravated furnishing scheduled drugs
- Aggravated operating under the influence
- Aggravated trafficking or furnish schedule drugs
- Aggravated trafficking of schedule W drug
- Aggravated trafficking of schedule Y drugs
- Aggravated trafficking of schedule Z drugs
- Aggravated trafficking of scheduled drugs
- Aggravated trafficking scheduled drugs-
- Allow minor to possess or consume liquor
Drugs/Alcohol (continued)
Allowing minor to consume liquor
Allowing minor to possess liquor
Cultivating marijuana
Drinking in public
Furnishing liquor to a minor
Furnishing X, Y, Z drugs
Illegal possession of liquor by minor
Illegal transportation of drugs by minor
Illegal transportation of liquor by minor
Illegal transportation of liquor within the state
Marijuana cultivation
Minor consuming liquor
Minor having liquor on person
Minor possessing liquor
Minor purchasing liquor
Minor transporting liquor
Operating motor vehicle under the influence
Operating under the influence
Operating under the influence-1 prior
Operating under the influence-injury
Operating under the influence-no test
Permit minors to consume liquor
Possessing imitation drugs
Possessing liquor by minor
Possessing marijuana
Possession of drug paraphernalia
Possession of liquor by minor on premises
Possession of marijuana
Procuring liquor for minor
Sale and use of drug paraphernalia
Stealing drugs
Trafficking or furnishing imitation scheduled drug
Transportation of drugs by minor
Unlawful furnishing scheduled drug
Unlawful possession of hydrocodone
Unlawful possession of oxycodone
Unlawful possession of scheduled drugs
Unlawful possession of synthetic hallucinogenic drugs
Unlawful trafficking in scheduled drugs
Unlawfully furnishing scheduled drugs
Unlawfully possessing alcohol

Other
Aggravated driving to endanger
Attempt to alter voting machine
Attempt to commit a crime
Attempting to commit a class D or E crime
Boarding or leaving a moving train
Carrying concealed weapon
Criminal attempt
Criminal conspiracy
Criminal solicitation
Cruelty to animals
Disorderly conduct
Disorderly conduct, fighting
Disorderly conduct, loud noise, private place
Disorderly conduct, loud unreasonable noise
Disorderly conduct, offensive words, gestures
Driving to endanger
Eluding an officer
Escape
Fail to give correct name, address or DOB
Fail to provide correct name, address, DOB
Failing to appear as subpoenaed
Failing to stop for officer
Failure to appear after bailed
Failure to appear in court on criminal summons
Failure to control or report a dangerous fire
False identification by minor
False public alarm or report
Falsifying physical evidence
 Forgery
Hindering apprehension or prosecution
Illegal possession of firearm
Illegal possession of firearm or crossbow
Indecent conduct
Leaving the scene of an accident
Making false report
Minor having false identification
Misuse of credit identification
Misuse of E-9-1-1 system
Obstructing government administration
Obstructing public ways
Obstructing report of crime
Operate after habitual offender revocation, prior
Operate vehicle without license
Operating vehicle without a license
Out of door burning violation
Passing a roadblock
Place tattoo on person without a license
Possessing false identification
Possessing firearm near school
Possession of fireworks
Provide false information or failure to cooperate
Refusing to provide name address
Refusing to sign criminal summons
Refusing to submit to arrest or detention, refuse stop
Removing portion of carcass
Tampering with a victim
Tampering with public records or information
Other (continued)

- Tampering with witness, informant, juror or victim
- Threatening display of weapon
- Trafficking in dangerous knives
- Trafficking in or furnishing counterfeit drugs
- Trafficking in prison contraband
- Unlawful prize fighting
- Unlawful use of license
- Unsworn falsification
- Violating condition of release
- Violation of requirements for shipping
- Walking or standing on track or bridge
Acknowledgments

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MAINE DEPARTMENT OF CORRECTIONS, DIVISION OF JUVENILE SERVICES

Chris Coughlan  Chris Raymond
Jeff Merrill    Pam Richards
Rae Ouellette  Mike Rocque
Colin O’Neill  Sue Smith

UNIVERSITY OF SOUTHERN MAINE MUSKIE SCHOOL OF PUBLIC SERVICE

Report Author
Robyn Dumont, Research Analyst, Muskie School of Public Service

Peer Review/Editing
Erica King, Policy Associate, Muskie School of Public Service
George Shaler, Research Associate, Muskie School of Public Service

Layout and Design
Sheri Moulton, Project Assistant, Muskie School of Public Service

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For More Information About This Report, Call (207)780-5835
This report is available on the Maine Statistical Analysis Center Website at: http://muskie.usm.maine.edu/justiceresearch or by calling: 207.780.5835

University of Southern Maine
Muskie School of Public Service
PO Box 9300
Portland, Maine 04104

www.muskie.maine.edu