



Florida Prison Recidivism Report: Releases from 2008 to 2014

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Florida Department of Corrections
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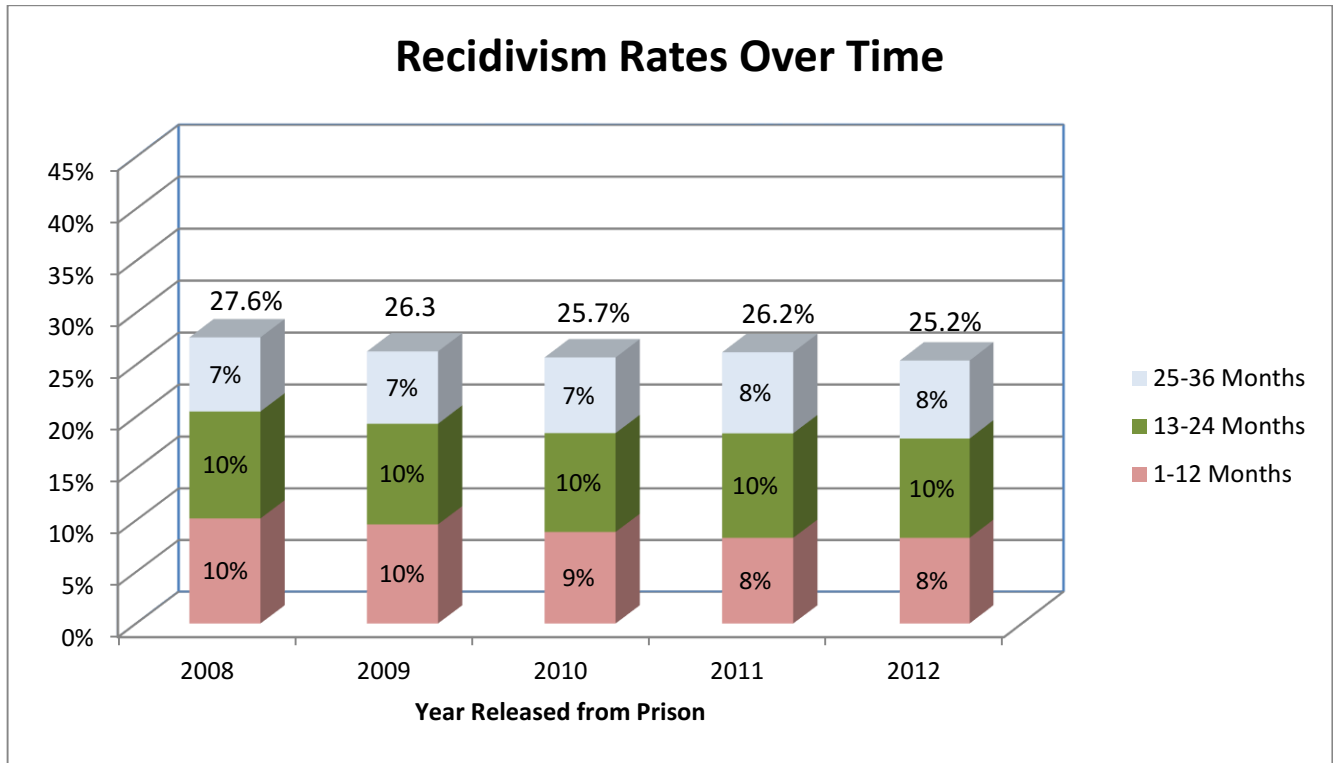
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EXECUTIVE SUMMARY

Defining Recidivism

Recidivism is defined as a **return to prison**. The return to prison may be a result of a new conviction or a violation of post-prison supervision. The follow-up periods (typically reported as **three years**) are calculated from prison release date to the date of readmission to prison.



Changing Recidivism Rates

The latest release cohort shows slight decreases in the three-year recidivism rate. These rates are shown below:

- Inmates released in 2010 who returned to prison within three years → 25.7% recidivism rate
- Inmates released in 2011 who returned to prison within three years → 26.2% recidivism rate
- Inmates released in 2012 who returned to prison within three years → 25.2% recidivism rate

Major Factors

For 2012 releases, some factors that influence an inmate's likelihood of recidivism include:

- Number of prior prison commitments
 - More Priors → Higher Likelihood of Recidivating
- Whether the inmate has a supervision term after release
 - Supervised → Higher Likelihood of Recidivating
- The inmate's tested education level
 - Higher Grade Level → Lower Likelihood of Recidivating
- The inmate's behavior while in prison
 - More Disciplinary Reports → Higher Likelihood of Recidivating
- The inmate's age at first offense
 - Younger → Higher Likelihood of Recidivating
- The inmate-reported drug screening score
 - Higher scores → Higher Likelihood of Recidivating
- The inmate's ethnicity
 - Hispanic → Lower Likelihood of Recidivating
- The inmate's custody level upon release
 - Low → Lower Likelihood of Recidivating
- The inmate's most serious serving offense
 - Murder → Lower Likelihood of Recidivating
- The inmate's theft offense counts within five years prior to admission
 - More Counts → Higher Likelihood of Recidivating
- Number of visits the inmate receives one year prior to release
 - More Visits → Lower Likelihood of Recidivating
- Bus ticket furnished by the department due to inmate's lack of adequate funds to pay for their own release transportation or lack of an outside party willing to pick up the inmate
 - Bus Ticket → Higher Likelihood of Recidivating

INTRODUCTION

The Florida Prison Recidivism Report is produced annually by the Bureau of Research and Data Analysis within the Florida Department of Corrections. The study examines the recidivism rate of Florida's released inmate population. While the use of recidivism as a performance indicator of the state's rehabilitative efforts can be debated, the analysis itself is of significant public importance. Given that 86% of inmates housed in Florida prisons today will one day be released back into our communities, those responsible for the state's planning and budgeting need to know the likelihood that an inmate who is released today will one day return to Florida's prison system. More importantly, for the public and those charged with ensuring public safety, the state's recidivism rate is an important measure of criminal activity produced by released prisoners.

When discussing recidivism rates, the factors that influence recidivism must be considered. For example, recidivism rates vary across age groups, racial/ethnic groups, and gender. To determine where to devote correctional and community resources, we must identify which groups are most likely to fail when they are released from Florida's prisons and which groups are likely to successfully re-enter society.

This study finds that the factors that influence Florida's recidivism rate are generally consistent with existing research. A report by the Pew Center on the States shows the overall recidivism rate (**return to prison for any reason within three years of release**) for releases from 33 states participating in the study was approximately 43%.¹ A 2014 report from the Bureau of Justice Statistics of multiple states reports an overall recidivism rate of nearly 50%.²

It must be noted that, unlike many states, Florida paroles very few inmates, and less than one-third of released inmates have supervision following their release. Historically, inmates who are supervised following release have recidivated at a higher rate than those without post-release supervision. Since fewer of Florida's released inmates participate in post-prison supervision, Florida's recidivism rate is lower than that of other states.

¹ Pew Center on the States, *State of Recidivism: The Revolving Door of America's Prisons* (Washington, DC: The Pew Charitable Trusts, April 2011)
http://www.pewtrusts.org/~media/legacy/uploadedfiles/pcs_assets/2011/pewstateofrecidivismpdf.pdf

² United States. U.S. Department of Justice. Bureau of Justice Statistics. *Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010*. By Matthew R. Durose, Alexia D. Cooper, Ph.D., and Howard N. Snyder, Ph.D. Washington D.C.: U.S. Dept. of Justice, Office of Justice Programs, Bureau of Justice Statistics, 2014. Web. 24 Apr. 2014. www.bjs.gov/content/pub/pdf/rprts05p0510.pdf

RECIDIVISM STUDY METHODOLOGY

All inmates released from Florida prisons from January 1, 2012 to December 31, 2012 are included in the study, with the following exceptions:

- Inmates who died or were executed have been omitted from the calculation of recidivism rates.
- Inmates who are missing information on the factors of interest are omitted from the analysis of factor influences.
- Inmates with more than one release in a calendar year have only the first such release included.
- Inmates with detainers in place at the time of release are omitted.

This methodology follows the definition of recidivism stated by the Association of State Correctional Administrators (ASCA) Performance-Based Measures System Counting Rules.³ For this study, survival analysis techniques are used to compute recidivism rates and to define the statistical models that determine which factors significantly influence recidivism rates. The basic rates for tables and graphs are computed from Kaplan-Meier estimates of the survival curve using right-censored data. The analyses of factor significance are conducted using Cox models (proportional hazards regression) of the same data. The analysis used a 5% level of significance to determine the factors to include, and a stepwise selection routine for determining the order of importance. The correlations between factors were considered during the stepwise routine to eliminate highly correlated variables from both being selected for inclusion in the model.

The following variables were considered for inclusion in the model:

- **Inmate Background Information**

- Gender is male – Yes/No
- Number of prior prison commitments
- Age at release
- Age at first offense
- Race is black – Yes/No
- Ethnicity is Hispanic – Yes/No
- Confirmed or suspected gang member – Yes/No

³ “ASCA Performance-Based Measures System Counting Rules” (July 2016 Web)
http://www.asca.net/system/assets/attachments/9894/PBMS%20KeyIndicators%20%207_5_16.pdf?1467830524

- **Inmate Incarceration Information**

- Time served in prison (current incarceration in months)
- Custody level – Low or High
- Number of disciplinary reports during current incarceration
- Substance abuse severity score
- Diagnosed mental illness – Yes/No
- Supervision to follow – Yes/No
- Bus ticket furnished by the Department of Corrections for release transportation – Yes/No
- Inmate bank account balance at time of release

- **Inmate Education Information**

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- Most recent Tests of Adult Basic Education (TABE) score (education level in grade equivalents)

- **Inmate Criminal History**

- Most serious violent offense in criminal history (Categories for murder/manslaughter, sex offense, robbery, other violent offense (like assault or kidnapping) – Yes/No)
- Most serious violent offense within 15 years prior to admission (Categories for murder/manslaughter, sex offense, robbery, and other violent offense – Yes/No)
- Offense counts in criminal history (Categories for murder/manslaughter, sex offense, robbery, other violent offense, burglary, theft, drugs, weapons, and other non-violent offense)
- Non-violent offense counts within 5 years prior to admission (Categories for burglary, theft, drugs, weapons, and other non-violent offense)

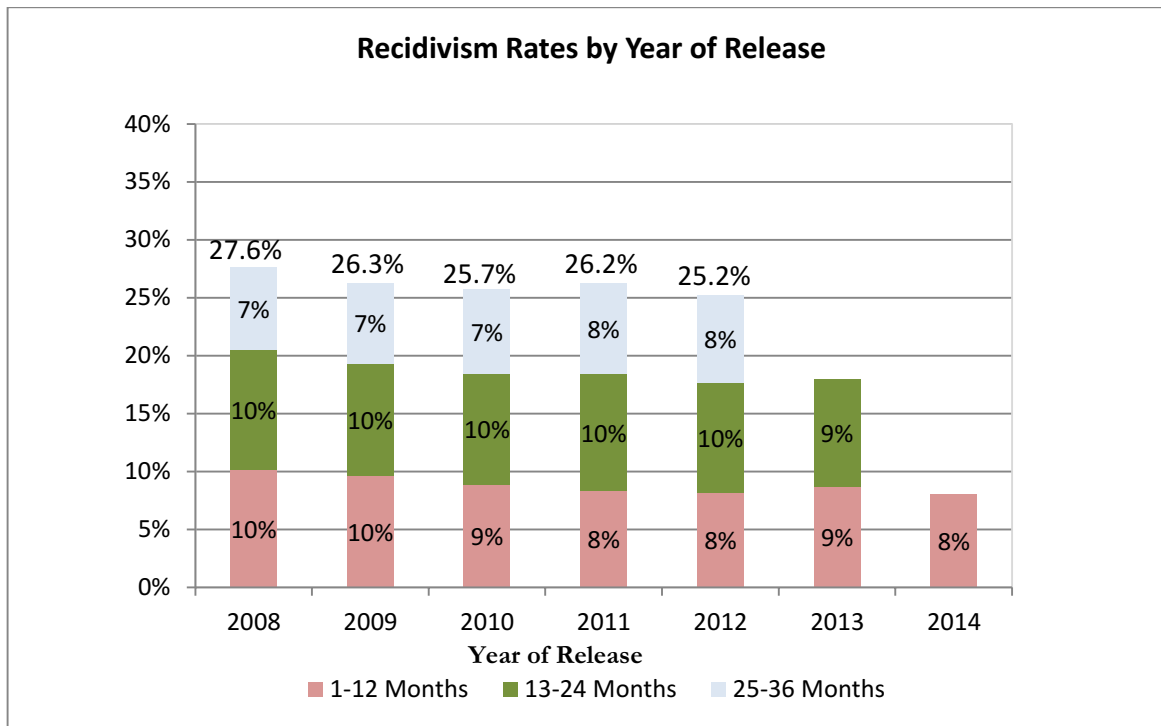
- **Inmate Social Relations**

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Note that for the "most serious" offense factors, the hierarchy is: murder/manslaughter > sex offense > robbery > other violent offense. Each inmate can only be designated in one of the categories. For example, if he has committed both sex offenses and robbery, he will be considered in the "most serious offense is sex offense" category, not in the "most serious offense is robbery" category.

For the criminal history factors, only those offenses for which the inmate received either a Florida prison sentence, or Florida community supervision sentence, are considered. Crimes in Florida that resulted in other sanctions, such as fines, county jail or federal sentences, are not considered. Arrests, supervision or prison sentences outside of Florida are not considered unless they are part of the inmate's Florida sentence. For information on re-arrest rates, see page 20 of this report.

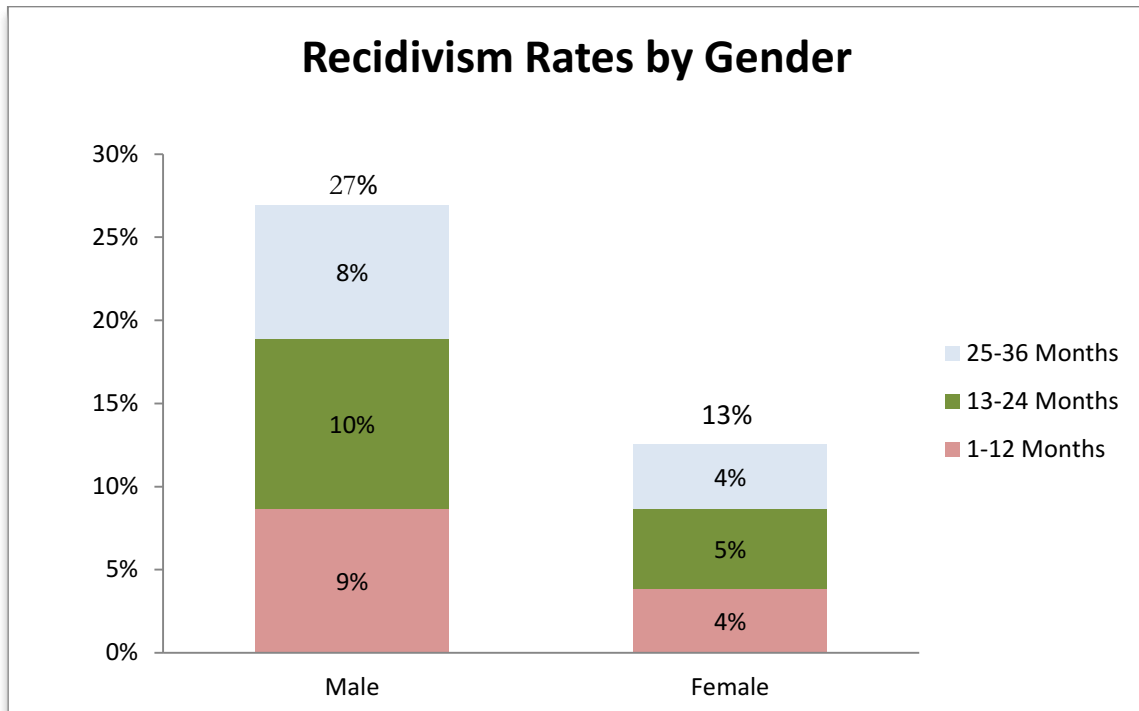
RECIDIVISM RATES OVER TIME



The 36-month recidivism rates, when examined one year of releases at a time, range from 27.6% to 25.2% in the five years for which three-year rates can be computed.

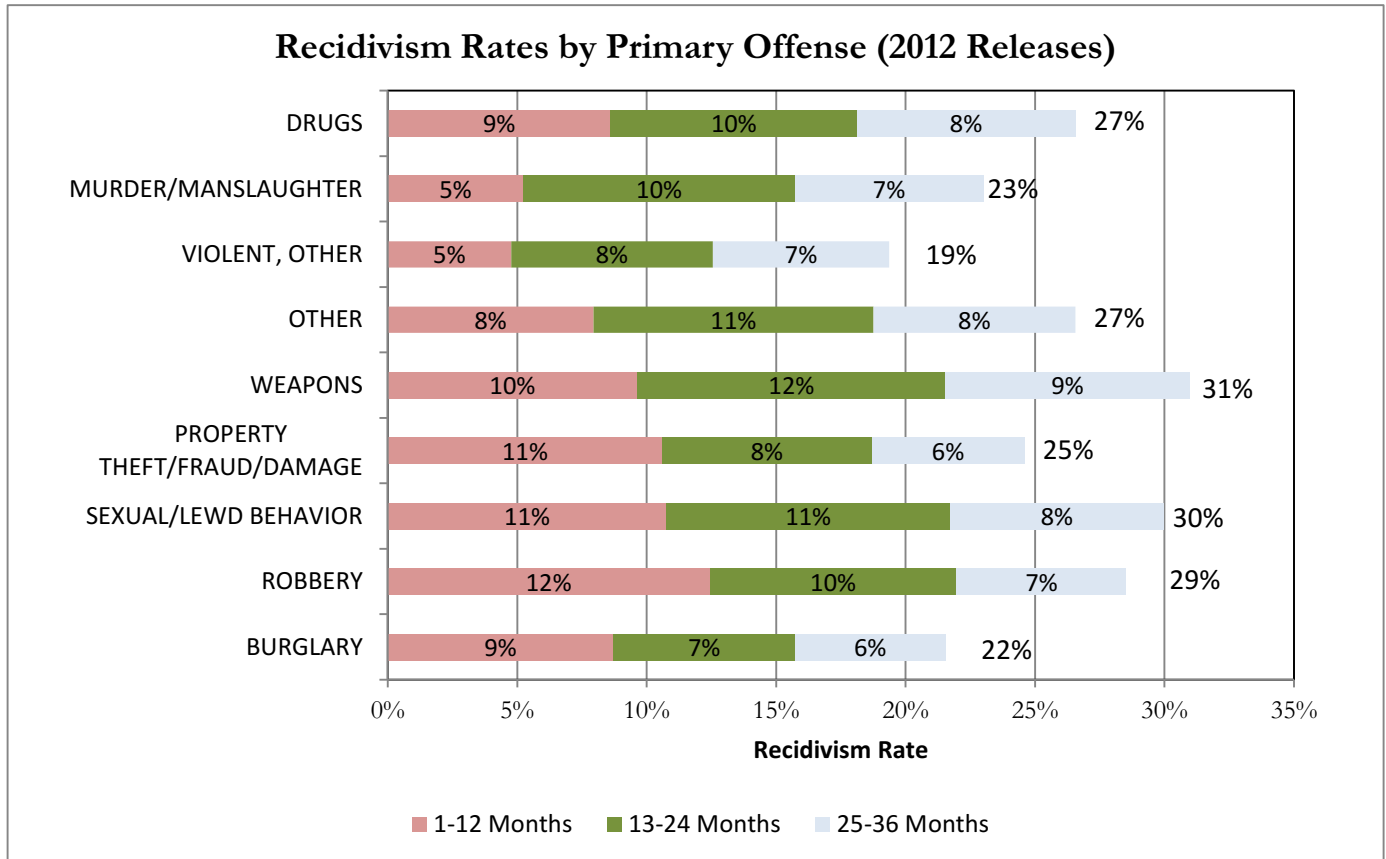
Recidivism rates are certainly affected by factors outside the influence of the Department of Corrections, such as unemployment, crime rates and local criminal justice issues, including jail bed availability and judicial behavior. Statewide initiatives such as truth-in-sentencing, increased use of mandatory prison terms, and availability of inmate rehabilitative programs may also influence recidivism rates. For these reasons, recidivism rates cannot be used as the only measure of operational performance for the prison system. It is a measure of a multitude of societal issues working for and against the released inmate, before he ever receives a prison sentence and after he is released.

RECIDIVISM RATES AND GENDER FOR INMATES RELEASED 2012



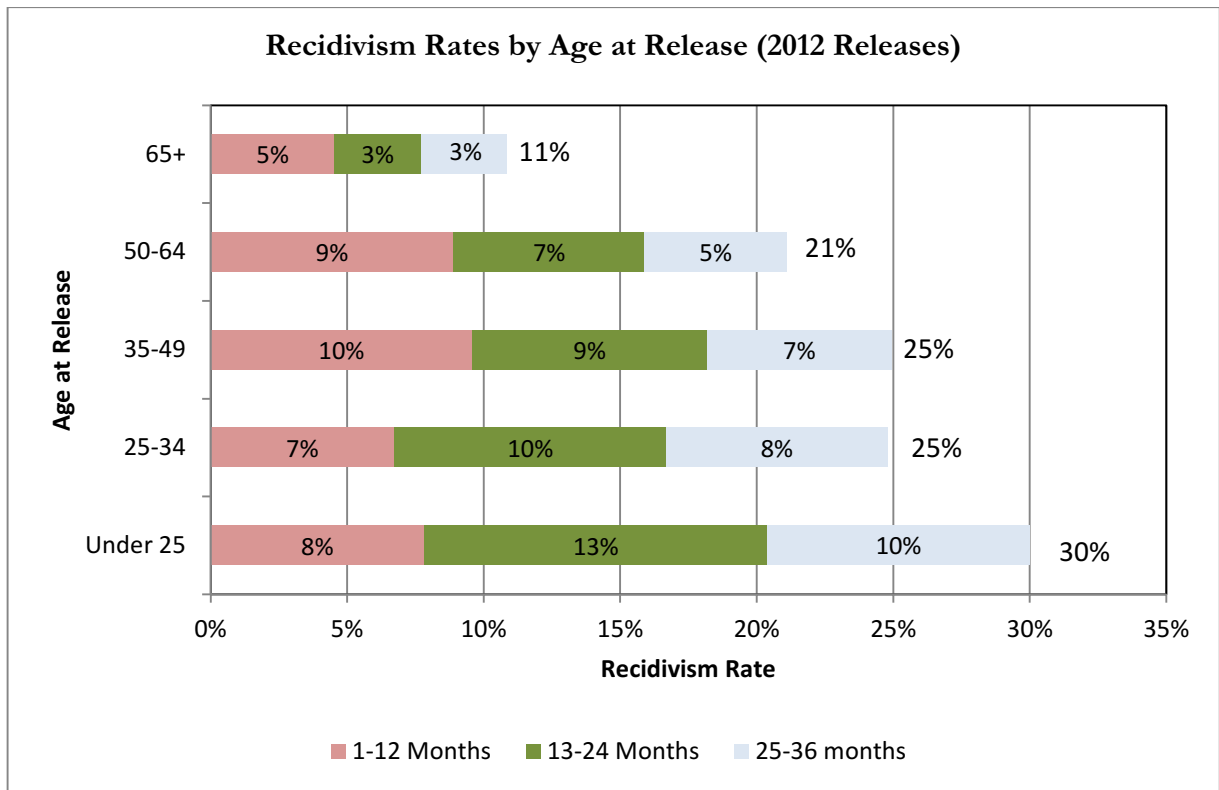
With regard to gender, female inmates' recidivism rates are much lower than male inmates' recidivism rates. At three years, the male recidivism rate is 27% while the female rate is only 13%. Other factors could impact the difference in the recidivism rates. While the average time served for males is 41 months, the average time served for females is only 28 months. Approximately 30% of female releases have some type of supervision to follow compared to 36% of males. These factors and others may explain some of the differences in the recidivism rate for males and females.

RECIDIVISM RATES AND PRIMARY OFFENSES FOR INMATES RELEASED 2012



The graph above shows that inmates serving a prison sentence for "other" violent offenses (like aggravated assault, battery, kidnapping, arson) have the lowest recidivism rates, followed by burglary and murder offenders. Inmates serving time for weapons, sex offenses, robbery, other non-violent offenses (like DUI, driving with suspended or revoked license, failure to register), and drug offenses have higher recidivism rates than the average recidivism rate of 2012 releases.

RECIDIVISM RATES AND AGE FOR INMATES RELEASED 2012



An inmate's likelihood to recidivate decreases with age. Note that there is little difference in the recidivism rates between the age group of 25-34 and 35-49.

**RECIDIVISM RATES – MODEL FACTOR TABLES
FOR INMATES RELEASED 2012**

Table 1. Hazard Ratios for Categorical Factors Selected by Model (Male)

Factors	Values	Overall Releases 2012 (Available Data Only)	Percent of Release Cohort	Recidivism Rate	Hazard Ratio
Supervision to Follow	Yes	9,595	36%	39%	2.065**
	No	17,291	64%	20%	
Gang Membership	Yes	2,245	8%	45%	1.67**
	No	24,641	92%	25%	
Ethnicity	Hispanic	2,579	10%	22%	0.725**
	Non-Hispanic	24,307	90%	27%	
Custody at Release	Low (Community or Minimum)	12,191	45%	22%	0.82**
Criminal History	Other Violent Offenses Committed within 15 Years Prior to Admission	8,881	33%	29%	0.919**
	Worst Offense was Murder	817	3%	24%	0.73**
Spouse Have a Positive Influence	Yes	13,195	50%	26%	0.94**
	No	13,074	50%	28%	
Friends Have a Negative Influence	Yes	1,735	7%	34%	1.173**
	No	24,534	93%	26%	
Friends Have a Positive Influence	Yes	15,890	60%	26%	0.941*
	No	10,379	40%	29%	
Bus Ticket Furnished for Release Transportation	Yes	10,599	39%	30%	1.067**
	No	16,287	61%	25%	

** : p-value ≤ 0.01; * : 0.01 < p-value < 0.05; NS: Not Significant at α = 0.05

Table 2. Hazard Ratios for Continuous Factors Selected by Model (Male)

Factors	Value	Median	Mean	Hazard Ratio
Criminal History	Number of Prior Prison Commitments (0-8)	0.0	0.8	1.173**
Age at First Offense	Age at First Offense (13-81)	20	23	0.966**
Institutional Behavior	Number of Disciplinary Reports During the Current Incarceration (0-154)	1.0	2.8	1.009**
Education Level	Most Recent Tests of Adult Basic Education (TABE) Score (Grade Equivalents of 1-12.9)	6.7	†	0.963**
Number of Visits Inmate Gets 12 Months Prior to Release	Number of Visits (0-69)	0	0.4	0.974**
Substance Abuse Severity Score	Inmate-Reported Drug Screening Score (0-14)	4.0	5.1	1.01**
Criminal History	Number of Theft Offenses within 5 Years Prior to Admission (0-57)	0.0	0.9	1.034**
	Number of Other Offenses within 5 Years Prior to Admission (0-10)	0.0	0.3	1.071**
	Number of Burglary Offenses (0-41)	0.0	1.1	1.027**

** p -value ≤ 0.01 ; * $0.01 < p$ -value < 0.05 ; NS: Not Significant at $\alpha = 0.05$; †: An average cannot be calculated for grade equivalent TABE scores since these are not interval scale.

Table 3. Hazard Ratios for Categorical Factors Selected by Model (Female)

Factors	Values	Overall Releases 2012 (Available Data Only)	Percent of Release Cohort	Recidivism Rate	Hazard Ratio
Supervision to Follow	Yes	1,070	30%	19%	2.075**
	No	2,506	70%	10%	
Custody at Release	Low (Community or Minimum)	2,535	71%	10%	0.771**
Most Serious Crime in Inmate History	Murder	85	2%	7%	0.465*
Inmate Admits to having Enemies outside of Prison	Yes	114	3%	7%	0.537*
	No	3,387	97%	12%	
Family has a Positive Influence on the Inmate	Yes	3,021	86%	12%	0.777*
	No	480	14%	15%	

** p -value ≤ 0.01 ; * p -value < 0.05 ; NS: Not Significant at $\alpha = 0.05$; ***: Sample size is too small.

Table 4. Hazard Ratios for Continuous Factors Selected by Model (Female)

Factors	Value	Median	Mean	Hazard Ratio
Criminal History	Number of Prior Prison Commitments (0-7)	0.0	0.4	1.287**
Age at First Offense	Age at First Offense (14-64)	24.0	26.3	0.947**
Substance Severity Score	Inmate-Reported Drug Screening Score (0-14)	7.0	6.8	1.052**
Criminal History	Number of Theft offense Counts within 5 years prior to admission(0-42)	0	1.4	1.04**
Most Recent TAFE Score	Educational Level (1-12)	8.6	†	0.963**

** p -value ≤ 0.01 ; * p -value < 0.05 ; NS: Not Significant at $\alpha = 0.05$; †: An average cannot be calculated for grade equivalent TAFE scores since these are not interval scale.

Note that hazard ratios in the above tables are interpreted as the multiple of the likelihood of failure. For example, in Table 1 male inmates who are gang members have a hazard ratio of 1.67. This ratio means that a male inmate who is a gang member is $(1.67-1=0.67)$ 67% more likely to fail than a male

inmate who is not a gang member with all other factors held constant (meaning they are identical on all factors in the model except for gang membership).

On the other hand, if the hazard ratio is less than one, the interpretation is a percent reduction in likelihood to fail. For example, in Table 1 a male Hispanic inmate is $(1-0.725=.275)$ 27.5% less likely to recidivate than a non-Hispanic male inmate with all other factors held constant.

For those measures that are expressed as numeric counts instead of dichotomous (Yes/No), the hazard ratios show the increase or decrease **per unit increase** in the factor. For example, in Table 2 for each additional disciplinary report a male inmate receives while incarcerated, his likelihood of recidivating increases by $(1.009-1=.009)$ 0.9%. For each additional grade level tested, his likelihood of recidivating decreases by $(1-0.963=.037)$ 3.7%.

Factors in Order of Predictability

Listed below are the factors, in order of importance, followed by an ‘*H*’ if the factor is associated with a higher likelihood of recidivism and an ‘*L*’ for a lower likelihood of recidivism.

Males

1. Supervision Following Prison – *H*
2. Number of Prior Prison Commitments – *H*
3. Age at First Offense – *L*
4. Gang Member Suspected or Confirmed – *H*
5. Most Recent TABE (Education Level) Score – *L*
6. Number of Theft Offenses within 5 Years Prior to Admission – *H*
7. Low Custody – *L*
8. Hispanic Ethnicity – *L*
9. Number of Burglary Offenses – *H*
10. Number of Disciplinary Reports while in Prison – *H*
11. Number of Other Offenses within 5 Years Prior to Admission – *H*
12. Friends Have a Negative Influences – *H*
13. Most Serious Offense is Murder - *L*
14. Inmate Reported Drug Screening Score – *H*
15. Number of Visits Inmate Gets 12 Months Prior to Release – *L*
16. Inmate has Other Violent Offenses within 15 Years Prior to Admission – *L*
17. Spouse Have Positive Influence – *L*
18. Inmate Furnished Bus Ticket for Release Transportation – *H*
19. Friends Have a Positive Influence - *L*

Females

1. Number of Prior Prison Commitments – *H*
2. Supervision Following Prison - *H*
3. Age at First Offense – *L*
4. Inmate Reported Drug Screening Score – *H*
5. Number of Theft Offenses within 5 Years Prior to Admission – *H*
6. Most Recent TABE (Education Level) Score – *L*
7. Low Custody - *L*
8. Most Serious Offense is Murder - *L*
9. Family has a Positive Influence – *L*
10. Inmate Admits to Having Enemies Outside of Prison – *L*

The factors that affect male recidivism rates, but not female rates are:

1. Number of Discipline Reports while in Prison
2. Gang Membership
3. Number of Burglary Offenses
4. Number of Other Offenses within 5 Years Prior to Admission
5. Violent Offense within 15 Years Prior to Admission
6. Inmate is Hispanic
7. Spouse Has a Positive Influence
8. Friends Have a Positive Influence
9. Friends Have a Negative Influence
10. Visits by the Family and Friends 12 Months Prior to Release
11. Bus Ticket Furnished by the Department of Corrections for Release Transportation

The factors that affect female recidivism rates, but not male rates are:

1. Family Has a Positive Influence
2. Inmate Concerned about Child's Welfare

The factors that affect both male recidivism and female recidivism in the same direction are (not in order of importance):

1. Number of Prior Prison Commitments
2. Supervision to Follow
3. Age at First Offense
4. Low Custody
5. Most Recent TABE Score
6. Inmate-Reported Drug Screening Score
7. Worst Offense is Murder
8. Number of Theft Offenses within 5 Years Prior to Admission

Table 5. Factors Not Included in the Model

Factor	Value	Overall Releases 2012	Percent of Release Cohort	Recidivism Rate
Release Type	Expiration of Sentence (No Supervision to Follow)	19,753	65%	19%
	Conditional Release (mandatory supervision for serious offenders as specified in F.S. 947.1405)	4,577	15%	43%
	Expiration of Sentence to Probation or Community Control (Split Sentence)	4,746	16%	35%
	Program Supervision (Addiction Recovery)	1,186	4%	19%
Release Facility	Major Correctional Institution	24,739	84%	27%
	Work/Forestry Camp	1,335	5%	24%
	Work Release	3,116	11%	12%

Note that the results presented in Table 5 do not constitute a rigorous evaluation of any factor. For example, it is not valid to claim that if all inmates went to Work Release Centers, one would realize a lower overall recidivism rate. Inmates who succeed at work release do not have the same characteristics as many other inmates, so the work release impact would likely be different if expanded to include a broader group of inmates.

Re-Arrest Rates

A review by the Office of Program Policy and Government Accountability (OPPAGA) suggested that the department include re-arrest rates in addition to recidivism rates in this report. The Bureau of Research and Data Analysis worked with the Florida Department of Law Enforcement's Statistical Analysis Center (SAC) to match arrest records to the release cohorts used in the recidivism calculation (all of the arrests occurred in Florida, and the lack of a post-release arrest record in Florida's Computerized Criminal History database does not mean that the inmate wasn't arrested post-release in another state).

The Florida Department of Law Enforcement (FDLE) maintains Florida's Computerized Criminal History (CCH) files which contain arrest information submitted by Florida law enforcement agencies via fingerprint cards or Livescan as well as judicial and custody information submitted by the Clerks of Court and the Department of Corrections, respectively. Note that CCH data are continually updated and arrest/judicial records are subject to change as additional information are received and entered. Caution should be used in comparing individual categories as these may be impacted by events whose records have not yet been added to the database.

Defining Re-Arrest

Re-arrest is defined as any arrest after release from prison. The arrest could result in a new conviction, a violation of post-prison supervision, or any other disposition. The follow-up periods (typically reported as **three years**) are calculated from prison release date to the date of arrest.

Release Year	Follow-up Period								
	12 Months			24 Months			36 Months		
	Arrested after Release	Total Released	Re-Arrest Rate	Arrested after Release	Total Released	Re-Arrest Rate	Arrested after Release	Total Released	Re-Arrest Rate
2008	14,736	33,552	43.9%	19,784	33,552	59.0%	22,211	33,552	66.2%
2009	14,410	33,832	42.6%	19,607	33,832	58.0%	22,066	33,832	65.2%
2010	13,316	32,354	41.2%	18,279	32,354	56.5%	20,685	32,354	63.9%
2011	12,595	31,683	39.8%	17,602	31,683	55.6%	20,111	31,683	63.5%
2012	11,394	30,462	37.4%	16,334	30,462	53.6%	18,708	30,462	61.4%

Changing Re-Arrest Rates

The annual release cohorts have shown decreases in five-year re-arrest rates. The declining trend in the re-arrest rates during the recent years is consistent with the Florida statewide decrease in the arrest numbers for the past years. Please refer to <http://www.fdle.state.fl.us/cms/FSAC/Data-Statistics/UCR-Arrest-Data.aspx> for more information about the statewide arrest numbers.