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Conducting Justice and Corrections Research for Effective Policy Making

**ARKANSAS
DEPARTMENT OF CORRECTION,
SENTENCING COMMISSION,
& DEPARTMENT OF COMMUNITY CORRECTION
TEN-YEAR ADULT SECURE POPULATION PROJECTION
2017-2027**

Prepared by

JFA Associates, LLC

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EXECUTIVE SUMMARY

In addition to the traditional analysis associated with the Arkansas Department of Correction (ADC) Projections, JFA Associates is also including follow-up analysis of the large increase in the prison population that occurred in recent years. The ADC population saw a one-year increase of 17.7 percent in 2013 fueled by a sharp increase in both new commitment and parole violator admissions. This one-year increase erased all reductions in the prison population achieved in 2011 and 2012. The trends driving these increases continued through late 2015. However, in the last quarter of 2015, the ADC population slowly stabilized and has remained static through much of 2016. The prison population at the end of each of the most recent 24 months is provided in Figure 3.

At the end of July 2015, the prison population peaked at 18,847. From that peak through March of 2016, the population steadily decreased by 1.0 percent per month. From the end of the first quarter of 2016 to mid-May 2017, the population has averaged near zero growth per month. The major source for the population stabilization in 2015 and 2016 was due to a slowing in the growth of admissions compared to previous years and the continued higher release flow of inmates exiting prison.

The remainder of this executive summary will focus on examining the sustained equilibrium in the ADC population that began in early 2016.

A. Despite Slight Growth in Admissions in 2016, the ADC Population Has Experienced Minimal Growth through May 2017

As reported in the previous iteration of this report, the ADC population continued to grow until July 2015 when increased releases from prison overcame the larger admissions flow that commenced in 2013. Releases from the ADC increased by 34.7 percent in 2014 and by 22.1 percent in 2015. In 2016, releases grew by 2.4 percent; this lower increase is a sign of stabilization in the ADC population. Releases began to outpace admissions for two primary reasons. First, the increased number of technical parole revocations entering the ADC that started in 2013, began following a one year revolving door flow. The average length of stay (ALOS) in prison for parole violators in 2012 was 19.5 months. At that time, parole revocations consisted largely of new crime parole revocations. In 2016, total parole violators averaged an ALOS of 14.1 months before release from ADC incarceration. The influx of technical parole violators, who traditionally have a shorter prison stay than both new commitments and new crime parole violators, deflated the overall ALOS for parole revocations.

Second, an end to high levels in parole revocations began in the last quarter of 2015 as a direct result of specific policy efforts made by the Arkansas Parole Board. The Parole Board's actions sought to limit returns to the ADC leading to a 27 percent drop in the average number of revocations per month in the latter part of 2015. Similarly, parole revocation waivers to ADC dropped 31 percent. The Parole Board endeavored to sustain the lower levels of revocations and waivers through 2016. As

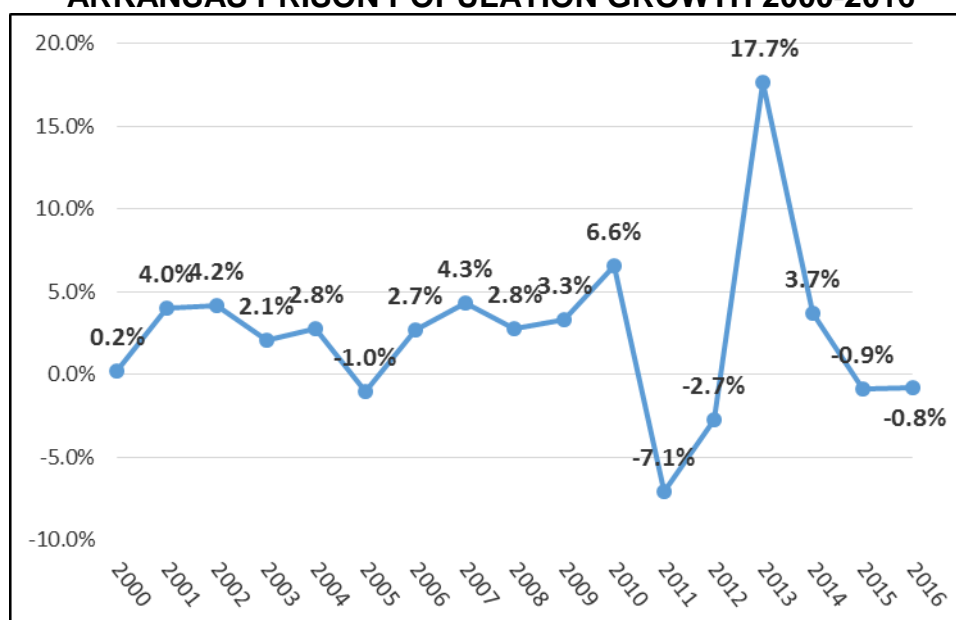
seen in Figure 2, the lower revocation rates were kept at levels similar to 4th quarter 2015 throughout 2016.

In addition, efforts have been jointly made by the Parole Board, Arkansas Community Correction (ACC), and ADC to return some parole violators and waivers to a 90 day short term return program. This program, also put in place in the fourth quarter of 2015, is estimated to have impacted approximately 10 percent of all revocations to ADC and to have shortened the ALOS for these offenders. The 2016 data extract file provided to JFA Associates for analysis of prison releases showed an increase in the ALOS for parole violators in 2016. However, as will be discussed later in this report, data issues with the release extract file may be skewing this statistic.

B. Slower Growth in Admissions to Prison has also Contributed to the Continued Stabilization in the Inmate Population.

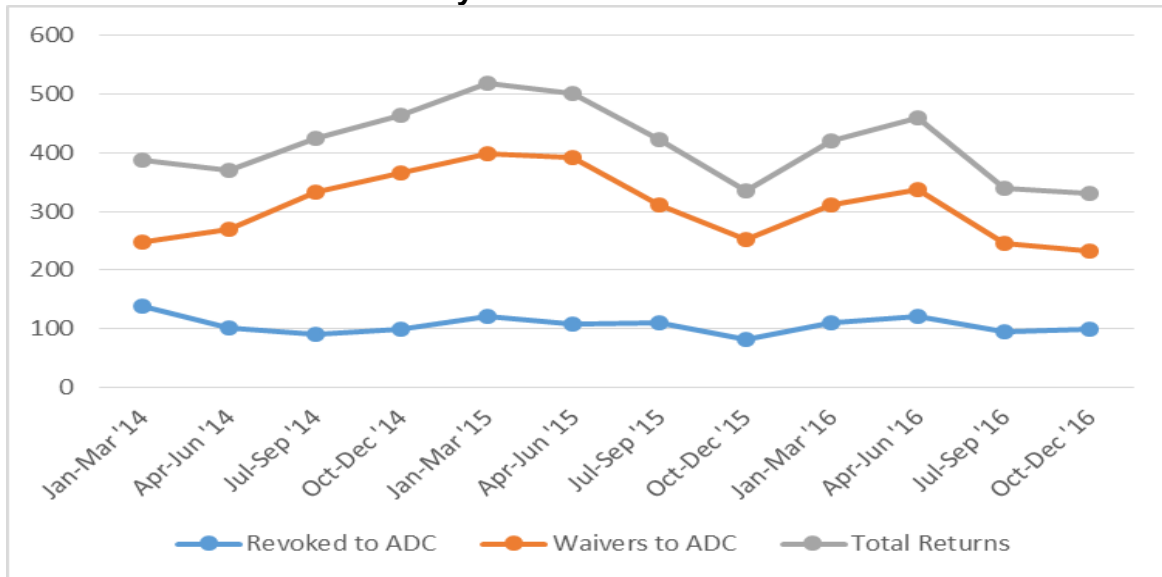
Between year-end 2015 and year-end 2016, the ADC population fell by 0.8 percent. This is the second consecutive year that the prison population has seen zero growth and indicates it may have reached equilibrium. The number of admissions to prison in 2016 grew by 3.2 percent, matching the small increase in releases. As shown in Table 3, new commitment admissions to prison in 2016 mirror counts seen in 2015. Table 2 provides counts of parole violators by technical versus new charge revocations. Similar to new commitments, parole violator admissions in 2016 did not change significantly compared to 2015 numbers. While a 3.2 percent increase in admissions is not ideal by any means, it is significantly less than the large increases seen between 2013 and 2015.

Figure 1
ARKANSAS PRISON POPULATION GROWTH 2000-2016



Source: ADC Population Monitoring Report

**Figure 2:
Parole Hearings and Number of Revocations to ADC
January 2014 – December 2016**



Quarter	Jan-Mar '14	Apr-Jun '14	Jul-Sep '14	Oct-Dec '14	Jan-Mar '15	Apr-Jun '15	Jul-Sep '15	Oct-Dec '15	Jan-Mar '16	Apr-Jun '16	Jul-Sep '16	Oct-Dec '16
Average Revocations to ADC per month	139	101	90	99	121	109	110	82	110	121	94	99
Average Waivers to ADC per month	248	270	334	365	398	393	312	253	311	338	245	233
Total Average Returns to ADC per month	387	371	424	464	519	502	422	335	421	459	339	332

Source: Arkansas Parole Board

TABLE 1
PAROLE VIOLATORS ADMITTED TO ADC 2012 - 2016

Seriousness Level	Parole Violator Admissions					Difference 2012 vs. 2016	Average LOS of Parole Violator Releases*				
	2012	2013	2014	2015	2016		2012	2013	2014	2015	2016
Males	1,633	3,671	4,139	4,613	4,523	2,890	19.5	19.0	13.1	13.3	14.7
SL group 1-6	890	2,425	2,833	3,243	3,216	2,326	17.8	15.6	11.1	11.2	12.7
SL group 7-10	657	1,180	1,102	1,150	1,103	446	24.2	25.3	17.1	17.1	19.6
Other	86	66	204	220	204	118	-	-	-	-	-
Females	93	334	351	469	542	449	17.0	13.9	9.3	10.5	9.7
SL group 1-6	66	242	263	363	436	370	16.2	13.2	8.5	9.3	8.4
SL group 7-10	26	90	76	92	94	68	18.5	16.2	12.1	13.6	12.7
Other	1	2	12	14	12	11	-	-	-	-	-
Total	1,726	4,005	4,490	5,082	5,065	3,339	19.4	18.6	12.9	13.0	14.1

Source: ADC data extract admissions files; 'Other' includes: lifers, 50%ers & 70%ers and cases with an unknown seriousness level;

'Other' is excluded from the average LOS calculation

*Bed space impact for this illustration represents impact of increased parole violations compared to 2012 levels.

TABLE 2
PAROLE VIOLATOR ADMISSIONS BY VIOLATION REASON 2014 - 2016

Seriousness Level	2014 Parole Violator New Charge	2014 Parole Violator Technical	2014 Parole Violator Total	2015 Parole Violator New Charge	2015 Parole Violator Technical	2015 Parole Violator Total	2016 Parole Violator New Charge	2016 Parole Violator Technical	2016 Parole Violator Total
Males	2,973	1,166	4,139	3,372	1,241	4,613	3,241	1,282	4,523
SL group 1-6	2,004	829	2,833	2,353	890	3,243	2,256	960	3,216
SL group 7-10	842	260	1,102	870	280	1,150	835	268	1,103
Other	127	77	204	149	71	220	150	54	204
Females	231	120	351	332	137	469	362	180	542
SL group 1-6	171	92	263	257	106	363	288	148	436
SL group 7-10	55	21	76	68	24	92	68	26	94
Other	5	7	12	7	7	14	6	6	12
Total	3,204	1,286	4,490	3,704	1,378	5,082	3,603	1,462	5,065

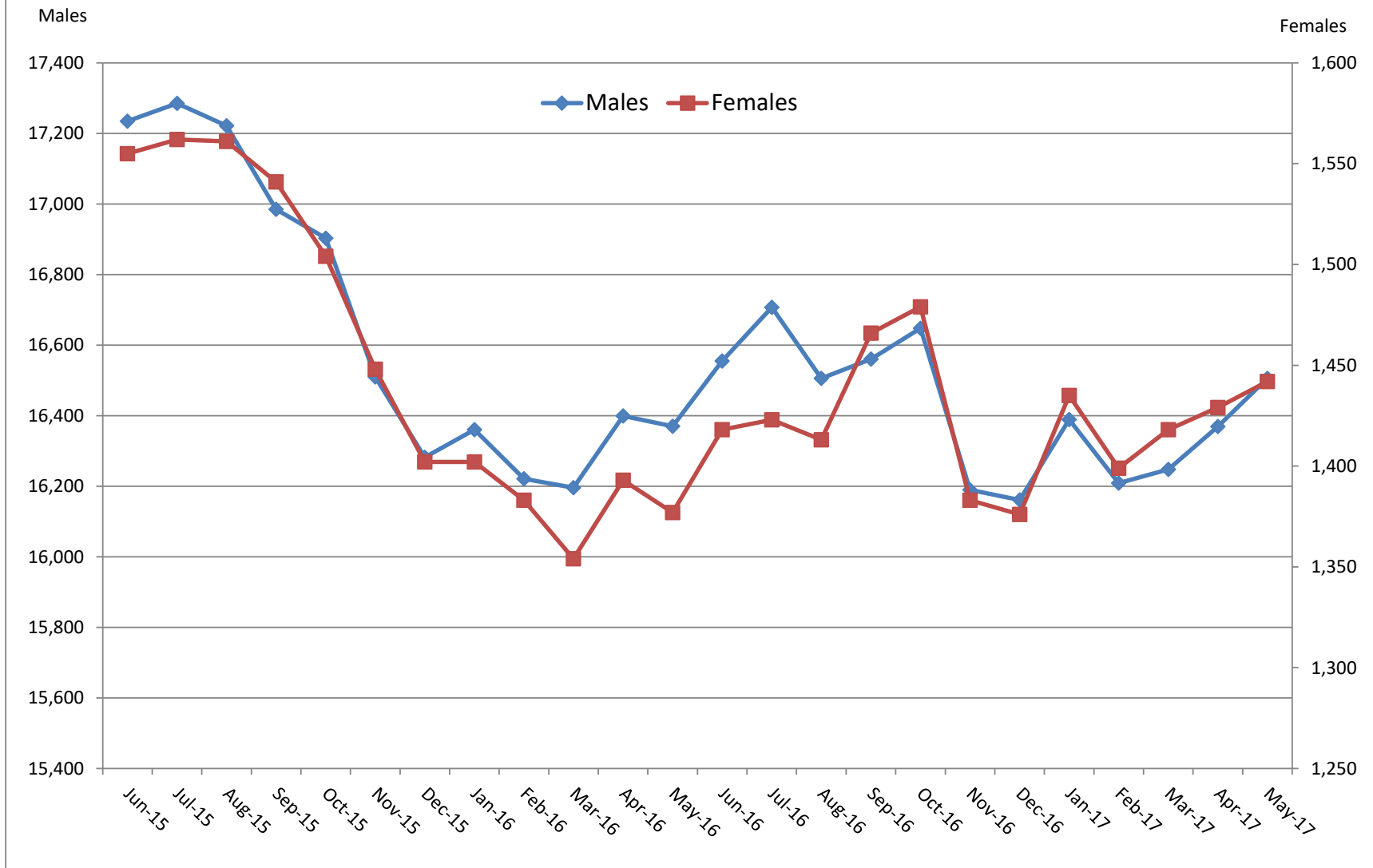
Source: ADC data extract admissions files; other' includes: lifers, 50%ers & 70%ers, habituals and cases with an unknown seriousness level

TABLE 3
NEW COMMITMENTS ADMITTED TO ADC 2012 - 2016

Seriousness Level	New Commitments				
	2012	2013	2014	2015	2016
1	4	0	3	4	1
2	197	217	270	282	273
3	777	1,063	1,330	1,507	1,484
4	732	826	842	876	782
5	460	494	586	586	632
6	810	1,102	1,146	1,174	1,196
7	361	505	418	441	471
8	634	463	361	325	386
9	233	250	115	117	124
10	135	121	55	54	58
Other	94	173	43	158	62
Total	4,437	5,214	5,169	5,524	5,468

Source: ADC data extract admissions files; cases with an unknown seriousness level are included in 'Other'.

**Figure 3: Trends in Male & Female Inmate Population
Previous 24 Months**



**ARKANSAS DEPARTMENT OF CORRECTION,
SENTENCING COMMISSION,
& DEPARTMENT OF COMMUNITY CORRECTION
TEN-YEAR ADULT SECURE POPULATION PROJECTION**

I. INTRODUCTION

The Arkansas Department of Correction (ADC), the Arkansas Sentencing Commission (ASC), and Arkansas Community Correction (ACC) requested continuing assistance to produce an independent and unbiased forecast of the state's inmate population to be completed in 2017.

This report represents a comprehensive analysis of all trends to include calendar year 2016 data. However, it should be noted that statistics in this report reflect trends based on the categories used in the simulation model to produce the ten year forecast. An explanation of these categories is presented in the next section. Use of analysis reported here beyond the scope of their application to the simulation model and the prison population forecast is not appropriate.

Similar to past efforts, the current forecast was completed by analysis of current inmate population trends and analyzing computer extract files provided by the Department of Correction and Arkansas Community Correction. This briefing document contains a summary of projections of male and female inmates through the year 2027, a summary of recent offender trends based on the simulation model categories, and an explanation of the primary assumptions on which the projections are based. Additional figures are contained in the Appendix of this document.

Special note concerning the data extract files provided in 2016

Historically, the admission and release data extract files provided to JFA Associates for analysis have contained subtle differences in comparison to aggregate ADC counts. While the data in these extracts has never *completely* matched up with ADC count sheets, efforts between JFA Associates and ADC staff to verify that the data files are a representative picture of all people who entered or exited prison in any given year have allowed for accurate projections to be produced. As shown in Table 9 of this report, the projections produced in 2016, using 2015 data extract files, averaged a monthly difference from actual counts of only 1.0 percent.

ADC has determined that the discrepancies between the admissions and release extracts and aggregate counts is due to the extract files not being updated over time with new movement codes. Beginning in the fall of 2017, JFA and ADC staff will focus on modernizing the extract files to reflect current business rules.

II. THE SIMULATION MODEL AND SENTENCING POLICIES

The forecast of the correctional population in Arkansas was completed using Wizard projection software. This computerized simulation model mimics the flow of offenders through the state's prison system over a ten-year forecast horizon and produces monthly projections. Wizard is an enhanced version of Prophet Simulation software. The forecasts produced for this report were completed by updating the original simulation model constructed in 2001. Legislative bills that were passed since 2001 and will have an impact on future prison population levels have been incorporated into the model. Please refer to earlier full productions of this report for a complete description of the simulation model structure. Also included in the simulation model is the continued use of the Emergency Powers Act.

Because Wizard attempts to mimic the state's sentencing structure and the flow of prisoners to and from the ADC, it must look at a wide array of data that have both a direct and indirect impact on prison population growth.

These factors are graphically portrayed in the flow diagram shown on page 6. As the diagram shows, a variety of factors underpin a correctional system's long-term projection. These factors can be separated into two major categories – external and internal.

External factors reflect the interplay of demographic, socio-economic and crime trends that produce arrests, and offenders' initial entry into the criminal justice process. Criminologists have long noted that certain segments of the population have higher rates or chances of becoming involved in crime, being arrested and being incarcerated. This is known as the "at-risk" population, which generally consists of younger males. The high crime rate ages are between 15 and 25, while the high adult incarceration rate is between the ages of 18 and 35. When the at-risk population is expected to increase in a jurisdiction, one can also expect some additional pressure on criminal justice resources, all things being equal.

Internal factors reflect the various decision points within the criminal justice system that cumulatively determine prison admissions and length of stay (LOS). These decisions begin with police and end with correctional officials who, within the context of the court-imposed sentences, have the authority to release, recommit, give and restore a wide array of good time credits, and offer programs that may reduce recidivism.¹

¹ The amount of discretion correctional authorities have to release prisoners varies according to each state's sentencing structure. The majority of states have indeterminate sentencing, which offers the greatest amount of discretion by virtue of authority of parole boards which are authorized to release inmates once they have served their minimum sentence. But even most states with determinate sentencing also provide some level of discretion to release prisoners based on good time and special program credits. Arkansas has determinate sentencing.

For example, one of the most difficult numbers to estimate is the number of prison admissions for the next five years. As suggested by Figure 4, people come to prison for three basic reasons: 1) they have been directly sentenced by the courts to a prison term (new court commitments); 2) they have failed to complete their term of probation and are now being sentenced to prison for a violation or new crime; or, 3) they have failed their term of parole (or post-release supervision) and are being returned to prison for a new crime or a technical violation. Almost two-thirds of the people who are admitted to prison, nationally, are those who have failed to complete probation or parole. A projection model thus should have a “feedback loop” that captures the relative rate of probation and parole failures.

Since each state has a unique sentencing structure, the model developed for each state must take into account that state’s sentencing laws. In the simulation model, particular care was taken to characterize accurately the elements of the Arkansas Sentencing Standards, enacted on January 1, 1994, and of Acts 1326, 1135 and 1268. Further legislation taken into account include comprehensive corrections reforms enacted in 2011 under Act 570, emergency jail release mechanisms enacted in Acts 418 and 1721 and most recently Act 1029.

On January 1, 1994, Arkansas put into effect a sentencing grid that uses a combination of the seriousness of the current offense and the offender’s criminal history to arrive at a presumptive sentence. Guidelines in Arkansas are advisory and court use is voluntary. Courts may sentence within the entire statutory range of an offense.

Felony crimes in Arkansas are categorized into ten levels of seriousness with 10 as the most serious. The offender’s criminal history score is determined through allocation of points for any prior convictions/adjudications.

Offenders convicted of a crime in lower seriousness levels 1 through 6 are eligible for supervised release after serving one-third of their sentence minus good time. Offenders convicted of a crime in seriousness levels 7 through 10 are eligible after serving one-half of their sentences minus good time. The exceptions to these rules are directed at offenders convicted of the particular crimes enumerated in Acts 1326, 1135 and 1268 who must serve 70 percent of their sentences and are not eligible to earn good time. Act 1326 took effect in September of 1995 and includes the following crimes: Murder I, Rape, Kidnapping, Aggravated Robbery, and Causing a Catastrophe. Act 1135 took effect on August 1, 1997 and includes the crime of manufacturing methamphetamine. Act 1268 took effect on July 30, 1999 and added the use of paraphernalia to manufacture methamphetamine. In 2007, Act 1034 allowed persons convicted of methamphetamine related crimes to accrue good time and reduce their sentence up to 50 percent of maximum. Act 570 of 2011 went into effect on July 27, 2011 and amended the 70 percent parole eligibility statute to add trafficking methamphetamine to the list of 70 percent crimes. The act also removed possession of drug paraphernalia to manufacture methamphetamine, now codified at §5-64-443(b) from 70 percent parole eligibility. Offenders sentenced under the former §5-64-403(c)(5) are still subject to 70 percent parole eligibility.

Act 363 of 2009 made good time retroactive to all 70 percent meth sentences. These cases are still 70 percent - offenses but are now eligible for good time. Because of the restriction on the amount of reduction (no more than 50 percent of the original sentence) it is awarded on 12 days for 30 served on Class I; 8 for 30 on Class II; 4 for 30 on Class III and zero for Class IV.

In the simulation model, offenders convicted under Acts 1326, 1135 and 1268 are placed in their own Identification Group (ID Group), allowing the particular limitations on their release eligibility to be accurately modeled. Offenders sentenced to serve life in prison also have their own ID Group. The remaining offenders are placed in ID Groups based on three factors: 1) gender, 2) admission type: new commitment or parole violator, and 3) seriousness level. Some seriousness levels are combined together, however seriousness levels 1 through 6 have been kept separate from those in seriousness levels 7 through 10 due to the difference in the proportion of time to be served before transfer eligibility.

In 1987, Emergency Powers Act 418 (EPA) was enacted. This act gave the Arkansas Board of Corrections the ability to effect policy whereby measures could be taken if the prison population exceeded 98 percent of capacity. Any offender is eligible for early release under the act if they are within 90 days of parole eligibility (with parole approval), transfer eligibility or discharge date(s). Act 1721, put into law in 2003, extended the Board of Correction's emergency powers to enact the same early release mechanisms if the county jail backlog exceeds 500 inmates. The provision allows offenders who have been convicted of certain non-violent offenses and who have served at least six months in the ADC to be eligible for release up to one year prior to their transfer eligibility (TE) date.

EPA are capacity driven and linked to an offender's transfer eligibility date or discharge date, arbitrarily decreasing their length of stay anywhere from 1 to 90 days. The simulation model's goal is to forecast the need for capacity and can only track the flow of offenders based on predicted trends. There are no means by which Arkansas can track EPA releases from admission to release as the emergency nature of the act predicts it will not be used should capacity not be exceeded. Therefore, EPA releases cannot be predicted within the simulation model. Rather, EPA releases are built into the model and assumed to remain at the previous year's level every year throughout the forecast horizon. For this reason, it is important to update the simulation model and reforecast the Arkansas prison population on an annual basis. EPA releases are watched very closely and tracked in this report in the 'Forecast Accuracy' section to more adequately gauge their impact.

In 2013 numerous policy changes were enacted by the Arkansas Board of Corrections. They are listed here to augment the discussion in the executive summary concerning the increase in parole violator revocations in 2013.

Arkansas Board of Corrections Policy Changes 2013:

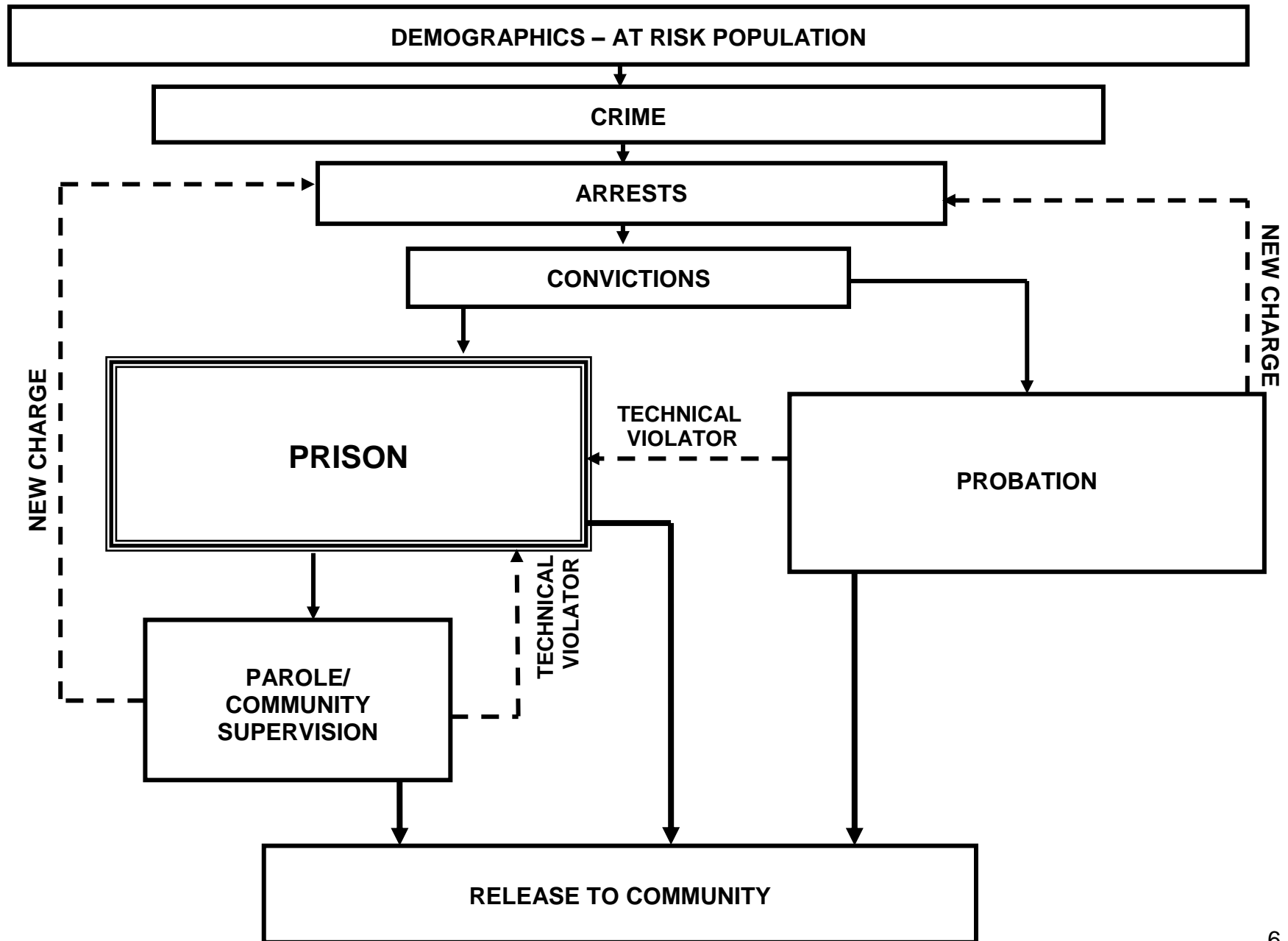
1. ACC will not release parole holds on individuals awaiting a revocation hearing pursuant to requests from jail personnel.
2. All requests for release of holds made by sheriffs or jail personnel must be in writing.
3. Parolees charged with a violent felony as defined by Act 1029 of 2013 or a violent or sex related misdemeanor will be jailed and a revocation hearing requested.
4. Parolees charged with any other felony will either be jailed or placed on GPS Monitoring and a revocation hearing requested.
5. Parolees who have absconded will be jailed and a revocation hearing requested. Absconding is defined as evading supervision for more than 180 days.
6. Parolees who have two prior violations for evading supervision for less than 180 days will be jailed and a revocation hearing requested upon a third (3) violation. A warrant for evading supervision is issued when a parolee fails to report and cannot be located for 30 days.
7. Parolees who have evaded supervision for more than 90 days that have a history of a violent felony as defined by Act 1029 of 2013 or a sex related misdemeanor will be jailed and a revocation hearing requested. All requests for revocations and denials thereof will be fully documented in the offender's case file. A parole hold will remain in effect on an ACT 3 Mental Evaluation until the hearing is completed.

Also in 2013, Act 132 and Act 133 added felony Y trafficking of persons to the list of 70 percent sentencing crimes. In 2015 and 2016, no offenders were sentenced under these acts.

Act 895 of 2015 added residential burglary to the list of "felonies involving violence" that are outlined in the habitual offender statute established in Act 1805 of 2001. Act 1805 of 2001 stipulated a list of offenses for which any person who has previously pled guilty or nolo contendere to and are subsequently convicted of again, shall not be eligible for release on parole by the Arkansas Parole Board. As a result, habitual offenders are now tracked separately for this report and in the simulation model to identify any emerging trends.

In early 2017, Act 423, known as the Criminal Justice Efficiency and Safety Act of 2017, was passed. Parts of Act 423 seek to increase the effectiveness of monitoring probationers and parolees by the Department of Community Correction, to promote efficient staffing by the Department of Community Correction and to establish more efficient and effective punishment for parolees and probationers who violate the terms and conditions of their supervision. The impact of this legislation on the number of parole and probation revocations to the ADC will be closely monitored during 2017 and appropriate modifications to the simulation model will be assessed for the 2018 iteration of the prison projections.

Figure 4



III. TRENDS IN POPULATION AND CRIME IN ARKANSAS

Significant Finding: *The Arkansas resident population is projected to remain static over the next several years. Growth is projected at an average annual rate of only 0.6 through 2025.*

Significant Finding: *UCR Part I reported crimes in Arkansas decreased by 1.6 percent between 2014 and 2015. Note: this is the most recent year of data available. Crime data has not yet been released by the FBI for 2016.*

Arkansas Resident Population

Since 2000, Arkansas's resident population has grown at a moderate pace. Between 2000 and 2004 the population grew by an average annual rate of 0.6 percent. Between 2005 and 2010 it grew an average annual rate of 1.0 percent. Using the 2010 census as a base, the University of Arkansas Institute for Economic Advancement has projected the resident population of Arkansas will grow from 2,988,248 in 2016 to 3,078,021 in 2020 (an increase of 3.0 percent overall). Further growth projections from the 2016 estimated resident population are listed in Table 4. It should be noted that the historical and projected resident population for Arkansas is dramatically outpaced by the growth in both prison admissions and prison population indicating Arkansas is increasing its already historically high incarceration rate.

Previous versions of this brief have included the projected growth of the state's at-risk population. The at-risk population is defined as the portion of the resident population most likely to be incarcerated. This demographic group is historically defined as all males between the ages of 18 and 35. Unfortunately, the US Census Bureau has not updated these projections for the states using the 2010 census base data. As an alternative, this brief presents available historical estimates for 2010 through 2015 (the most recent data since the last decennial census) in Table 5. During this time period, the at-risk population has increased by only 0.2 percent per year and by only 1.1 percent overall. Near future growth in this population will most likely mimic this trend.

TABLE 4
ARKANSAS PROJECTED DEMOGRAPHIC TRENDS 2016-2025

Year	Total Resident Population	Projected Annual Percent Change
<i>Actual 2016</i>	<i>2,988,248</i>	-
2017	3,026,555	1.3%
2018	3,044,865	0.6%
2019	3,062,041	0.6%
2020	3,078,021	0.5%
2021	3,092,955	0.5%
2022	3,107,234	0.5%
2023	3,121,147	0.4%
2024	3,134,930	0.4%
2025	3,148,708	0.4%
Avg. Projected Change 2016-2025		0.6%

Source: US Census Bureau; University of Arkansas Institute for Economic Advancement

TABLE 5
ARKANSAS HISTORICAL AT-RISK POPULATION 2010-2015

Year	Estimated Male Resident Population Ages 18-35
2010	351,823
2011	354,701
2012	356,872
2013	357,845
2014	354,200
2015	356,162
2016	356,276
Percent Average Change 2010-2016	0.2%

Source: US Census Bureau

Crime in Arkansas

Note: Crime rates mentioned in this report are a reference to reported crime tracked by the FBI's UCR initiative. Although no statistical significance is attributed to the impact of crime rates on prison admissions, observing these rates can provide some anecdotal insight into state prison admission trends and, in some cases, lower level guidance in projecting future admissions to prison.

During the 1990s, the levels of most serious reported violent and property crimes (defined by the FBI's Uniform Crime Reports Part I Crime category) in Arkansas remained static during the first part of the decade. Subsequently in the latter half of the 1990s, crime rates decreased significantly. From 1990 to 1995, the absolute number of UCR Part I crimes in Arkansas decreased at an average annual rate of 0.2 percent. From 1995 to 1999, the number of UCR Part I crimes fell at an average annual rate of 3.3 percent.

The crime index for CY 2004 showed that reported crime had increased by over 9.0 percent from the 2003 number. This is largely due to a change in Arkansas's reporting methods to the FBI. Arkansas assumed responsibility for reporting incidents of crime to the FBI in 1974. Until January 1, 2003, this information was collected from state agencies via summary reporting. After that date, Arkansas required all crime data to be reported based on incident. This change-over required a state-wide software update at all reporting locations. With the release of new crime information for 2005, JFA began to track recent crime trends for Arkansas once again. As shown in Table 6, crime rates under the old reporting system continued to decline between 2000 and 2003. Under the new reporting system, the incidents of crimes reported increased by 1.1 percent between 2004 and 2005. Since 2005, the crime rates in Arkansas have consistently decreased. Between 2005 and 2015 the total reported crime rate has decreased an average of 1.6 percent per year. Overall, total reported crime in Arkansas has decreased by 17.9 percent from 4,596.4 in 2005 to 3,772.8 in 2015.

It should be noted that there was an 8.6 percent increase in reported violent crime between 2014 and 2015. Table 6 provides detailed historical reported crime data for Arkansas.

TABLE 6
CHANGES IN THE NUMBER OF UCR CRIMES REPORTED TO POLICE 1990-2015

Year	Total Reported Crime	Reported Violent Crime	Reported Property Crime
1990	4,866.9	532.2	4,334.7
1991	5,165.0	583.3	4,581.7
1992	4,761.7	576.5	4,185.2
1993	4,810.3	593.3	4,217.0
1994	4,798.7	595.1	4,203.6
1995	4,690.9	553.2	4,137.7
1996	4,699.2	524.3	4,174.9
1997	4,718.7	526.9	4,191.8
1998	4,283.4	490.2	3,793.2
1999	4,042.2	425.2	3,617.0
2000	4,115.3	445.3	3,670.0
2001	4,130.2	452.4	3,677.8
2002	4,163.0	425.0	3,738.0
2003	4,088.8	456.4	3,632.4
2004*	4,535.4	502.3	4,033.1
2005	4,596.4	528.5	4,067.9
2006	4,581.1	551.6	3,967.5
2007	4,472.5	529.4	3,953.1
2008	4,331.7	504.6	3,827.1
2009	4,290.8	515.8	3,775.0
2010	4,058.8	505.3	3,553.5
2011	4,235.0	480.9	3,754.1
2012	4,129.2	469.1	3,660.1
2013	4,048.3	445.7	3,602.6
2014	3,818.1	480.1	3,338.0
2015	3,772.8	521.3	3,251.5
Avg. % Change 1990-1999	-1.9%	-2.3%	-1.9%
Avg. % Change 1990-2010	-0.8%	-0.1%	-0.9%
Avg. % Change 2005-2015	-1.6%	0.5%	-1.9%

Source: www.FBI.gov; *AR UCR reporting methodology changed

Comparison of Arkansas and the United States

In the discussion above, the population and crime data are observed in terms of changes over time within Arkansas. In Table 7, Arkansas's population and crime data are presented in comparison to the national levels and trends. Arkansas has had growth in residential population on par with the nation over the past decade, growing by 6.3 percent compared to 8.2 percent for the US. Crime in the nation, as a whole, has decreased by a far larger percentage when compared to Arkansas. From 2005 to 2015, reported crime in the US decreased by 26.4 percent while Arkansas saw an 17.9 percent decrease in reported crime.

In terms of state prison populations (using the most recent national data available: year-end 2015), Arkansas has seen significantly larger overall growth as compared to the nation as a whole over the last ten years, 28.0 percent compared to a 0.6 percent decrease nationally. It is important to note that the Arkansas prison population appears to have stabilized in the last two years. The ADC population decreased by 0.9 percent in 2015 and by 0.8 percent in 2016. This is a return to the trend that Arkansas had been following prior to 2013 when the Arkansas prison population had seen declines that mirrored national trends.

According to the Bureau of Justice Statistics, Arkansas' adult incarceration rate in 2015, 774 prisoners per 100,000 state residents, vastly exceeded the national rate of 521. Note: the national incarceration rate used for this report is based on offenders held in state prisons only and does not include federal prisoners or persons held in jails.

TABLE 7
COMPARISON BETWEEN UNITED STATES AND ARKANSAS
ON KEY POPULATION AND CRIME DEMOGRAPHICS

	United States	Arkansas
POPULATION²		
Total Population (7/1/16)	323,127,513	2,988,248
Change in Population		
1-year change (7/1/15 – 7/1/16)	0.5%	0.3%
10-year change (7/1/06 – 7/1/16)	8.2%	6.3%
CRIME RATE³ (Rate per 100,000 inhabitants)		
UCR Part I Reported Crime Rates (2015)		
Total	2,870.2	3,772.8
Violent	383.2	521.3
Property	2,487.0	3,251.5
Change in Total Reported Crime Rate		
1-year change (2014-2015)	-3.4%	-1.2
10-year change (2005-2015)	-26.4%	-17.9
PRISON POPULATION⁴		
Total Inmates (State Prisons Only) 2016**	1,330,337	17,537
1-year change (2015-2016)	-1.5%	-0.8%
10-year change (2006-2016)	-0.6%	28.0%
Average annual change (2006-2016)	0.0%	2.7%
State Incarceration Rate (per 100,000 residents) ⁵	521	774
PAROLE POPULATION (2016)^{6***}	756,055	24,162
Rate per 100,000 residents ⁷	304	1,012
PROBATION POPULATION (2016)^{8***}	3,771,417	31,293
Rate per 100,000 residents ⁹	1,514	1,267

***Year end 2015 is the latest data available for the US; ***US: States only, federal supervision excluded, data are for year end 2015*

² U.S. Census Bureau, Population estimates for July 1, 2016.

³ Uniform Crime Reports, Crime in the United States – 2015, Federal Bureau of Investigation.

⁴ Prisoners in Year End 2015, Bureau of Justice Statistics, Dec. 2016; Arkansas Department of Correction Statewide Population Report.

⁵ Prisoners in Year End 2015, Bureau of Justice Statistics, Dec. 2016; US (excludes federal prisons); Rate is for adults only.

⁶ US data source: Probation and Parole in the United States, 2015 Bureau of Justice Statistics, Revised Feb. 2017; Arkansas data source: Statewide Field Operations Report Dec. 2016.

⁷ US and Arkansas data source: Probation and Parole in the United States, 2015 Bureau of Justice Statistics, Revised Feb. 2017

⁸ US data source: Probation and Parole in the United States, 2015 Bureau of Justice Statistics, Revised Feb. 2017; Arkansas data source: Statewide Field Operations Report Dec. 2016.

⁹ US and Arkansas data source: Probation and Parole in the United States, 2015 Bureau of Justice Statistics, Revised Feb. 2017

III. THE JUNE 2016 FORECAST – ACCURACY

The previous inmate population forecast for the Arkansas Department of Correction was released in June 2016.

Significant Finding: *For the last 12 months, the projections for male inmates were estimated to increase at a monthly average of 0.27 percent, while the actual population decreased by 0.02 percent per month. The male population was over-forecasted by an average monthly difference of 1.2 percent.*

Significant Finding: *The Arkansas Department of Correction exercised the Emergency Powers Act in 2016, allowing early release for prisoners throughout the year when over-crowding conditions were at their peak. Although the overall average accuracy of the forecast is good by national standards, EPA releases may hamper the models ability to estimate the inmate population on a monthly basis by offsetting length of stay trends. In 2016, 2,769 offenders were released via the Emergency Powers Act. On average over the past decade, some 2,300 prisoners were released via this method annually.*

Table 9 and Figure 7 present the accuracy of projections generated in June of 2016. Accuracy of the projections are tracked, by gender, from June 2016 to May 2017 by comparing projected totals with the actual counts of male and female inmates.

- Through the past 12 months, the projected female population averaged a -1.2 percent difference from actual totals. On average, the 2016 simulation model averaged 17 fewer female inmates per month than actual counts.
- For the 2016 model, the forecasted counts of male inmates differed from the actual counts by a maximum over-estimation of 511 (March 2017) and by a maximum underestimation of 2327 (July 2016).
- The total prison population forecast had an average percent difference of 1.0 percent per month during the entire tracking period. National standards set acceptable error at ± 2.0 percent.
- As mentioned previously, EPA releases are tracked by JFA Associates to monitor and mitigate their impact on the simulation model. The EPA was utilized every month in 2016. Table 8 details EPA releases since 2006.

TABLE 8
EPA RELEASES CY 2006-2016

Year	Act 1721	Act 418	Total
2006	196	1,493	1,689
2007	294	1,806	2,100
2008	369	1,708	2,077
2009	512	1,756	2,268
2010	319	1,853	2,172
2011	319	2,023	2,297
2012	169	2,478	2,647
2013	201	2,672	2,873
2014	437	2,470	2,907
2015	368	2,380	2,748
Jan. 2016	25	42	67
Feb. 2016	22	384	406
Mar. 2016	27	190	217
Apr. 2016	31	55	86
May 2016	10	382	392
Jun. 2016	2	157	159
Jul. 2016	46	77	123
Aug. 2016	43	432	475
Sep. 2016	6	112	118
Oct. 2016	43	67	110
Nov. 2016	45	435	480
Dec. 2016	11	125	136
Total 2016	311	2,458	2,769

Source: ADC data runs from EOMIS

**TABLE 9
ACCURACY OF THE 2016 FORECAST**

Month-Year	Male				Female				Total			
	Projected	Actual	Numeric Diff.	% Diff.	Projected	Actual	Numeric Diff.	% Diff.	Projected	Actual	Numeric Diff.	% Diff.
Jun-16	16,413	16,555	-142	-0.9%	1,389	1,418	-29	-2.0%	17,802	17,973	-171	-1.0%
Jul-16	16,475	16,707	-232	-1.4%	1,394	1,423	-29	-2.0%	17,869	18,130	-261	-1.4%
Aug-16	16,517	16,506	11	0.1%	1,397	1,413	-16	-1.1%	17,914	17,919	-5	0.0%
Sep-16	16,495	16,560	-65	-0.4%	1,395	1,466	-71	-4.8%	17,890	18,026	-136	-0.8%
Oct-16	16,508	16,648	-140	-0.8%	1,397	1,479	-82	-5.5%	17,905	18,127	-222	-1.2%
Nov-16	16,561	16,190	371	2.3%	1,401	1,383	18	1.3%	17,962	17,573	389	2.2%
Dec-16	16,631	16,161	470	2.9%	1,407	1,376	31	2.3%	18,038	17,537	501	2.9%
Jan-17	16,650	16,389	261	1.6%	1,409	1,435	-26	-1.8%	18,059	17,824	235	1.3%
Feb-17	16,712	16,209	503	3.1%	1,414	1,399	15	1.1%	18,126	17,608	518	2.9%
Mar-17	16,759	16,248	511	3.1%	1,418	1,418	0	0.0%	18,177	17,666	511	2.9%
Apr-17	16,809	16,369	440	2.7%	1,422	1,429	-7	-0.5%	18,231	17,798	433	2.4%
May-17	16,906	16,506	400	2.4%	1,430	1,442	-12	-0.8%	18,336	17,948	388	2.2%
Average Difference			199	1.2%			-17	-1.2%			182	1.0%

Source: Arkansas Department of Correction Statewide Population Report /JFA Associates' prison projections

IV. HISTORICAL INMATE POPULATION TRENDS

Significant Finding: *From 2011 to 2012 admissions to prison in Arkansas fell by 12.1 percent due to efforts towards implementing Act 570 of 2011. This was one of the largest decreases in admissions in the past 15 years. This trend was reversed dramatically in 2013 as admissions to prison increased by 49.6 percent. According to ADC official counts, admissions to prison increased by 3.2 percent between 2015 and 2016.*

Significant Finding: *Total male admissions to prison increased by 3.0 percent and total female admissions increased by 4.6 percent between 2015 and 2016.*

Significant Finding: *Based on counts in the 2016 ADC admissions extract file, male parole violator admissions decreased by 2.0 percent in 2016 as compared to 2015 counts.*

Table 10 and Figure 9 present the admissions to prison in Arkansas from 2006 to 2016 for males and females. These data reflect official counts verified by ADC staff. Table 11 presents admissions by intake reason (new commitment versus parole violator). Data for Table 11 differ from totals in Table 10 because of discrepancies in the 2016 admission extract file as discussed in the introduction of this report. Table 12 and Figure 10 present the year-end inmate populations for inmates from 2006 to 2016. Table 13 lists releases for the past 10 years. Verified ADC counts are the source for both Tables 12 and Table 13.

- The number of total admissions to prison in 2016 increased by 3.2 percent.
- Based on extract file data, male parole violators numbered 4,613 in 2015. This number is estimated to have decreased to 4,523 in 2016.
- Based on extract file data, female new commitment admissions to prison continued to increase in 2016. Female new commitments increased by 126 admissions or 13.5 percent between 2015 and 2016. New commitment admissions accounted for an estimated 66 percent of total female admissions in 2016.
- Releases from the ADC in 2016 increased by 2.4 percent compared to 2015 counts.
- In 2016, female releases increased by 4.4 percent compared to 2015 while male releases increased by 2.1 percent.
- Over the past two years the female population has remained static with an increase of a scant 0.4 percent in 2015 and a decrease of 1.9 percent in 2016.
- At year end 2016, the total Arkansas prison population was 17,537, which was 28.0 percent larger than the total prison population in 2006. As of early May

2017, the total prison population was 17,948, an increase of 2.3 percent from the December count.

TABLE 10
ARKANSAS DEPARTMENT OF CORRECTION
HISTORICAL ADMISSIONS TO PRISON BY GENDER: 2006-2016

YEAR	MALES	FEMALES	TOTAL
2006	5,711	862	6,573
2007	6,445	763	7,208
2008	6,267	750	7,017
2009	6,683	792	7,475
2010	6,854	813	7,667
2011	6,293	717	7,010
2012	5,547	616	6,163
2013	8,152	1,067	9,219
2014	8,486	1,173	9,659
2015	9,206	1,400	10,606
2016	9,479	1,465	10,944
Numeric Change 2006 – 2016	3,768	603	4,371
Percent Change 2006 – 2016	66.0%	70.0%	66.5%
Average Annual Percent Change 2006 – 2016	6.2%	7.6%	6.3%
Percent Change 2015 – 2016	3.0%	4.6%	3.2%

Source: ADC Research & Planning Office;

TABLE 11
ARKANSAS DEPARTMENT OF CORRECTION
HISTORICAL ADMISSIONS TO PRISON BY ADMISSION TYPE: 2009-2016

Year	New Commits		Parole Violator	
	Male	Female	Male	Female
2009	4,523	620	2,160	172
2010	4,370	606	2,484	207
2011	4,540	577	1,753	140
2012	3,914	523	1,633	93
2013	4,481	733	3,671	334
2014	4,347	822	4,139	351
2015	4,593	931	4,613	469
2016	4,411	1,057	4,523	542
Average % Change 2009-2016	0.0%	9.0%	18.0%	38.3%
% Change 2015-2016	-4.0%	13.5%	-2.0%	15.6%

Source: ADC data extract admission file; Counts differ slightly from Table 15 as they include lifers, 50 & 70%ers and 'unknowns' (unknowns are cases in the extract files for which seriousness level cannot be identified, this is less than 2.0% of admissions in any given year); 21 persons with an admission reason of 'Other' are not included in the 2016 counts

TABLE 12
ARKANSAS DEPARTMENT OF CORRECTION
TEN YEAR HISTORICAL END OF YEAR INMATE POPULATION
2006-2016

YEAR	MALE	FEMALE	TOTAL
2006	12,659	1,039	13,698
2007	13,217	1,068	14,285
2008	13,627	1,059	14,686
2009	14,109	1,062	15,171
2010	15,013	1,163	16,176
2011	13,948	1,087	15,035
2012	13,568	1,059	14,627
2013	15,881	1,330	17,211
2014	16,453	1,397	17,850
2015	16,282	1,402	17,684
2016	16,161	1,376	17,537
Numeric Change 2006 – 2016	3,502	337	3,839
Percent Change 2006 – 2016	27.7%	32.4%	28.0%
Average Annual Percent Change 2006 – 2016	2.7%	3.2%	2.7%
Percent Change 2015 – 2016	-0.7%	-1.9%	-0.8%

Source: Arkansas Department of Correction Statewide Population Report; Note: population as of May 2017 was 17,948

TABLE 13
ARKANSAS DEPARTMENT OF CORRECTION
HISTORICAL RELEASES: 2006-2016

Year	Males	Females	Total
2006	6,074	774	6,848
2007	5,709	721	6,430
2008	6,273	801	7,074
2009	6,372	810	7,182
2010	5,952	712	6,664
2011	6,612	692	7,304
2012	5,647	652	6,299
2013	5,755	789	6,544
2014	7,762	1,053	8,815
2015	9,360	1,400	10,760
2016	9,559	1,462	11,021
Numeric Change 2006 – 2016	3,485	688	4,173
Percent Change 2006 – 2016	57.4%	88.9%	60.9%
Average Annual Percent Change 2006 – 2016	5.5%	7.7%	5.7%
Percent Change 2015 – 2016	2.1%	4.4%	2.4%

**Note: 2006-2009, 2011 counts were calculated by JFA Associates. Source for 2010, 2012-2016: ADC Research & Planning Office*

V. CURRENT INMATE POPULATION CHARACTERISTICS

A. 2016 Admissions to Prison

Significant Finding: *The average sentence applied to the entire admissions population (excluding lifers) in 2016 was 93.8 months (7.8 years), versus 92.1 months (7.7 years) in 2015.*

Table 15 provides information about the population admitted to prison in 2016 based on the ADC admissions extract data file. The admissions population in Table 15 is divided into Identification (ID) groups based on a combination factors that include seriousness level, admission type, gender, and special sentencing conditions. The ID groups are generated for modeling purposes and do not necessarily coincide with ADC groupings. Unique categories for persons sentenced to life in prison, for those sentenced under 70% Acts and for habitual offenders are also included in the model to track these populations. The balance of admissions are divided into New Commitment and Parole Violator categories and further categorized by gender and the seriousness level of their admitting offenses.

Data from the ADC admissions extract file is used to generate Figure 11 which depicts the number of persons admitted in each of the ID groups. In addition, data from the ADC admissions extract file was used to generate Figure 12 which details the average sentences for each group in 2016. These figures are contained in the Appendix of this report.

Admissions Counts

- In 2013, there was an unprecedented increase in the number of parole violators returned to prison in Arkansas. Parole violators admissions in 2013 summed to 4,005 (including 70 percenters, 50 percenters, lifers and admissions whose seriousness level was unknown), up 132.0 percent from the 2012 number of 1,726. In 2016, parole violator admissions remain at elevated levels numbering 5,065.
- In 2016, 3.8 percent of admissions had minimum serving time restrictions. This 3.8 percent is comprised of 88 admissions for 50% methamphetamine crimes, 20 admissions for life sentences, 39 admissions for habitual offenders and 254 admissions for all 70 percent crimes.
- The majority of the 70 percent offenders were admitted to the ADC due to a conviction related to an aggravated robbery (37.7 percent) or rape (23.0 percent).
- 20 new lifers were admitted to the ADC in 2016. On December 31, 2016, the number of lifers held in the ADC was 1,383, about 7.9 percent of the population. Persons in prison with minimum serving time restrictions accounted for 17.4 percent of the year-end population in 2016. Habitual offenders accounted for 2.7 percent of the prison population at the end of 2016.

Sentence Lengths

- Excluding lifers, seriousness level unknown cases and 70 percent inmates, new commitment males had an average sentence of 78.5 months (6.5 years) in 2016.
- Excluding lifers, seriousness level unknown cases and 70 percent inmates, new commitment females averaged a sentence of 50.9 months (4.2 years) in 2016.
- In 2016 new commitment males in seriousness level 2 saw a notable decrease in their average sentence compared with 2015. Male new commitments in seriousness level 4 saw an increase from an average of 64.5 months (5.4 years) in 2015 to an average of 77.9 months (6.5 years) in 2016.
- In 2016 new commitment females in all seriousness levels 7-10 had an increase in their average sentence versus 2015. The average sentence in 2016 was 118.6 months compared to 98.0 months (8.2 years) in 2015.
- Sentences for male parole violators remained static between 2015 and 2016 data. Female parole violators saw a decrease in average sentences from 82.0 months in 2015 to 74.3 months (6.2 years) in 2016.

- Among those admitted under 70 percent (excluding those who were sentenced to life in prison),
 - 50 percenters convicted of manufacturing methamphetamine in 2016 had an average sentence of 119.7 months (10.0 years) , up from the average of 103.2 months (8.6 years) in 2015.
 - Those convicted of aggravated robbery and rape in 2016 had average sentences of 175.1 months (14.6 years) and 291.7 months (24.3 years), respectively.
 - The average sentence for the 42 inmates admitted for first degree murder in 2016 was 431.4 months (36.0 years) , by far the most severely sanctioned group excluding lifers.

JFA Associates has begun tracking habitual offenders sentenced under Act 1805 due to the addition of residential burglary as an eligible offense for sentencing under this law. In 2015, only two (2) residential burglary offenders were sentenced as habitual offenders. In 2016, this numbered increased to nine (9).

Table 14 shows the historical growth in the inmate population in reference to the impact that 70 percent have had on the year end population. While the total number of 70 percenter inmates increased significantly from 2001 to 2005, this group's growth in the ADC year-end population has remained slow but steady between 2006 and 2016.

In 2016, 70 percent admissions did not change significantly from levels seen in 2015. The number held in prison at year end 2016 also did not change appreciably from 2015 counts.

TABLE 14
ARKANSAS DEPARTMENT OF CORRECTION
HISTORICAL 50/70/100 PERCENT ACTS ADMISSIONS & YEAR END COUNT
2006-2016

Year	Total 70%ers Admitted	Total 50%ers Admitted	Avg. Sentence 50 & 70%ers (Mos.)	Total End of Year 70%er	Total End of Year 50%er
2006	306	-	225	2,736	-
2007	249	-	225	2,762	-
2008	274	-	257	2,788	-
2009	232	109	263	2,561	406
2010	313	156	250	2,694	437
2011	185	91	236	n/a	n/a
2012	200	54	260	n/a	369
2013	211	61	236	2,675	349
2014	241	73	229	2,662	333
2015	211	61	228	2,777	278
2016	254	88	219	2,839	211
Numeric Change 2006-2016	-52	-	-6	103	-
Percent Change 2006-2016	-17.0%	-	-2.7%	3.8%	-
Percent Change 2015-2016	20.4%	44.3%	-3.9%	2.2%	-24.1%

Source: ADC data extract admission and stock files

TABLE 15
ARKANSAS DEPARTMENT OF CORRECTION
ADMISSIONS COUNTS AND AVERAGE SENTENCE BY ID GROUP IN 2016

ID Group	Number Admitted	Percent of Total	Average Sentence (mos.) 2016	Average Sentence (mos.) 2015
Lifers	20	0.2%	Life	Life
Habitual Offenders (Act 1805)	39	0.4%	211.8	225.1
50/70 Percent Acts Inmates	342	3.2%	219.3	226.3
1 st Degree Murder	41	0.4%	431.4	431.6
Rape	79	0.7%	291.7	315.4
Aggravated Robbery	129	1.2%	175.1	200.8
Kidnapping	5	0.0%	230.4	196.8
Drug – Methamphetamine 50%	88	0.8%	119.7	103.2
New Commitments – Males	4,133	39.2%	78.5	75.9
Seriousness levels 1-2	235	2.2%	36.4	43.4
Seriousness level 3	1,104	10.5%	37.8	39.8
Seriousness level 4	620	5.9%	77.9	64.5
Seriousness level 5	518	4.9%	74.6	71.8
Seriousness level 6	968	9.2%	91.2	91.6
Seriousness level 7	386	3.7%	118.1	122.8
Seriousness levels 8-10	302	2.9%	176.2	187.4
New Commitments – Females	1,038	9.8%	50.9	49.9
Seriousness levels 1-6	919	8.7%	42.1	44.6
Seriousness levels 7-10	119	1.1%	118.6	98.0
Parole Violators – Males	4,319	40.9%	108.7	107.2
Seriousness levels 1-6:	3,216	30.5%	93.5	94.3
Seriousness levels 7-10:	1,103	10.5%	152.9	143.5
Parole Violators – Females	530	5.0%	74.3	82.0
Seriousness levels 1-6:	436	4.1%	65.4	73.0
Seriousness levels 7-10:	94	0.9%	115.4	117.3
Unknown seriousness level	133	1.3%	n/a	n/a
TOTAL*	10,554	100.0%	93.8	92.1

**Average sentence for all admissions excluding lifers; Source: ADC data extract admissions file*

B. Sentence Length Comparison 2011-2016

Significant Finding: Average sentences in 2016 in seriousness levels 1-2, 3, 5, 6 and level 9 are appreciably lower than average sentences in 2011.

Table 16 and Figure 13 depict average sentences for new commitments by seriousness level for 2011 through 2016.

- Compared to 2011, seriousness level 6 average sentences in 2016 are 16.5 percent lower.
- Compared to 2011, seriousness level 5 average sentences in 2016 have declined 23 months.
- Compared to 2011, seriousness level 4 average sentences in 2016 have increased. This is a reversal of several years of declines in average sentences for persons convicted of offenses in this seriousness level.
- Compared to 2011, seriousness level 3 average sentences in 2016 have declined 18 months.
- Seriousness level 10 is the only group to see no significant change in average sentences between 2011 and 2016.
- For each year since 2011, seriousness levels 5 and 6 have shown the most consistent declines in average sentences.

TABLE 16
ARKANSAS DEPARTMENT OF CORRECTION
AVERAGE SENTENCES OF NEW COMMITMENTS BY SERIOUSNESS LEVEL
CALENDAR YEARS 2011 - 2016

Seriousness Level	Average Sentence (mos.)					
	CY 11	CY 12	CY 13	CY 14	CY 15	CY 16
Seriousness levels 1-2	45	35	41	39	43	34
Seriousness level 3	54	44	46	42	37	36
Seriousness level 4	69	66	67	60	60	70
Seriousness level 5	93	83	85	75	68	70
Seriousness level 6	103	104	105	90	87	86
Seriousness level 7	116	150	144	128	117	116
Seriousness level 8	171	158	160	141	149	164
Seriousness level 9	316	340	302	308	301	294
Seriousness level 10	425	421	458	419	492	422

Source: ADC data extract admissions file

C. 2016 Release Population

Significant Finding: *Male new commitments had served an average of 20.3 months upon release in 2016.*

Significant Finding: *The majority of offenders in 2016 (88.6 percent) were released from prison via parole or supervised release, followed by 7.7 percent released via discharge, 3.0 percent released to boot-camp, and the remaining 0.7 percent released via various other mechanisms such as administrative closure.*

Table 17 provides information about the population released from prisons in Arkansas in 2016. For each ID group, Table 17 presents the number of people released, the average time served in months, and the percent of releases by release type. The data was generated using the ADC release data extract file. As mentioned earlier in this report, discrepancies between the verified ADC release counts and the counts generated from the extract file have called into question whether the extract file provides a complete picture of release trends in 2016. The data presented here should be considered as rough estimates at best.

Average Time Served

- The average time served for male new commitments showed a direct correlation with seriousness level in 2016. Average length of stay ranged from between 9.1 months for seriousness levels 1-2, to 75.9 months for seriousness levels 8-10 (combined).
- The average length of stay of female new commitments in 2016 was 11.7 months.
- Regardless of release type or id group, total releases in 2016 had an average length of stay of 18.6 months (1.6 years) which represents an increase over the 2015 total ADC LOS of 16.6 months (1.4). The 2016 average mimics the average LOS reported in 2014 of 18.2 months (1.5).
- The average LOS of male parole violators released in 2016 was 14.9 months (1.2 years). Female parole violators released in 2016 averaged a LOS of 9.6 months (0.8 years).
- In 2016, 21 offenders sentenced under Act 1805 stipulations were released from prison after serving an average length of stay of 72.1 months (6.0 years). (how many years). This group is, as of this iteration of the projections, too small to impact overall lengths of stay in the simulation model. JFA Associates will continue to monitor this group in anticipation that the total number in this cohort will grow large enough to warrant its own category within the simulation model.

Releases by Release Mechanism 2016

- Boot camp releases accounted for 20.1 percent of male seriousness level 7 releases.
- In 2016, male new commitments were released via discharge at a rate of 6.6 percent. Female new commitments were released via discharge at a rate of 3.4 percent.

TABLE 17
ARKANSAS DEPARTMENT OF CORRECTION
AVERAGE TIME SERVED AND RELEASE TYPE BY ID-GROUP IN 2016

ID Group	Number of Releases	Percent	LOS (Mos.)	Percent by Release Mechanism			
				Parole	Discharge	Boot-camp	Other
Lifers	21	0.2%	328.7	0.0%	14.3%	0.0%	85.7%
Habitual Offenders (Act 1805)	21		72.1	83.1%	11.7%	0.0%	5.2%
70 Percent Acts Inmates	343	3.5%	80.0	83.1%	11.7%	0.0%	5.2%
New Commitments – Males	3,568	36.5%	20.3	88.0%	4.8%	6.6%	0.6%
Seriousness levels 1-2	206	2.1%	9.1	92.7%	6.3%	1.0%	0.0%
Seriousness level 3	918	9.4%	9.6	92.5%	5.1%	2.2%	0.2%
Seriousness level 4	565	5.8%	12.7	85.5%	7.4%	6.4%	0.7%
Seriousness level 5	424	4.3%	13.8	89.9%	2.8%	6.8%	0.5%
Seriousness level 6	857	8.8%	20.4	86.1%	3.1%	9.8%	0.9%
Seriousness level 7	312	3.2%	30.4	75.7%	3.8%	20.1%	0.3%
Seriousness level 8-10	286	2.9%	75.9	91.1%	7.2%	0.0%	1.7%
New Commitments – Females	777	7.9%	11.7	90.3%	3.4%	6.4%	0.0%
Seriousness levels 1-6	660	6.8%	9.2	92.0%	3.2%	4.8%	0.0%
Seriousness levels 7-10	117	1.2%	26.1	80.5%	4.2%	15.3%	0.0%
Parole Violators – Males	4,466	45.7%	14.9	89.3%	10.2%	0.1%	0.4%
Seriousness levels 1-6	3,105	31.8%	12.7	87.8%	11.7%	0.1%	0.4%
Seriousness levels 7-10	1,361	13.9%	19.8	92.6%	6.9%	0.0%	0.5%
Parole Violators – Females	535	5.5%	9.6	90.9%	8.4%	0.6%	0.2%
Seriousness levels 1-6	429	4.4%	8.8	89.3%	9.8%	0.7%	0.2%
Seriousness levels 7-10	106	1.1%	12.7	97.2%	2.8%	0.0%	0.0%
Unknown	43	0.4%	15.2	n/a	n/a	n/a	n/a
TOTAL	9,774	100.0%	18.6	88.6%	7.7%	3.0%	0.7%

Source: ADC data extract release file; Note: "Other" release category is a "catch-all" of minor prison release routes such as death and administrative closure.

VI. KEY POPULATION PROJECTION ASSUMPTIONS

The inmate population projections contained in this report were completed using the Wizard simulation model. This model simulates the movements of inmates through the prison system based on known and assumed policies affecting both the volume of admissions into the system and the lengths of stay for inmates who are housed in prison. It simulates the movements of individual cases, by offense group, and projects each separately. Inmates sentenced under different sentencing policies, move through the system differently. Preceding sections of this reports displayed the individual case level data used to build the model. JFA has made the following key assumptions that have a significant impact on the projection results.

A. Future transfer eligibility rates for new offenders will mimic those observed during 2016.

New law transfer rates will also remain constant at the rates observed during 2016 throughout the forecast horizon. Table 18 displays the number and rates at which new law offenders were not released at the transfer eligibility dates for 2015 and 2016. As can be seen in Table 18, approximately 52.18 percent of all new charge inmates released via discharge or parole are held beyond their transfer eligibility date and serve an average of 8.7 months before being released- marking an increase of over two months from 2015 figures. The statistics, broken out by gender and type of crime, are assumed over the forecast horizon.

B. The sentence group composition of future annual new court commitments is assumed to be the same as the composition of new commitments during 2016.

Projections in this report are based on admission and release data provided to JFA Associates by the Arkansas Department of Correction for 2016. Table 16 presented the sentencing profiles for newly committed inmates by seriousness level. Future new commitments are assumed to “look like” these new commitment admissions in terms of the proportion of admitting charges, sentences received, good time credit awards, and serving times to parole eligibility.

C. Parole revocation admissions to ADC will be at the level observed during 2016.

In 2015, it was determined that 5,082 offenders were returned for parole violations; this number is 13.2 percent higher than the 2014 count of 4,490. In 2016, offenders returned for parole violations total 5,065, indicating a leveling off of parole violators admissions returned.

It is assumed the level of both parole board revocations and waivers to ADC observed in 2016 will continue throughout the forecast horizon, approximately 5,065 admissions per year. Any large deviation from this assumption could have an error effect on the forecasting accuracy. JFA will continue to track this trend and this assumption throughout the year.

D. Projections New Commitment Assumption.

Under the projections assumptions, new commitments are projected to increase at average annual level 1.5 percent per year throughout the forecast horizon. Projected overall new commitment growth was determined by average annual growth since 2006, excluding the one year dramatic increase in 2013. New commitments to prison, and their associated average sentence lengths, should be monitored closely over the next year to ensure forecast accuracy.

E. 90 Day Parole Violator Return Program.

Prior assumptions in 2015 assumed approximately 10 percent, or an annual level of 500, all parole returns to prison will be put in a 90 day short term return program and not admitted to prison. Violators returned to prison in 2016 did not decline as assumed but remained stable.

It is assumed the level of 90 day short term return diversion resulting in a stable level of violator admissions in 2016 will remain constant over the forecast horizon.

TABLE 18
ARKANSAS DEPARTMENT OF CORRECTION
OFFENDERS (RELEASED VIA DISCHARGE OR PAROLE) HELD BEYOND TRANSFER
ELIGIBILITY DATE BY ID-GROUP IN 2015 & 2016

ID Group*	Total Released via Discharge/Parole	Total Held Beyond Transfer Eligibility Date	Percent Held Beyond Transfer Eligibility Date	For those held beyond TE Date, average # of months held over
2015				
New Commitments – Males	3,432	1,828	53.3%	7.5
New Commitments – Females	682	384	56.3%	3.3
TOTAL	4,114	2,212	53.8%	6.8
2016				
New Commitments – Males	3,310	1,796	54.3%	9.2
New Commitments – Females	731	309	42.3%	5.2
TOTAL	4,041	2,105	52.1%	8.7

**Excludes those with an offense date before 1/1/1994, lifers, parole violator returns, 50%ers and 70%ers.*

Source: ADC data extract file

VII. PRISON POPULATION PROJECTIONS FOR 2017-2027

This section contains the baseline inmate population projections based on the assumptions set forth in the previous section.

A. Projected Inmate Population

Tables 19 and 20 and Figure 5 display the historical and projected inmate populations for the period 2006 to 2027. The table includes the projections using the base model assumptions. A more detailed breakdown of the forecast by gender and by month is presented in the Appendix of this document.

Baseline projections included in this report were produced using the Wizard simulation model which projects bed space needs regardless of housing location or type. The Wizard model, at its most basic level, uses the calculation of:

$$\text{Admissions} \times \text{Length of Stay} = \text{Population}$$

Forecasts produced under this method will account for shorter sentenced offenders cycling faster through the system and the stacking effect of lifers, mandatory serving offenders with long length of stays. All of these complex interplays are present in the Arkansas prison system and influence the resulting projections.

- At the end of December 2027, 20,134 offenders are projected to be housed in the Arkansas Department of Correction.
- At the end of 2016, the inmate prison population was 17,537. Under the baseline projection, the population is projected to increase to 18,137 inmates at the end of 2017 and to 19,137 in 2022. The projected growth represents average annual increases of 1.1 percent per year through the year 2027.
- Under the baseline projections, the male inmate population is projected to grow an average of 1.0 percent between 2017 and 2027 while the female inmate population is projected to grow by an average of 1.1 percent per year through 2027.

Historical 10-year average growth (2.7 percent) in the prison population exceeds the projected future annual 10-year growth (1.1 percent). The factors producing these results include, previous two-year stabilization of the prison population through continued use of EPA, stabilization of levels of parole violators returned, slightly lower sentences for 50% and 70% offenders and fewer offenders held beyond their transfer eligibility date. Competing trends include slight fluctuations for some net sentences, slight increases in commitments for 70% and 50% crimes, increase time to release for offenders not released at the transfer eligibility date and slight increase in length of stay for parole violators.

TABLE 19
ARKANSAS DEPARTMENT OF CORRECTION
HISTORICAL AND PROJECTED INMATE POPULATION 2006-2027

2006	13,698	
2007	14,285	
2008	14,686	
2009	15,171	
2010	16,176	
2011	15,035	
2012	14,627	
2013	17,211	
2014	17,850	
2015	17,684	
2016	17,537	17,537
2017		18,137
2018		18,333
2019		18,547
2020		18,750
2021		18,941
2022		19,137
2023		19,357
2024		19,554
2025		19,757
2026		19,947
2027		20,134
Numeric Diff. 2006-2016	3,839	
% Diff. 2006-2016	28.0%	
Average % Diff. 2006-2016	2.7%	
Numeric Diff. 2017-2027		1,997
% Diff. 2017-2027		11.0%
Average % Diff. 2017-2027		1.1%

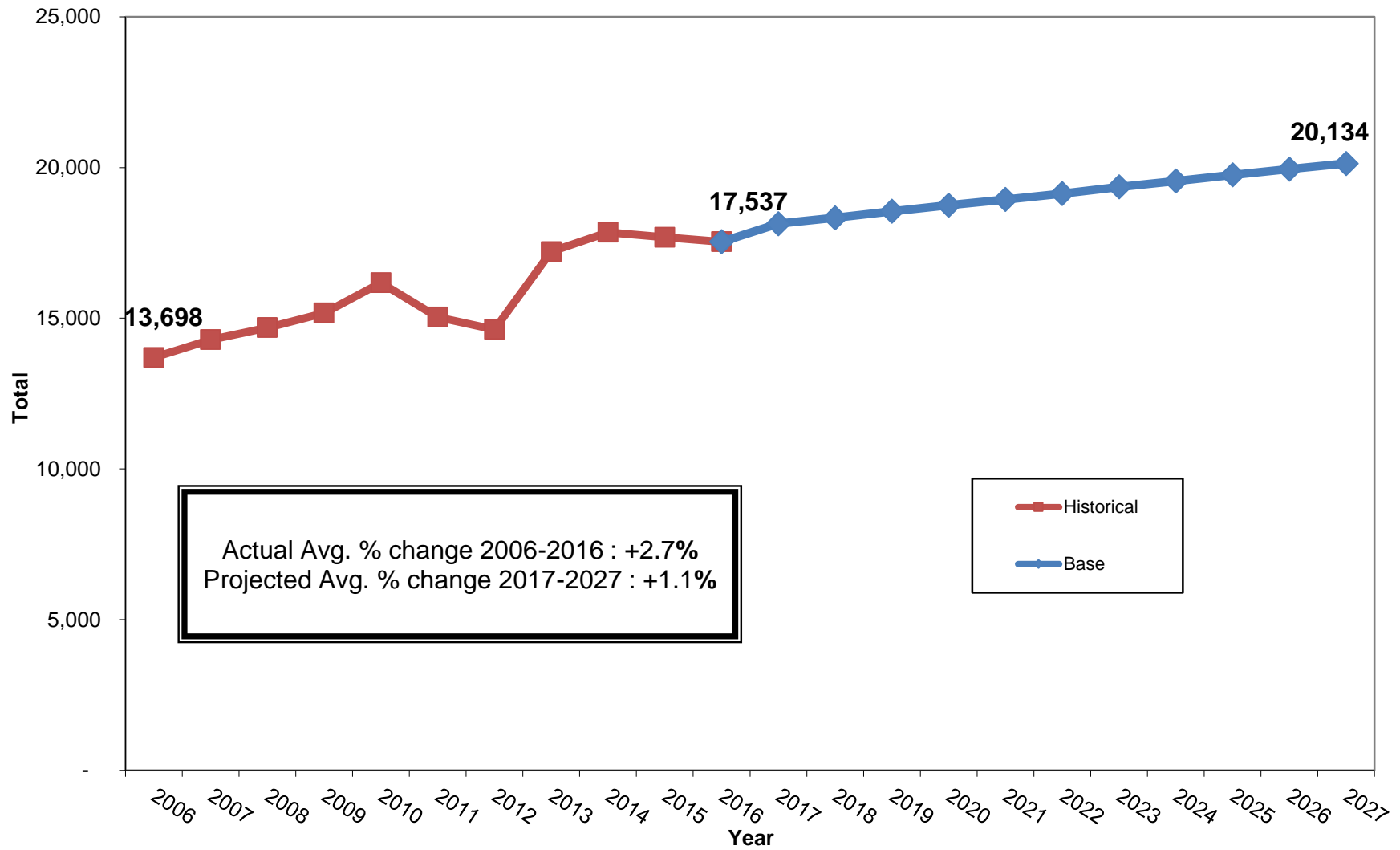
Source: JFA Simulation Model

TABLE 20
ARKANSAS DEPARTMENT OF CORRECTION
HISTORICAL AND PROJECTED INMATE POPULATION BY GENDER 2006-2027

Year	Historical Males	Historical Females	Projected Males	Projected Females
2006	12,659	1,039		
2007	13,217	1,068		
2008	13,627	1,059		
2009	14,109	1,062		
2010	15,013	1,163		
2011	13,948	1,087		
2012	13,568	1,059		
2013	15,881	1,330		
2014	16,453	1,397		
2015	16,282	1,402		
2016	16,161	1,376	16,161	1,376
2017			16,686	1,451
2018			16,862	1,471
2019			17,060	1,487
2020			17,245	1,505
2021			17,420	1,521
2022			17,601	1,536
2023			17,805	1,552
2024			17,985	1,569
2025			18,173	1,584
2026			18,347	1,600
2027			18,516	1,618
Numeric Diff. 2006-2016	3,502	337		
% Diff. 2006- 2016	27.7%	32.4%		
Average % Diff. 2006-2016	2.5%	3.2%		
Numeric Diff. 2017-2027			1,830	167
% Diff. 2017- 2027			11.0%	11.5%
Average % Diff. 2017-2027			1.0%	1.1%

Source: JFA Simulation Model

Figure 5: Historical & Projected ADC Population: 2006-2027



APPENDIX

ADDITIONAL TABLES AND FIGURES

TABLE A
TOTAL BASELINE PROJECTED INMATE POPULATION

Year	January	February	March	April	May	June	July	August	September	October	November	December
2017	17,710	17,661	17,686	17,735	17,869	17,975	18,045	18,043	18,075	18,085	18,113	18,137
2018	18,156	18,173	18,189	18,213	18,246	18,278	18,286	18,313	18,327	18,311	18,326	18,333
2019	18,305	18,304	18,324	18,340	18,381	18,418	18,446	18,480	18,498	18,513	18,539	18,547
2020	18,561	18,569	18,578	18,591	18,628	18,637	18,661	18,673	18,711	18,733	18,742	18,750
2021	18,764	18,784	18,785	18,800	18,827	18,855	18,869	18,891	18,899	18,908	18,934	18,941
2022	18,952	18,967	18,978	18,988	19,046	19,055	19,065	19,070	19,086	19,126	19,121	19,137
2023	19,174	19,221	19,230	19,235	19,240	19,248	19,269	19,299	19,322	19,332	19,346	19,357
2024	19,362	19,380	19,446	19,488	19,493	19,507	19,512	19,521	19,516	19,538	19,535	19,554
2025	19,573	19,586	19,601	19,638	19,655	19,674	19,696	19,723	19,737	19,751	19,746	19,757
2026	19,784	19,795	19,825	19,832	19,856	19,869	19,882	19,894	19,907	19,921	19,941	19,947
2027	19,962	19,980	19,996	20,016	20,031	20,055	20,085	20,130	20,122	20,116	20,127	20,134

TABLE B
FEMALE BASELINE PROJECTED INMATE POPULATION

Year	January	February	March	April	May	June	July	August	September	October	November	December
2017	1,407	1,415	1,413	1,424	1,447	1,451	1,459	1,442	1,442	1,444	1,447	1,451
2018	1,455	1,453	1,456	1,458	1,465	1,472	1,474	1,468	1,472	1,468	1,469	1,471
2019	1,473	1,472	1,474	1,478	1,481	1,487	1,482	1,486	1,489	1,482	1,481	1,487
2020	1,486	1,483	1,485	1,490	1,491	1,497	1,502	1,500	1,501	1,503	1,501	1,505
2021	1,504	1,505	1,503	1,505	1,510	1,511	1,508	1,513	1,519	1,515	1,516	1,521
2022	1,524	1,526	1,529	1,524	1,525	1,527	1,528	1,525	1,524	1,533	1,523	1,536
2023	1,538	1,540	1,544	1,543	1,541	1,545	1,546	1,548	1,549	1,551	1,553	1,552
2024	1,551	1,555	1,558	1,559	1,560	1,562	1,561	1,561	1,563	1,564	1,568	1,569
2025	1,568	1,566	1,570	1,572	1,569	1,573	1,576	1,580	1,582	1,585	1,584	1,584
2026	1,589	1,591	1,592	1,588	1,591	1,596	1,593	1,599	1,601	1,596	1,602	1,600
2027	1,598	1,601	1,605	1,608	1,611	1,609	1,610	1,614	1,619	1,618	1,616	1,618

TABLE C
MALE BASELINE PROJECTED INMATE POPULATION

Year	January	February	March	April	May	June	July	August	September	October	November	December
2017	16,303	16,246	16,273	16,311	16,422	16,524	16,586	16,601	16,633	16,641	16,666	16,686
2018	16,701	16,720	16,733	16,755	16,781	16,806	16,812	16,845	16,855	16,843	16,857	16,862
2019	16,832	16,832	16,850	16,862	16,900	16,931	16,964	16,994	17,009	17,031	17,058	17,060
2020	17,075	17,086	17,093	17,101	17,137	17,140	17,159	17,173	17,210	17,230	17,241	17,245
2021	17,260	17,279	17,282	17,295	17,317	17,344	17,361	17,378	17,380	17,393	17,418	17,420
2022	17,428	17,441	17,449	17,464	17,521	17,528	17,537	17,545	17,562	17,593	17,598	17,601
2023	17,636	17,681	17,686	17,692	17,699	17,703	17,723	17,751	17,773	17,781	17,793	17,805
2024	17,811	17,825	17,888	17,929	17,933	17,945	17,950	17,959	17,953	17,974	17,967	17,985
2025	18,005	18,020	18,031	18,066	18,086	18,101	18,120	18,143	18,155	18,166	18,162	18,173
2026	18,195	18,204	18,233	18,244	18,265	18,273	18,289	18,295	18,306	18,325	18,339	18,347
2027	18,364	18,379	18,391	18,408	18,420	18,446	18,475	18,516	18,503	18,498	18,511	18,516

**Figure 6: Comparison of State Population with Crime Index per 100,000 Residents
Arkansas 2006-2016**

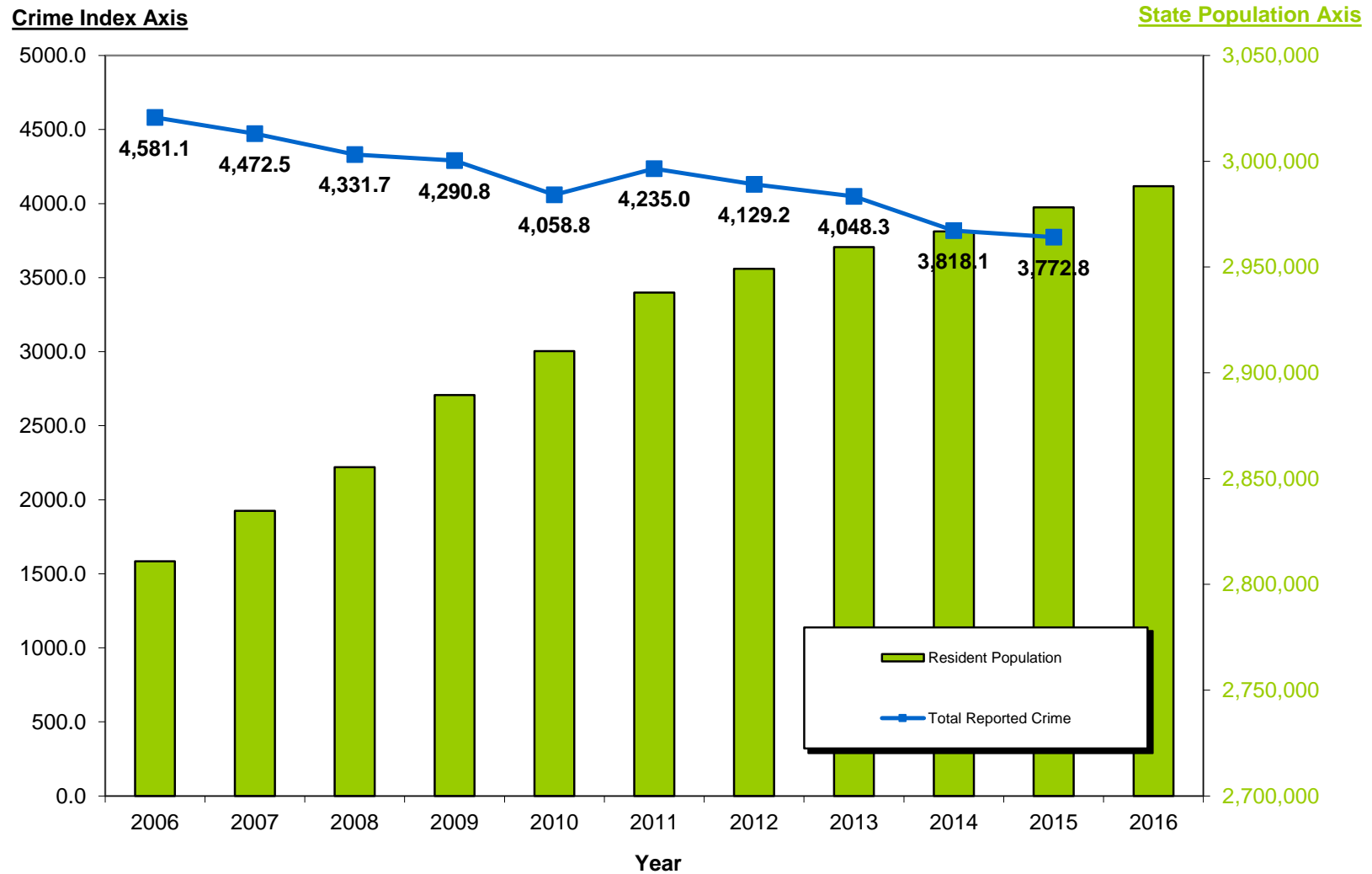


Figure 7: Accuracy of 2015 Male and Female Forecasts
June 2016 thru May 2017

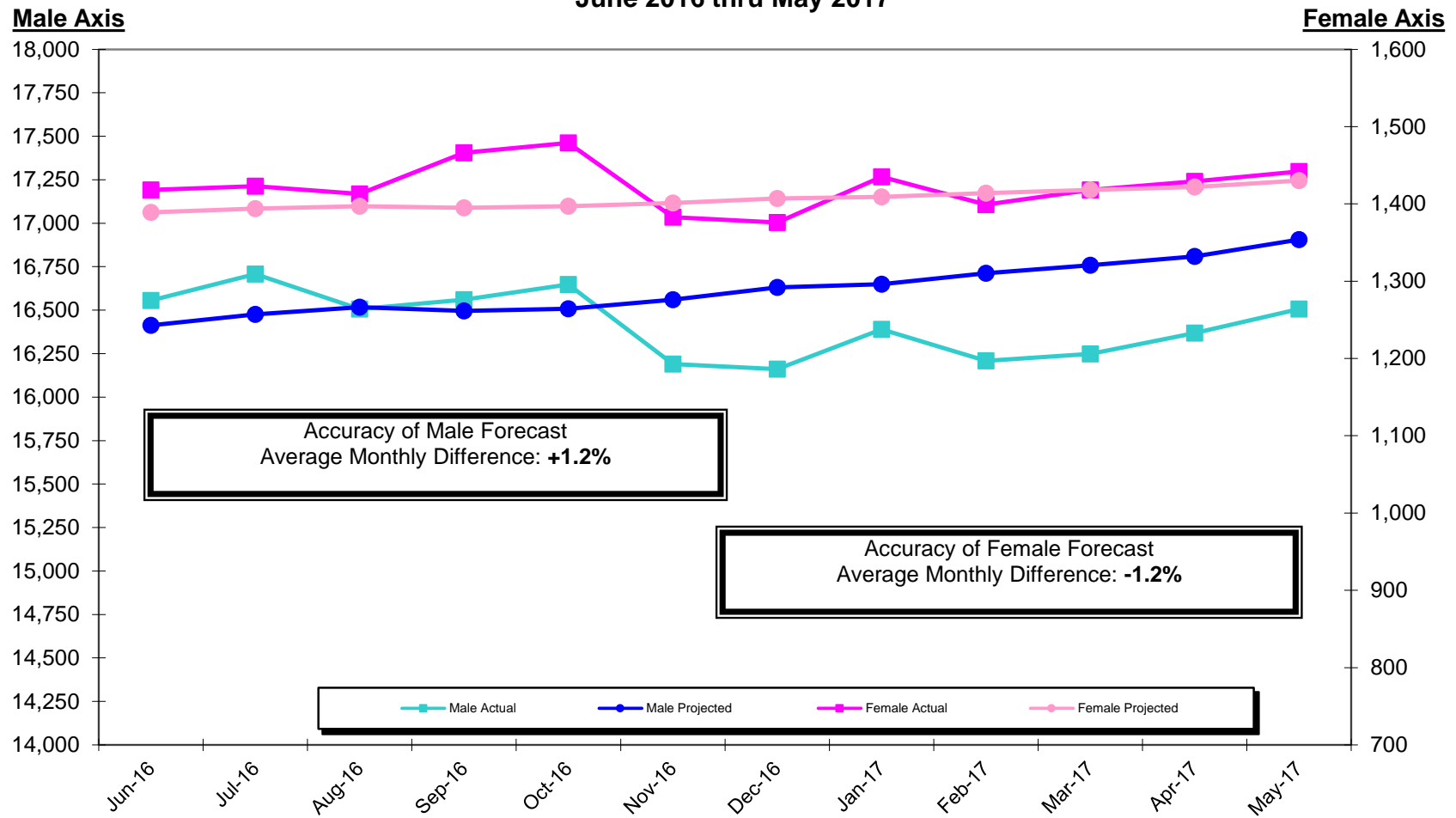


Figure 8: Accuracy of 2016 Forecast Total Incarcerated Population

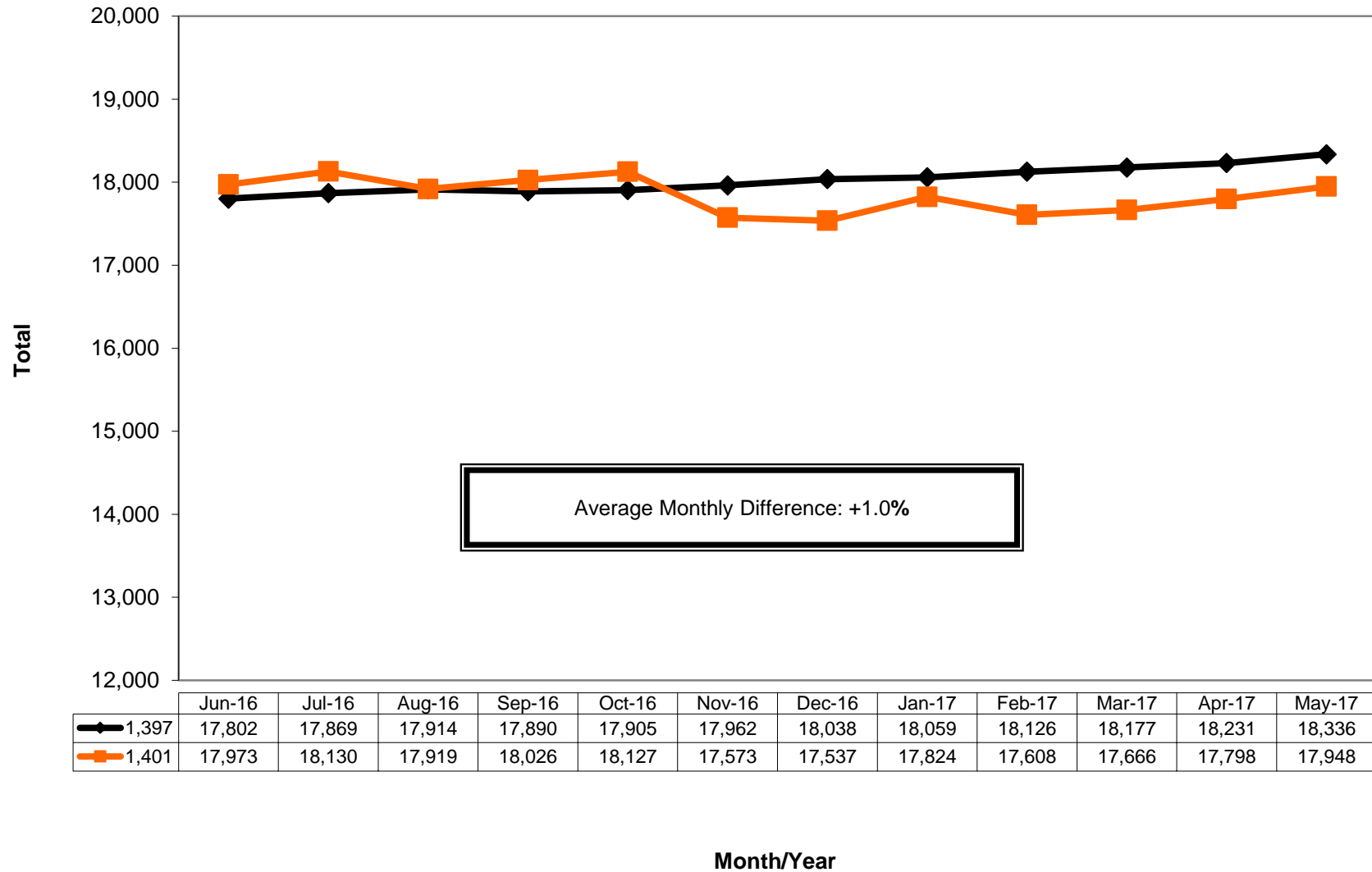


Figure 9: Historical Admissions to Prison: 2006-2016

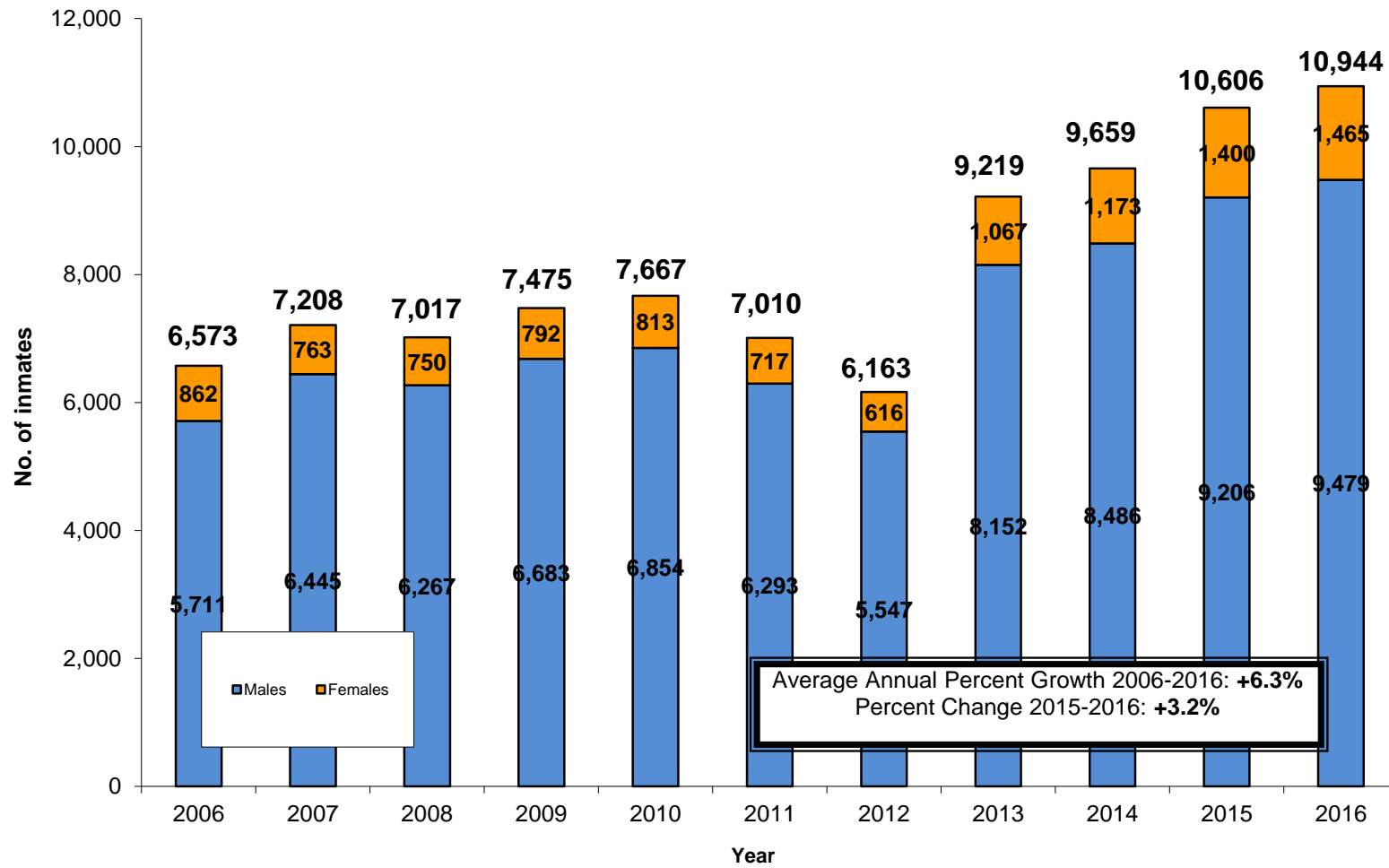


Figure 10: Historical Prison Population 2006-2016

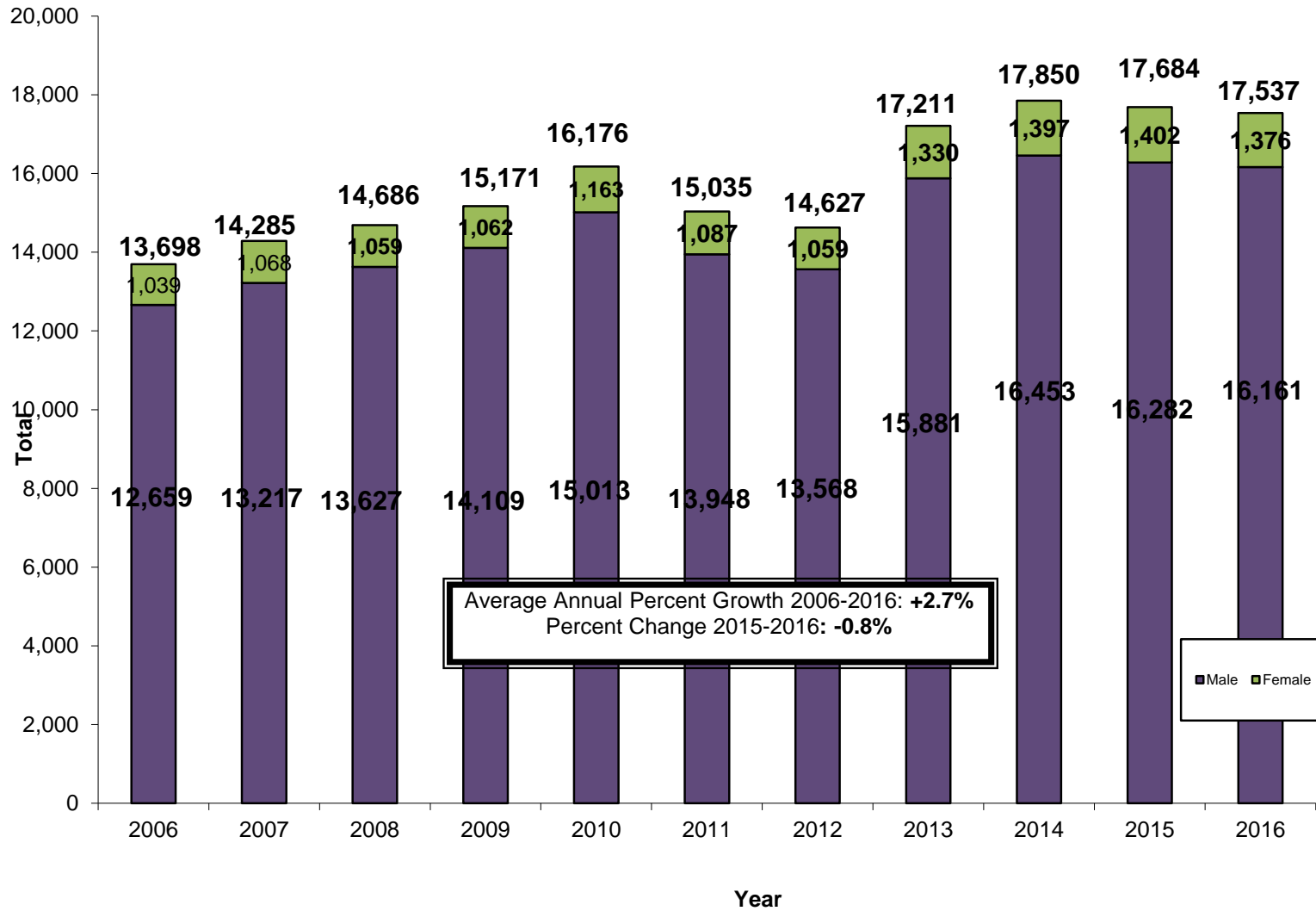
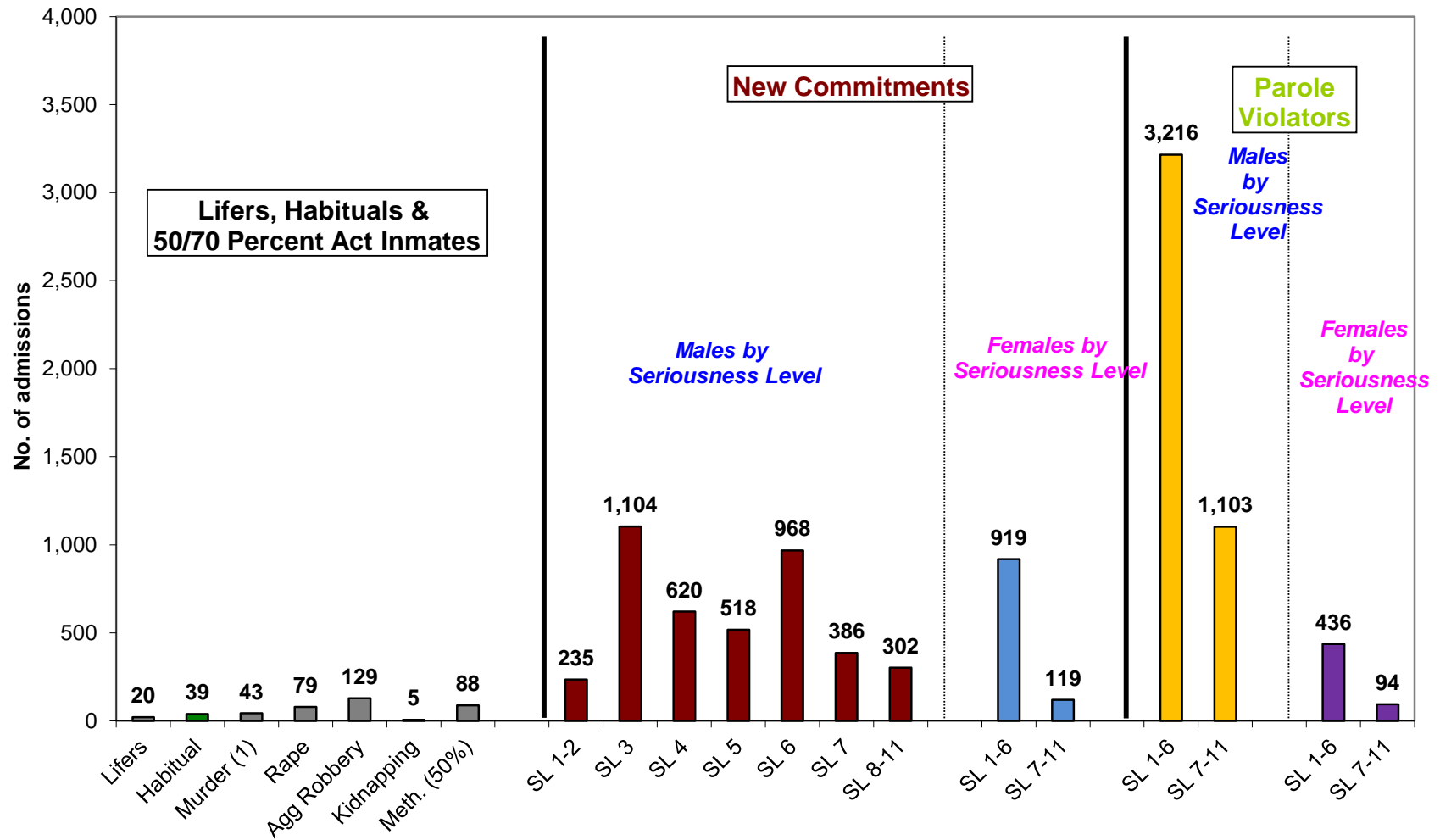
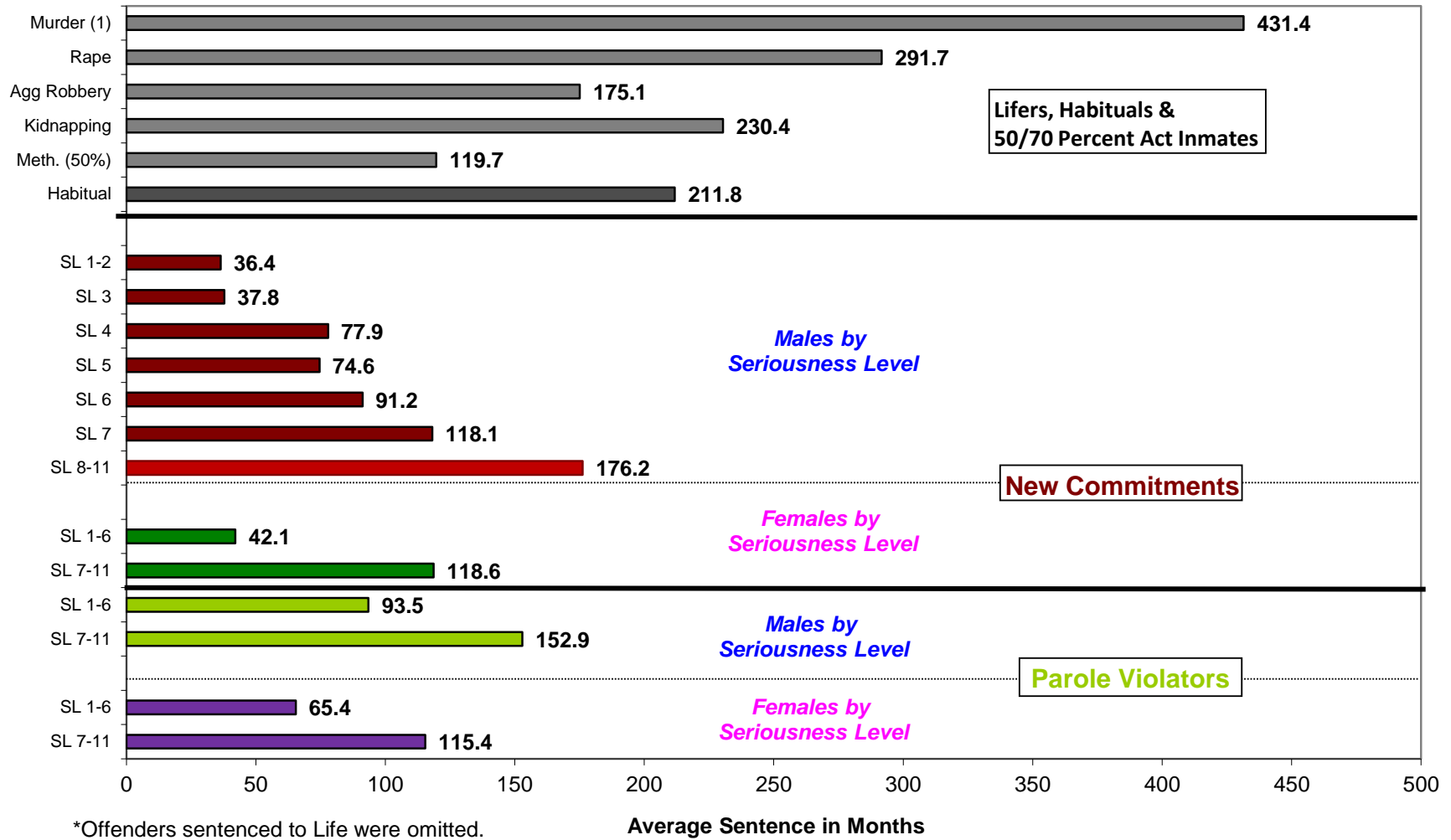


Figure 11: Number of People Admitted to Prison
by Gender, Seriousness Level and Admission Type in 2016



**Figure 12: Average Sentences of People Admitted to Prison
by Gender, Seriousness Level and Admission Type in 2016**



**Figure 13: Comparison of Average Sentences for New Court Commitments
Admitted to Prison by Seriousness Level
Calendar Years 2012 - 2016**

