

Recidivism Analysis

2014 Release Cohort

A study of the offenders released from the Nevada Department of Corrections and their probability of re-admission.

Prison recidivism is a performance outcome indicator closely followed by the criminal justice system. A proportion of offenders that is released from prison is successful in the community while another proportion is not. Prison inmates differ in their demographic as well as their criminogenic characteristics, and this principle leads many researchers to formulate a variety of questions regarding rehabilitation and programming alternatives. Administering a prison system and delivering rehabilitative programs requires a variety of resources; thus, reducing recidivism requires thought out strategies.

Given the importance of success, the Nevada Department of Corrections analyzes caseloads and tracks the pattern of offenders released yearly for thirty-six months after prison exit. During 2014, 1,963 felons were released on parole and 3,297 discharged their sentences. Of the 5,260 total that left the prison system, 1,506 or 28.63% were re-incarcerated by the end of 2017. Females and males were statistically equally likely to return, and habitual offenders had much larger predictive probability of returning to prison within 36 months after release than non-habitual individuals.

Exhibit 1-Recidivism and Release Type

Release Type	Did not return	Returned	Total	% Returned
Discharged	1,530	433	1,963	8.23%
Paroled	2,224	1,073	3,297	20.40%
Total	3,754	1,506	5,260	28.63%

Exhibit 2-Recidivism and Gender

Gender	Did not return	Returned	Total
Female	71.97%	28.03%	100.00%
Male	71.27%	28.73%	100.00%
Total	71.37%	28.63%	100.00%

Exhibit 3-Habitual Criminal Status

Habitual	Did not return	Returned	Total
Habitual	54.76%	45.24%	100.00%
Non habitual	71.78%	28.22%	100.00%
Total	71.37%	28.63%	100.00%



How is the prison recidivism rate derived?

- It is the proportion of felony offenders that returns to prison within 36 months of release

What is the prison recidivism rate for Nevada?

- 28.63%

Are habitual offenders likely to return more often?

- Habitual offenders returned 45.24% of the time, while non-habitual offenders returned 28.22% of the time.

Factors known about the 2014 release cohort

- Race or ethnicity
- Age
- Gender
- Offense Group
- Category Felony
- Prior felony convictions
- Release status
- Re-incarceration status

Involvement of drugs or alcohol in the crime

- For 80.15% of the offenders released in 2014 alcohol, drug, or both were factors in the crime.
- 35.48% of offenders for whom drugs were a factor in the crime returned to prison within three years of release.

Are there specific age groups that are more likely to return to prison?

Recidivism is influenced by age. The largest age group in the 2014 release cohort is comprised of individuals 25 to 34 years of age, and the second largest is made up of 35 to 44 year olds. However, the largest group of recidivists was comprised of individuals younger than 25 years of age. This is because the probability of returning to prison decreases by 0.7% for each additional year of age at time of release, resulting in lower recidivism probability for older individuals and larger probability for younger ones. For example, the predictive probability of returning to prison for an offender released at the age of 17 is 43.05% , for an offender released at 30 is 21.70%, and for an offender released at age 45 is 14.00%. In turn, recidivism rates decline for each of the age groups shown below.

Exhibit 4-Recidivism by Age Group

Age Group	% Released	% Returned
<25	14.58%	38.59%
25-34	37.11%	32.43%
35-44	24.51%	24.44%
45-55	17.87%	22.55%
>55	5.93%	16.03%
Total	100.00%	28.63%

Are substances significant factors in the crime or have an effect on recidivism?

In 80.15% of the cases that were released during 2014, drugs, alcohol, or both were factors in the crime. Recidivism rates for individuals that committed crimes that involved drugs and alcohol or drugs only were larger than the average rate. When drug was a factor in the original crime, the recidivism rate was 6.85% larger than for all the other offenders. Empirical analysis of the indicators provided sufficient evidence to conclude that substance involvement in the crime is a statistically significantly predictive variable.

Exhibit 5-Substances were Factors in the Crime

Factors in the Crime	Return Rate
Alcohol	14.52%
Drugs and alcohol	29.40%
Drugs	35.48%
None	23.85%

How soon after release is an ex-prisoner likely to become re-incarcerated?

More than half of the proportion that returned before 36 months went by returned within the first twelve months (15.86% of the total 28.63% that

Timing is an important factor in improving the chances of success outside prison

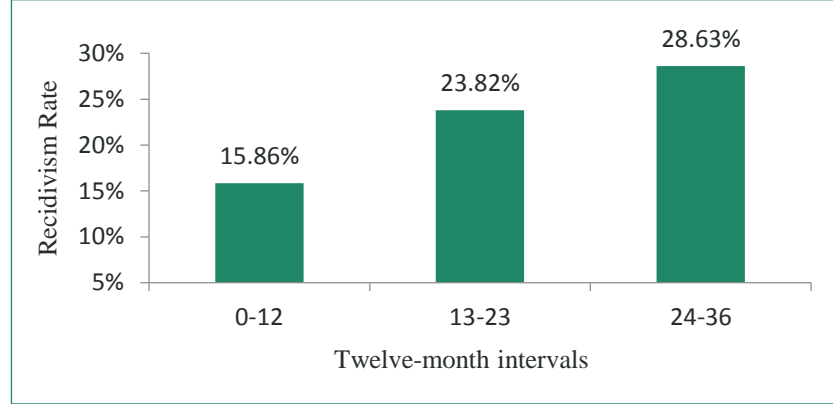
- 15.86% of offenders released returned within 12 months of release.
- 7.96% returned between the 13th and 23rd month.
- Only 4.81% of ex-prisoners returned between the 24th and 36th month.

Offense groups and felony categories matter

- Drug and property offenders are at higher risk of returning.
- DUI offenders have low recidivism.
- All but B felons have larger recidivism rates than the average rate.

returned); and 23.82% of the 28.63% that returned by the end of the three-years was re-admitted before two years went by. The recidivism rate for year three was only 4.81%. This observation supports the argument that the longer and offender is away from prison, the lower the chances that he or she will return.

Exhibit 6-Recidivism by Months After Release



Are select offense groups or felony categories more prone to recidivism?

Traditionally, property and drug offenders have had the two largest return rates of all of the six groups utilized by the NDOC. Relative to DUI offenders, all offense groups have larger statistically significant predictive probability of being re-incarcerated, and all but B category felons have higher recidivism rates than the overall rate of 28.63%. When tested empirically, it was concluded that offense group is a significant predictive indicator, drug offenders have 25.62% to 30.08% chance of failing in the community, and property offenders' 31.15% to 36.14% chance of failing.

Exhibit 7-Offenses

Offense Group	% Return	Felony Category	% Return
Drug	29.91%	A	30.77%
DUI	6.06%	B	26.67%
Other	22.09%	C	32.24%
Property	36.79%	D	34.22%
Sex	25.13%	E	30.41%
Violence	25.21%	--	--

Did the group of offenders that became incarcerated have prior felony convictions in Nevada before the initial booking?

The number of convictions in the offender's history is a predictive

Recidivism and Prior Felony Convictions

- Offenders with prior felony convictions have recidivism rates larger than the overall rate.
- The marginal effect on recidivism for each additional prior felony in Nevada is 5.74%.

Offenses combined with Age

- Offenders 18-24 years of age have recidivism rates that are larger than the average rate for offenders across all offense groups.
- Young property offenders have rates in the 40% range.

determinant of re-incarceration. Offenders with prior felony offenses released in 2014 returned at a faster rate than offenders without prior felonies. Approximately 26% of individuals without prior felonies returned, while 31.90% to 52.04% of offenders with prior felony charges in Nevada became re-incarcerated at the NDOC. Recidivism increases by 5.74% with each additional increase in prior felony convictions in the State of Nevada.

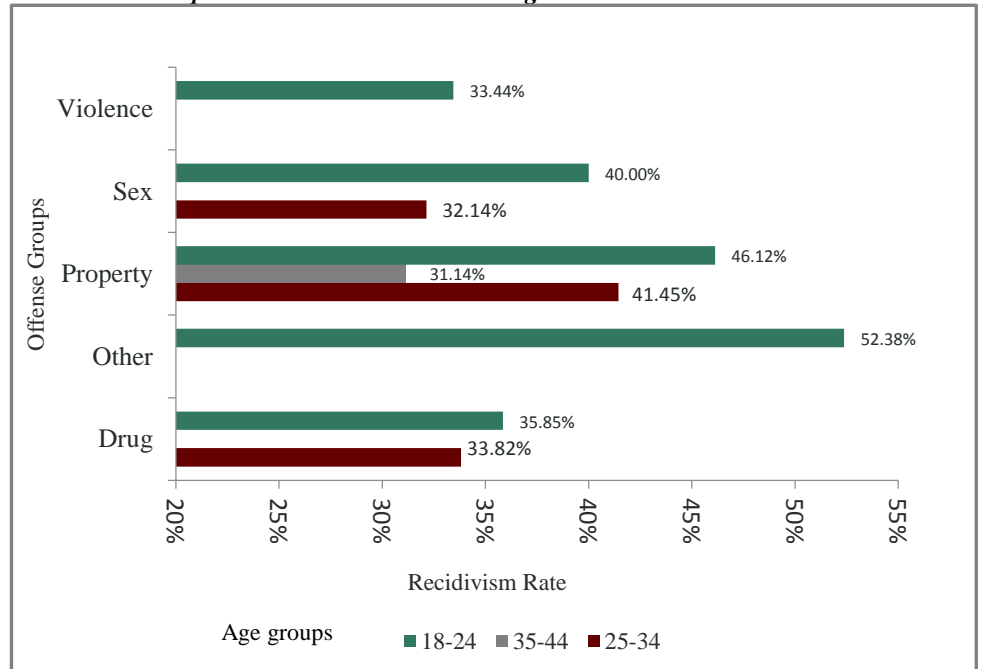
Exhibit 8-Number of Felony Convictions

Prior Felonies	Didn't Return	Returned	Total
0	74.03%	25.97%	100.00%
1	68.10%	31.90%	100.00%
2-3	60.53%	39.47%	100.00%
4+	47.96%	52.04%	100.00%
Total	71.37%	28.63%	100.00%

What Combination of Felony Offenses and Age Groups are at most risks?

For all the offense groups, young individuals have rates above the average rate. Individuals in the 18 to 25 years of age group have larger recidivism rates across all offense groups, with rates ranging from 33.44% to 52.38%. Individuals 25-34 years of age that are drug, property, or sex offenders return 32.14% to 41.45% of the time. Third in ranking are 35 to 44 year olds that are released after serving time for property crimes with 31.14% of them returning within 36 months of release. All the groups depicted in Exhibit 9 below have rates above the average proportion.

Exhibit 9- Groups with Rates Above the Average Rate



- All but B felons in the 18-24 years of age group have higher than average rates of return.
- Offenders in the older age categories have rates below the average rate.

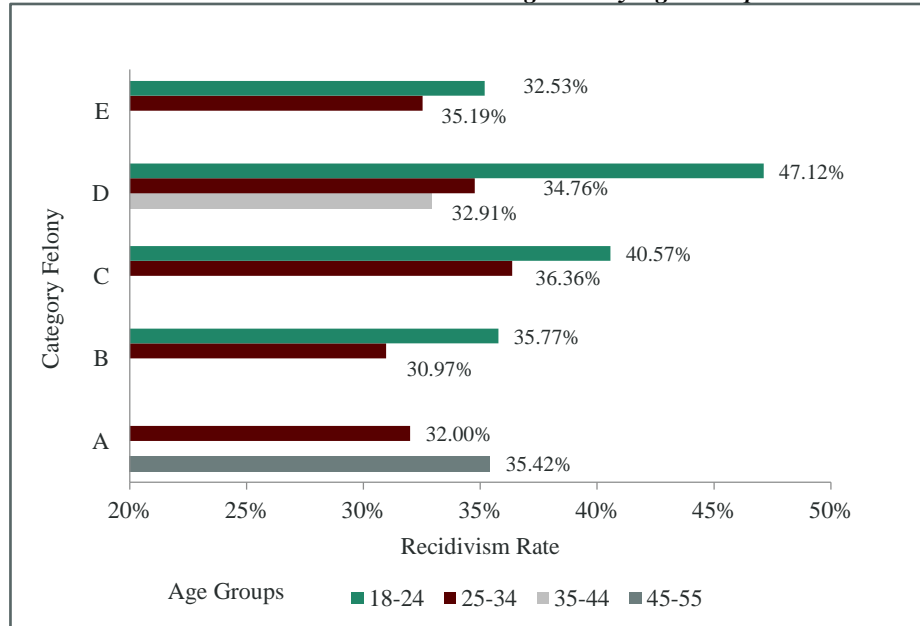
Rates by Felony Type

Felony	% Released	% Returned
A	4.94%	30.77%
B	66.86%	26.67%
C	16.67%	32.84%
D	7.83%	34.22%
E	3.69%	30.41%
Total	100.00%	28.63%

What are the statuses of the offenders that come back to the NDOC?

- 55.51 % (more than half) of offenders come back as parole violators without new convictions.
- 41.63% come back with new felony commitments.

Exhibit 10-Felons with Rates Above the Average rate by Age Group



What was the distribution by imprisonment status for the offenders that came back?

Exhibit 11-Imprisonment statuses

New Commitment	Parole Violator no new Conviction	Parole Violator new Conviction	Grand Total
627	836	43	1,506
41.63%	55.51%	2.86%	100.00%

Does the recidivism rate for the Nevada Department of Corrections (NDOC) include re-arrests or re-incarcerations in jails or other prison systems?

The return rates discussed in this publication encompass felon offenders that were released from a Nevada prison after serving time for committing felony crimes in Nevada and that were returned to a Nevada prison within a 36-month period after release. The NDOC follows the Performance Based Measures (PBMS) established by the Association of State Correctional Administrators (ASCA). Offenders from other jurisdictions that were housed at an NDOC facility to participate in special programs are not accounted for in the sample. These offenders are not within the NDOC’s jurisdiction.

Does race or ethnicity affect the predictive probability of recidivism?

Offenders from different racial or ethnical backgrounds differ in their

Racial Groups

- Above the average: Native and African Americans, and Caucasians.
- Below the average: Asians, Hispanics, and Other.

Nevada Risk Assessment (NRAS)

- Risk assessments calculate risk factors (e.g. education, socio-economic status).
- NRAS determines program need to mitigate the risk factors of the offender.
- NRAS provides eligibility and screening of programs for the case manager.
- The NDOC will attempt to correlate risk scores to recidivism rates for future cohorts.

likelihood of returning to prison. Native American individuals have the largest predictive probability of prison recidivism. For a Native American individual released from the NDOC, the probability of returning ranges from 33.28% to 53.39%, while for Hispanic individuals the range is 17.45% to 21.97%. African American offenders have the second largest predictive probability of returning to a Nevada prison having a range of 31.07% to 35.90%. Other offenders encompass individuals for whom the information is unknown or not does not fit into any of the other five categories.

Exhibit 12-Recidivism Rates by Racial and Ethnic Group

Race and Ethnicity	Didn't Return	Returned	Total
African American	67.41%	32.59%	100.00%
American Indian	63.22%	36.78%	100.00%
Asian	77.46%	22.54%	100.00%
Caucasian	69.74%	30.26%	100.00%
Hispanic	79.66%	20.34%	100.00%
Other	85.71%	14.29%	100.00%
Total	71.37%	28.63%	100.00%

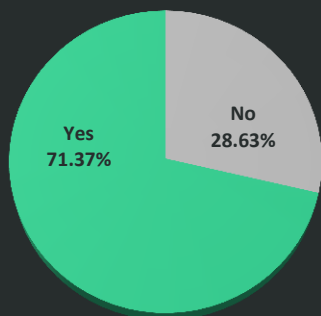
What are the implications of the findings of the 2014 release cohort analysis?

Evidence based research has concluded that an effective strategy for addressing the recidivism problem is to begin by rehabilitating the individuals that need it the most. These are the offenders that are at highest risk of returning and that should be first selected to participate in treatment programs intended to achieve a favorable experience after serving prison time. Offenders that are at very low risk of re-offending require less rehabilitation and can worsen if they are treated with high risk offenders. In order to gather detailed information about the offender's specific needs for rehabilitation, the NDOC implemented a risk assessment instrument to manage inmates and began to implement evidence based practices.

Has the NDOC realized improvements in its rate of returns?

The NDOC is proud of its strategies to reduce the likelihood that an offender will return to prison. The 2014 cohort had the lowest re-incarceration rate in five years. This is an accomplishment that has involved a change in work and programmatic culture within the NDOC, several public and private partners, the inmates' family, the community, and service providers. More offenders were released in 2014 than in 2010,

Succeeds in the Community



Have rates improved over time in Nevada?

- Yes, the 2014 release cohort had the lowest 36-month rate of five consecutive cohorts.

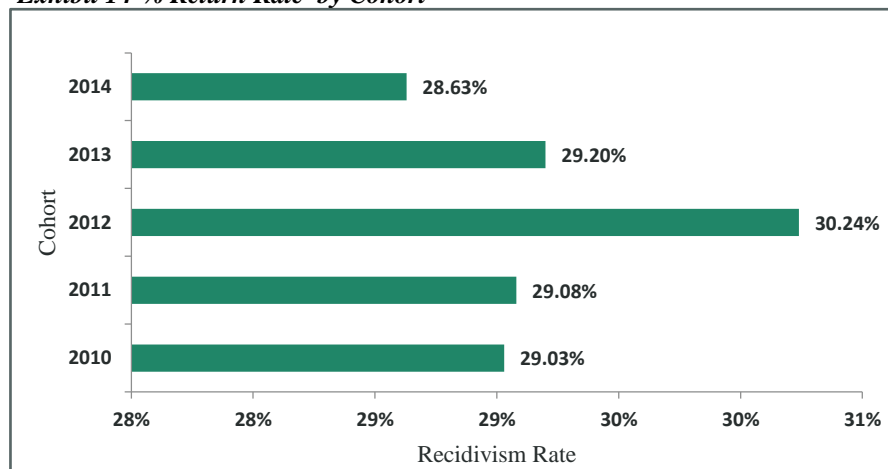
Year	Rate
2010	29.03%
2011	29.08%
2012	30.24%
2013	29.20%
2014	28.63%

2011, and 2012; nevertheless, as shown in the charts below, a smaller proportion of them in the 2014 cohort returned after three years.

Exhibit 13-Inmates Released and Returned by Year

Release Year	Releases	Returns	%	Months
2010	5,511	1,605	29.03%	36
2011	5,271	1,533	29.08%	36
2012	5,106	1,544	30.24%	36
2013	4,972	1,454	29.20%	36
2014	5,260	1,506	28.63%	36

Exhibit 14-% Return Rate by Cohort



Are there additional pieces of information?

Offenders can be classified into groups based on various risk factors. A new scoring rubric was implemented by the NDOC which is embedded in the Nevada Risk Assessment instrument instituted in 2013. The intent is to gather information on key dimensions that describe the inmate and that can be used for housing or treatment placement among many other purposes. Many states have found a strong relationship between the risk score and recidivism, and the NDOC intends to incorporate the score as a variable in future years.

Summary

Recidivism is a complex issue that is influenced by many factors. The offender's history before incarceration, his or her ability to conform to societal norms, demographic and criminogenic characteristics--all playing major roles in success outside a prison. These multi-faceted risk factors highlight the importance of statewide community partnerships in addressing recidivism and the impacts on the community. While it is

Factors that are significant

- Gender
- Age
- Offense group
- Habitual status
- Prior convictions
- Ethnicity or race
- Release type
- Substance factors

known that there are many other factors outside the purview of the NDOC; from this analysis, sufficient evidence was gathered to conclude that recidivism has been improving and that young, property, drug, non B felons, and offenders that had prior felony convictions in Nevada are at most risk of re-incarceration. Given the indicators, the NDOC will continue to pursue an approach that is focused on tailoring programming models according to the individual's most salient risks.

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