

## Florida Prison Recidivism Report: Releases from 2009 to 2015

December 2017

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Bureau of Research and Data Analysis

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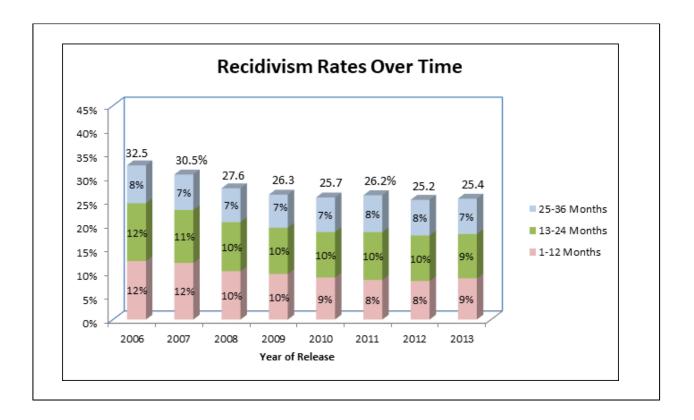
### Defining Recidivism

The Florida Department of Corrections defines recidivism as a **return to prison**, as the result of either a new conviction or a violation of post-prison supervision, within three years of their prison release date. The follow-up periods are calculated from prison release date to the date of readmission to prison.

### Changing Recidivism Rates

The three-year recidivism rate has decreased from 32.5% in 2006 to 25.4% in 2013. However, the recidivism rates have fluctuated over the past five years. These rates are shown below:

- Inmates released in 2009 who returned to prison within three years  $\rightarrow$  26.3% recidivism rate
- Inmates released in 2010 who returned to prison within three years  $\rightarrow$  25.7% recidivism rate
- Inmates released in 2011 who returned to prison within three years  $\rightarrow$  26.2% recidivism rate
- Inmates released in 2012 who returned to prison within three years  $\rightarrow$  25.2% recidivism rate
- Inmates released in 2013 who returned to prison within three years  $\rightarrow$  25.4% recidivism rate



### Major Factors

For 2013 releases, some factors found to influence an inmate's likelihood of recidivism include:

- Number of prior prison commitments
  - o More Priors → Higher Likelihood of Recidivating
- Whether the inmate has a supervision term after release
  - o Supervised → Higher Likelihood of Recidivating
- The inmate's tested education level
  - o 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
  - o Hispanic → Lower Likelihood of Recidivating
- The inmate's custody level upon release
  - o Low→ Lower Likelihood of Recidivating
- The inmate's most serious serving offense
  - o Murder→ Lower Likelihood of Recidivating
- The inmate's theft offense counts within five years prior to admission
  - o More Counts→ Higher Likelihood of Recidivating
- Number of visits the inmate receives one year prior to release
  - o 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
  - o 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 present 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 better determine where to devote correctional and community resources, it is imperative that we identify the factors that influence both success and failure in terms of reentry so that we can understand and address the unique challenges inmates face upon returning to the community.

This study finds that the factors that influence Florida's recidivism rate are generally consistent with existing research. A 2011 report from the Pew Center on the States shows the overall recidivism rate (return to prison for any reason within three years of release) for releases in 2004 from the states that participated was 43.3%. <sup>1</sup> A 2014 report from the Bureau of Justice Statistics of 23 states reports an overall three-year recidivism rate of nearly 50% for 2005 releases.<sup>2</sup>

It must be noted that, unlike many states, Florida paroles very few inmates. In Fiscal Year 2015-16 about 32.6% of inmates were released to supervision terms.<sup>3</sup> Historically, inmates who are supervised following release recidivate at a higher rate than those without post-release supervision. Since fewer of Florida's released inmates are supervised post-release, Florida's recidivism rate appears to be much lower than other states.

Pew Center on the States, State of Recidivism: The Revolving Door of America's Prisons (Washington, DC: The Pew Charitable Trusts, April 2011) <a href="http://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs\_assets/2011/pewstateofrecidivismpdf.pdf">http://www.pewtrusts.org/~/media/legacy/uploadedfiles/pcs\_assets/2011/pewstateofrecidivismpdf.pdf</a>

<sup>&</sup>lt;sup>2</sup> 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. <a href="https://www.bjs.gov/content/pub/pdf/rprts05p0510.pdf">www.bjs.gov/content/pub/pdf/rprts05p0510.pdf</a>

<sup>&</sup>lt;sup>3</sup> http://www.dc.state.fl.us/pub/annual/1516/stats/im release.html

### **METHODOLOGY**

In this study recidivism is defined as a **return to prison,** as the result of either a new conviction or a violation of post-prison supervision, within three years of their prison release date. 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 which 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.

All inmates released from Florida prisons from January 1, 2013 to December 31, 2013 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 release included.
- Inmates with detainers in place at the time of release are omitted.

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

### - 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
- Number of visits inmate had or received in the 12 months prior to release
- Bus ticket furnished by the Department of Corrections for release transportation Yes/No
- Inmate has been assigned to close management within three years before released Yes/No
- Inmate is homeless at release Yes/No

#### - Inmate Education Information

- Has inmate obtained a GED/HS certificate Yes/No
- Has inmate received a vocational certificate Yes/No
- 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 (e.g. 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)

#### Social Cognitive Factors

These factors are measured by the following domain scores (scale: 1-5)

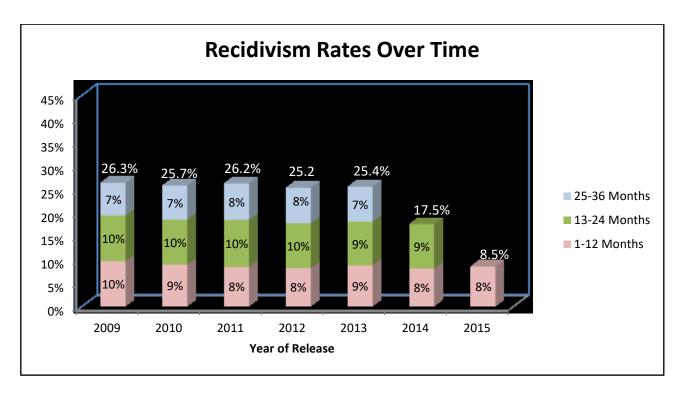
- Education & Employment Score This domain considers the social achievement of a significant academic milestone and employment history
- Criminal Thinking Score This domain considers how a person's behavior reflects his/her thinking, and whether their mental orientation is prosocial or supports their criminal behavior
- Wellness Score This domain includes a wide range of skills, such as healthy habits, proper hygiene, good nutrition and appropriate leisure time activities
- Family/Marital Score This domain considers impact of marital or equivalent relationships on the pro-criminal influences and antisocial attitudes
- Substance Abuse Score This domain considers the inmate history of alcohol and drug use
- Criminal Associates Score This domain considers inmate attachments to criminal associates
- Anti-Social Personality Score This domain considers the antisocial behavior marked by impulsiveness, aggression, and stimulation seeking

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 included. Arrests, supervision, or

prison sentences outside of Florida are also not included, unless they are a part of the inmate's Florida sentence. For information on re-arrest rates, please refer to page 18 of this report.

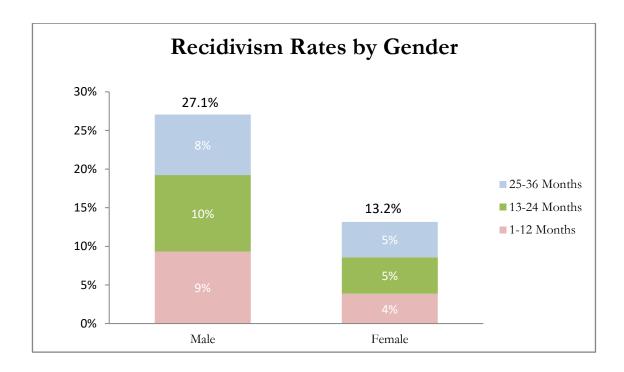
In addition, for the "most serious violent offense" factor, an inmate can only be designated to one of the offense categories listed below. For example, if an inmate has committed both a sex offense and a robbery, he will be counted in the sex offense category, NOT in the robbery category, according to the offense severity hierarchy. The offense severity hierarchy for the most serious violent offense factor is as follows:

- 1. Murder
- 2. Sex Offense
- 3. Robbery
- 4. Other violent offense (e.g. assault, kidnapping, etc.)



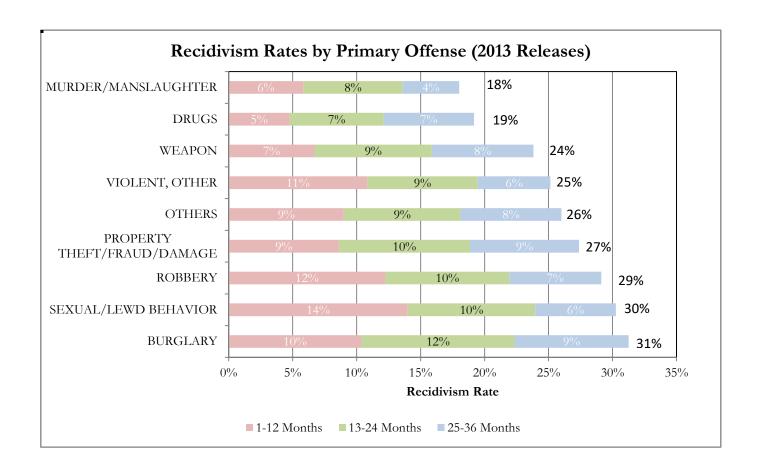
 As of the 2017 report, 3-year recidivism rates cannot yet be computed for 2014 and 2015 releases, so only one- and twoyear rates are provided in the chart.

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 Florida prison system. Recidivism is a measure of a multitude of societal issues working for and against the released inmate, before he ever receives a prison sentence and long after he is released.



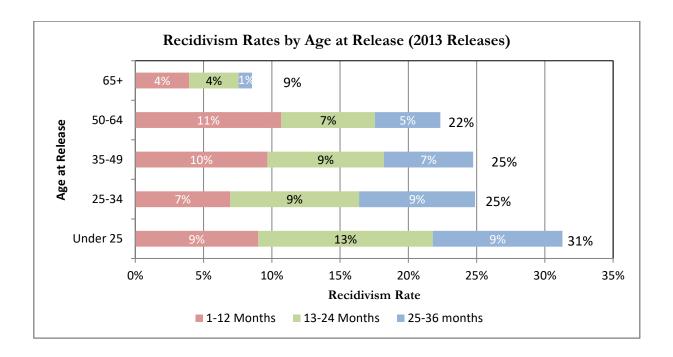
Female inmates' recidivism rates are much lower than male inmates' rates. At three years, the male recidivism rate is 27.1% while the female rate is only 13.2%. Other factors could account for the difference we observe. While the average time served for males is 43 months, the average time served for females is only 27 months. Approximately 30% of female releases have some type of supervision to follow compared to 36% of males. These are only a few of the factors that may explain some of the differences in recidivism rates for males and females.

## RECIDIVISM RATES BY PRIMARY OFFENSE FOR INMATES RELEASED in 2013



The graph above shows that inmates serving a prison sentence for murder/manslaughter offenses have the lowest recidivism rates at 18%, followed by inmates with drugs and weapon offenses. Inmates with burglary offenses have the highest recidivism rates at 31%. Inmates serving time for violent other (e.g. aggravated assault, battery, kidnapping, arson), sexual/lewd behavior, robbery, other non-violent offenses (e.g. DUI, driving with suspended or revoked license, failure to register), and property theft/fraud/damage offenses have higher recidivism rates than the overall recidivism rate for 2013 releases.

# RECIDIVISM RATES BY AGE AT RELEASE FOR INMATES RELEASED in 2013



An inmate's likelihood to recidivate decreases with age at release. 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 in 2013

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

		Overall Releases 2013 (Available	Percent of Release	Recidivism	Hazard
Factors	Values	Data Only)	Cohort	Rate	Ratio
Supervision to Follow	Yes	9,526	36%	40%	2.248**
Supervision to Follow	No	16,701	64%	20%	
C W L L	Yes	2,235	9%	46%	1.593**
Gang Membership	No	23,992	91%	25%	
Custody at Release	Low (Community or Minimum)	11,909	45%	22%	0.828**
Ethnicity	Hispanic	2,547	10%	23%	0.744**
Etimicity	Non-Hispanic	23,680	90%	28%	
Homeless Residence Status at	Yes	747	3%	43%	1.301**
Release	No	25,480	97%	27%	
Murder Offense 15 Years Prior to Admission	Yes	625	2%	22%	0.784**
Worst Offense is Sex	Yes	2,123	8%	32%	1.118**
Bus Ticket Furnished for	Yes	8,696	33%	31%	1.065**
Release Transportation	No	17,531	67%	25%	

<sup>\*\*:</sup> p-value  $\leq$  0.01; \*: 0.01  $\leq$  p-value  $\leq$ 0.05; NS: Not Significant at  $\alpha$  = 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 (0-10)	0.0	0.8	1.283**
Age at Release	Age at Release (15-85)	34	36	0.973**
Institutional Behavior	Number of Disciplinary Reports During the Current Incarceration (0-387)	1.0	2.9	1.008**
Education Level	Most Recent Tests of Adult Basic Education (TABE) Score (Grade Equivalents of 1-12.9)	7.0	†	0.958**
Number of Visits Inmate Gets 12 Months Prior to Release	Number of Visits (0-112)	0	3.3	0.989**
Substance Abuse Severity Score	Inmate-Reported Drug Screening Score(0-14)	3.0	4.8	1.018**
Criminal Associates	CA_Score (1-5)	2	2	1.053**
	Number of Theft Offenses (0-124)	1.0	1.9	1.027**
Criminal History	Number of Burglary Offenses within 5 Years Prior to Admission (0-71)	0.0	0.6	1.042**
	Number of Other Offenses within 5 Years Prior to Admission (0-13)	0.0	0.4	1.048**

<sup>\*\*:</sup> p-value  $\leq$  0.01; \*: 0.01  $\leq$  p-value  $\leq$ 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 2013 (Available Data Only)	Percent of Release Cohort	Recidivism Rate	Hazard Ratio
C , E 11	Yes	1,030	30%	19%	2.138**
Supervision to Follow	No	2,420	70%	11%	
Custody at Release Low (Community or Minimum)		2,541	74%	11%	0.772**
Most Serious Crime in Inmate History	Murder	83	2%	2%	0.29*
Cons Month and in	Yes	22	0.6%	45%	2.614*
Gang Membership	No	3,428	99%	13%	

<sup>\*\*:</sup> p-value  $\leq$  0.01; \*: 0.01  $\leq$  p-value  $\leq$ 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 (0-8)	0.0	0.4	1.287**
,				
Age at First Offense	Age at First Offense (14-68)	24.0	26.5	0.963**
Criminal Associates	CA_Score (1-5)	2.0	2.2	1.135**
Institutional Behavior	Number of Disciplinary Reports During the Current Incarceration (0-99)	0	1.4	1.023**
Substance Score	SA_Score (0-14)	7.0	6.6	1.033**
	Number of Other Offenses within 5 Years of Admission (0-8)	0	0.3	1.16**
Criminal History	Number of Burglary Offenses (0-33)	0	0.4	1.065**
Most Recent TABE Score	Educational Level (1-12)	8.95	†	0.962**

<sup>\*\*:</sup> p-value  $\leq$  0.01; \*: 0.01  $\leq$  p-value  $\leq$ 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.

Note that hazard ratios in the previous 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 1.593. This ratio means that a male inmate who is a gang member is (1.593-1=0.593) 59.3% 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 (1-0.744=.256) 25.6% 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 (1.008-1=.008) 0.8%. For each additional grade level tested, his likelihood of recidivating decreases by (1-0.958=0.042) 4.2%.

Table 5. Factors Not Included in the Model

Factor	Value	Overall Releases 2013	Percent of Release Cohort	Recidivism Rate
	Expiration of Sentence (No Supervision to Follow)	19,079	64%	19%
Release Type	Conditional Release (mandatory supervision for serious offenders as specified in F.S. 947.1405)	4,835	16%	44%
	Expiration of Sentence to Probation or Community Control (Split Sentence)	4,578	15%	35%
	Program Supervision (Addiction Recovery)	1,017	3%	20%
Release Facility	Major Correctional Institution	23,914	83%	27%
	Work/Forestry Camp	1,275	4%	22%
	Work Release	3,353	12%	13%

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 observe a lower overall recidivism rate. Inmates who succeed at work release do not necessarily have the same characteristics as other inmates, so the work release impact would likely be different if expanded to include a broader group of inmates.

### Factors in Order of Predictability by Gender

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 Higher Likelihood
- 2. Number of Prior Prison Commitments Higher Likelihood
- 3. Age at Release Lower Likelihood
- 4. Gang Member Suspected or Confirmed Higher Likelihood
- 5. Number of Disciplinary Reports while in Prison Higher Likelihood
- 6. Number of Theft Offenses Higher Likelihood
- 7. Most Recent TABE (Education Level) Score Lower Likelihood
- 8. Low Custody Lower Likelihood
- 9. Number of Burglary Offenses within 5 Years Prior to Admission Higher Likelihood
- 10. Number of Visits Inmate has Got 12 Months Prior to Release Lower Likelihood
- 11. Inmate Reported Drug Screening Score Higher Likelihood
- 12. Hispanic Ethnicity Lower Likelihood
- 13. Inmate has homeless residence status at release Higher Likelihood
- 14. Criminal Associates Score Higher Likelihood
- 15. Number of Other Offenses within 5 Years Prior to Admission Higher Likelihood
- 16. Inmate Committed Murder Offense 15 Years Prior to Admission Lower Likelihood
- 17. Inmate Worst Offense is Sex Higher Likelihood
- 18. Inmate is Furnished Bus Ticket for Release Transportation Higher Likelihood

### Females

- 1. Number of Prior Prison Commitments Higher Likelihood
- 2. Supervision Following Prison Higher Likelihood
- 3. Age at First Offense Lower Likelihood
- 4. Criminal Associates Score Higher Likelihood
- 5. Number of Disciplinary Reports while in Prison Higher Likelihood
- 6. Number of Other Offenses within 5 Years Prior to Admission Higher Likelihood
- 7. Most Serious Offense is Murder Lower Likelihood
- 8. Inmate Substance Abuse Score Higher Likelihood
- 9. Most Recent TABE (Education Level) Score Lower Likelihood
- 10. Gang Member Suspected or Confirmed Higher Likelihood
- 11. Low Custody Lower Likelihood
- 12. Number of Burglary Offenses Higher Likelihood

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

- 1. Number of Theft Offenses
- 2. Inmate Worst Offense is Sex
- 3. Inmate is Hispanic
- 4. Visits by the Family and Friends 12 Months Prior to Release
- 5. Bus Ticket Furnished by the Department of Corrections for Release Transportation
- 6. Inmate has homeless residence status at release

## 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. Number of Disciplinary Reports during the Incarceration
- 4. Criminal Associate Scores
- 5. Low Custody
- 6. Most Recent TABE Score
- 7. Substance/Drug Score
- 8. Murder Offense
- 9. Number of Other Offenses within 5 Years Prior to Admission
- 10. Number of Burglary Offenses
- 11. Gang Membership

In terms of the age impact, age at release affects the male recidivism rate, while age at first offense affects the female recidivism rate.

#### **Re-Arrest Rates**

A review by the Office of Program Policy and Government Accountability (OPPAGA) recommended 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 was not 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 is received and entered. Caution should be used when comparing individual categories, as these may be impacted by events that have not yet been recorded in 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 another disposition. The follow-up periods (typically reported as **three years**) are calculated from prison release date to the date of arrest.

Release Year	40.35 .1					36 Months			
Tear	Arrested after Release	Total Released	Re- Arrest Rate	Arrested after Release	Total Released	Re- Arrest Rate	Arrested after Release	Total Released	Re- Arrest Rate
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%
2013	11,200	29,677	37.7%	15,878	29,677	53.5%	18,213	29,677	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 recent years is consistent with the statewide decrease in Florida arrest numbers for past years. Please refer to <a href="http://www.fdle.state.fl.us/cms/FSAC/Data-Statistics/UCR-Arrest-Data.aspx">http://www.fdle.state.fl.us/cms/FSAC/Data-Statistics/UCR-Arrest-Data.aspx</a> for more information about statewide arrest numbers.

Florida Department of Corrections

Bureau of Research and Data Analysis

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