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Conducting Justice and Corrections Research for Effective Policy Making

# ARKANSAS DEPARTMENT OF CORRECTION, ARKANSAS SENTENCING COMMISSION, & ARKANSAS COMMUNITY CORRECTION

## TEN-YEAR ADULT SECURE POPULATION PROJECTION 2018-2028

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#### **EXECUTIVE SUMMARY**

#### External Trends Impacting the Arkansas Prison Population

- 1. The Arkansas resident population and its "at-risk" population (males ages 18-35) have seen little to no growth in the past 10 years. The total resident population is projected to have minimal growth through 2025.
- 2. While reported crime in Arkansas has fallen 16.6 percent overall between 2006 and 2016 (the most recent years data is available), violent crimes per 100,000 residents have risen three years in a row (2014-2016).

#### Internal Trends Impacting the Arkansas Prison Population

- 3. The number of persons admitted to the Arkansas Department of Correction (ADC) in 2017 fell by 13.3 percent when compared to 2016. This is the most significant one year decrease since 2012.
- 4. The drop in admissions in 2017 was the result of:
  - A 6.5 percent decrease in new commitments from court as compared to 2016 counts;
  - b. A 41.9 percent decrease in technical parole violations to the ADC as compared to 2016 counts.
- 5. The decrease in technical parole violator admissions is attributed to a large decrease in both average monthly waivers to the ADC by the Arkansas Parole Board and a decrease in the average monthly total returns to the ADC by the Board across every quarter in 2017 when compared to 2016.
- 6. It should be noted that even with the drops in 2017 parole violator admissions, the totals are still higher than 2013 counts.
- 7. Average sentences for new commitments across all seriousness levels have remained stable in recent years.
- 8. The average length of stay in prison across all seriousness levels has also remained stable in recent years.
- 9. The number of EPA releases in 2017 were 13.4 percent lower than EPA releases in 2016.
- 10. The number of persons held by the ADC beyond their transfer eligibility date and the average time they are held has remained static through 2016 and 2017.
- 11. The decline in the number of persons admitted to prison in 2017 was outpaced by a larger decline in releases. The decrease in releases from the ADC in 2017 was directly related to the decrease in admissions of technical parole violators. Because of this, the ADC population grew by 3.1 percent between year-end 2016 and year-end 2017.

2018-2028 Prison Population Projections

- 12. At the end of December 2028, 19,947 offenders are projected to be housed by the Arkansas Department of Correction.
- 13. At the end of 2017, the inmate prison population was 18,078. Under the baseline projection, the population is projected to increase to 18,286 inmates at the end of 2018 and to 19,126 in 2023. The projected growth represents average annual increases of 0.9 percent per year through the year 2028.
- 14. Under the baseline projections, the male inmate population is projected to grow an average of 0.9 percent between 2018 and 2028 while the female inmate population is projected to grow by an average of 1.1 percent per year through 2028.

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#### **TABLE OF CONTENTS**

Executive Summary	1
List of Tables and Figures	4
Special Analysis on Recent ADC Population Growth	6
Introduction	14
The Simulation Model & Sentencing Policies	15
External Trends Impacting the Arkansas Prison Population	19
Arkansas Resident Population	19
Crime in Arkansas	21
Comparison of Arkansas & the United States	22
Accuracy of the 2017 Projections	25
Historical Arkansas Inmate Population Trends	29
Current Arkansas Inmate Population Trends	34
2017 Admissions to Prison	34
New Commitment Sentence Length Comparison 2012-2017	39
2017 Release Population	40
Key Population Projection Assumptions	42
Prison Population Projections for 2018-2028	45
Appendix	49

#### **LIST OF TABLES AND FIGURES**

Table 1:	Parole Violators Admitted to ADC 2012-2017
Table 2	Average Length of Stay of Parole Violators Released from ADC 2012-2017
Table 3:	Parole Violator Admissions by Violation Reason 2015-2017
Table 4:	New Commitments Admitted to ADC 2012-2017
Table 5:	Arkansas Projected Resident Population 2017-2025
Table 6:	Historical Arkansas At-Risk Population 2010-2016
Table 7:	Changes in Reported UCR Crimes in Arkansas 1990-2016
Table 8:	Comparison between the United States and Arkansas on Key Population and Crime Demographics
Table 9:	EPA Releases 2007-2017
Table 10:	Accuracy of the 2017 Total Prison Population Forecast
Table 11:	Accuracy of the 2017 Female Prison Population Forecast
Table 12:	Accuracy of the 2017 Male Prison Population Forecast
Table 13:	Historical Admissions to the ADC by Gender 2007-2017
Table 14:	Historical Admissions to the ADC by Admission Type 2009-2017
Table 15:	Historical End of Year ADC Population 2007-2017
Table 16:	Historical Releases from the ADC 2007-2017
Table 17:	Historical 50 & 70 Percent Acts Admissions & Year End Counts 2007- 2017
Table 18:	ADC Admission Counts and Average Sentence by ID Group 2017
Table 19:	Average Sentence of New Commitments by Seriousness Level 201-2017
Table 20:	Average Length of Stay and Release Type for ADC Releases in 2017
Table 21:	ADC Inmates (Released via Discharge or Parole) Held Beyond Transfer Eligibility Date in 2016 & 2017
Table 22:	Historical and Projected ADC Population 2007-2028
Table 23:	Historical and Projected ADC Population by Gender 2007-2028
Table 24:	Projected Total ADC Population by Month 2018-2028
Table 25:	Projected Total ADC Female Population by Month 2018-2028
Table 26:	Projected Total ADC Male Population by Month 2018-2028
Figure 1:	Arkansas Prison Population Growth 2000-2017
Figure 2:	Parole Hearings and Number of Revocations to ADC
J	January 2015 – December 2017
Figure 3:	Trends in Male and Female Inmate Population (Previous 24 Months)
Figure 4:	Historical and Projected ADC Population 2007-2028
Figure 5:	Comparison of Arkansas Resident Population with Crime Index 2007-2017
Figure 6:	Accuracy of 2017 Male & Female Forecasts
Figure 7:	Accuracy of 2017 Total ADC Population Forecast
Figure 8:	Historical ADC Admissions 2007-2017

Figure 9: Historical ADC Population 2007-2017

Figure 10: Number of ADC Admissions in 2017 by Gender, Seriousness Level and

Admission Type

Figure 11: Average Sentence of ADC Admissions in 2017 by Gender, Seriousness

Level and Admission Type

Figure 12: Comparison of Average Sentence for New Commitments to ADC by

Seriousness Level 2012-2017

#### SPECIAL ANALYSIS ON RECENT ADC POPULATION GROWTH

In addition to the traditional analysis associated with the Arkansas Department of Correction (ADC) Projections, for the last five iterations of this report, JFA Associates has included 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 May of 2018. The prison population at the end of each of the most recent 24 months is provided in Figure 3.

During the period of population inflation, the prison population peaked at 18,847 in July of 2015. 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. Through calendar year 2017 to May of 2018, the ADC population has remained stable overall. The population has "zig zagged" between highs and lows but average percent growth has remained under 0.1 percent per month.

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

### A. Despite a Decrease in overall Admissions in 2017, the ADC Population Grew by 3.1 percent in 2017.

As reported in previous iterations 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. 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 19.4 months. At that time, parole revocations consisted largely of new crime parole revocations. 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 between 2014 and 2016. With decreases in the technical parole violator admissions in 2017, the average length of stay for all parole violators released in 2017 was 14.3 months, the longest since 2013.

The second contributor to increases in ADC releases was, an end to high levels in parole revocations which began in the last quarter of 2015 and was a direct result of

specific policy efforts made by the Arkansas Parole Board. The Parole Board 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.

In 2017, releases from ADC did not outpace admissions. This produced growth in the ADC population of 3.1 percent between end of year 2016 and end of year 2017.

The most unexpected trend that emerged in 2017 was the overall decrease of the number of inmates flowing in and out of prison. Total admissions decreased from 10,367 in 2016 to 8,986 in 2017 while total releases fell from 10,298 in 2016 to 8,454 in 2017. These are decreases of 13.3 percent and 17.9 percent respectively.

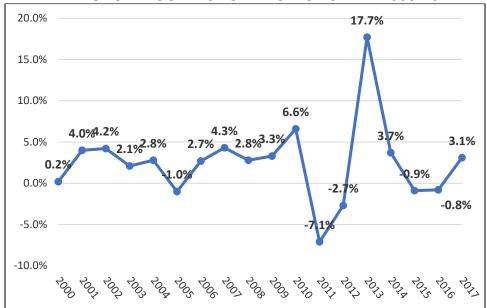
The decrease in admissions in 2017 was fueled, primarily, by a 6.5 percent drop in new commitments and a 41.9 percent drop in technical parole violators. In terms of offense seriousness, new commitments from court in <u>all</u> seriousness levels for both males and females, contributed to the overall decrease in admissions.

The decrease in releases from the ADC in 2017 was directly related to the decrease in admissions of technical parole violators. As mentioned above, technical parole violators cycle through the ADC within one year or less. With the decrease in admissions of these types of offenders in 2017, the total volume of persons moving though the system dropped, fueling an overall decrease in releases.

# B. A Decrease in the Number of Parole Hearings and Revocations by the Arkansas Parole Board Heavily Contributed to the Decrease in Admissions to the ADC in 2017.

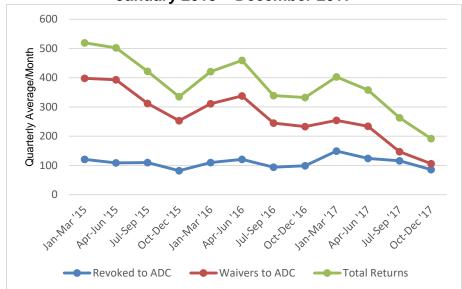
As shown in Figure 2, when comparing 4<sup>th</sup> quarter 2016 and 4<sup>th</sup> quarter 2017, the average monthly number of revocations to the ADC by the Arkansas Parole Board fell by 13.1 percent. The average monthly waivers to the ADC fell by 54.5 percent and the total cases returned to ADC fell by 42.2 percent. Both average monthly waivers and average monthly total returns saw decreases every quarter in 2017 when compared to 2016. These decreases reflect Parole Board policies focused on safe prison diversion for violators such as the 90-day suspension of parole violators and alternatives to prison readmission.

Figure 1
ARKANSAS PRISON POPULATION GROWTH 2000-2017



Source: ADC Research & Planning.

Figure 2:
Parole Hearings and Number of Revocations to ADC
January 2015 – December 2017



Quarter	Jan- Mar '15	Apr- Jun '15	Jul- Sep '15	Oct- Dec '15	Jan- Mar '16	Apr- Jun '16	Jul- Sep '16	Oct- Dec '16	Jan- Mar '17	Apr- Jun '17	Jul- Sep '17	Oct- Dec '17
Average Revocations to ADC per month	121	109	110	82	110	121	94	99	149	124	116	86
Average Waivers to ADC per month	398	393	312	253	311	338	245	233	254	234	147	106
Total Average Returns to ADC per month	519	502	422	335	421	459	339	332	403	358	263	192

Source: Arkansas Parole Board.

TABLE 1
PAROLE VIOLATORS ADMITTED TO ADC 2012 – 2017

Seriousness		Difference					
Level	2012	2013	2014	2015	2016	2017	2012 vs. 2017
Males	1,633	3,671	4,139	4,613	4,523	4,051	2,418
SL group 1-6	890	2,425	2,833	3,243	3,216	2,887	1,997
SL group 7-10	657	1,180	1,102	1,150	1,103	1,013	356
Other	86	66	204	220	204	151	65
Females	93	334	351	469	542	430	337
SL group 1-6	66	242	263	363	436	340	274
SL group 7-10	26	90	76	92	94	81	55
Other	1	2	12	14	12	9	8
Total	1,726	4,005	4,490	5,082	5,065	4,481	2,755

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

TABLE 2
AVERAGE LENGTH OF STAY (LOS)
PAROLE VIOLATORS RELEASED FROM ADC 2012 – 2017

TARGEE VIOLATORO RELEASED TROM ADO 2012 2011										
Seriousness	Av	Average LOS of Parole Violator Releases*								
Level	2012	2013	2014	2015	2016	2017				
Males	19.5	19.0	13.1	13.3	14.7	14.7				
SL group 1-6	17.8	15.6	11.1	11.2	12.7	12.6				
SL group 7-10	24.2	25.3	17.1	17.1	19.6	20.2				
Other	-	1	1	1	ı	ı				
Females	17.0	13.9	9.3	10.5	9.7	10.3				
SL group 1-6	16.2	13.2	8.5	9.3	8.4	8.7				
SL group 7-10	18.5	16.2	12.1	13.6	12.7	15.2				
Other	-	1	1	1	ı	-				
Total	19.4	18.6	12.9	13.0	14.1	14.3				

Source: ADC data extract admissions files; 'Other' includes: lifers, 50%ers & 70%ers, habitual offenders and cases with an unknown seriousness level; 'Other' is excluded from the average LOS calculation.

TABLE 3
PAROLE VIOLATOR ADMISSIONS BY VIOLATION REASON 2015 - 2017

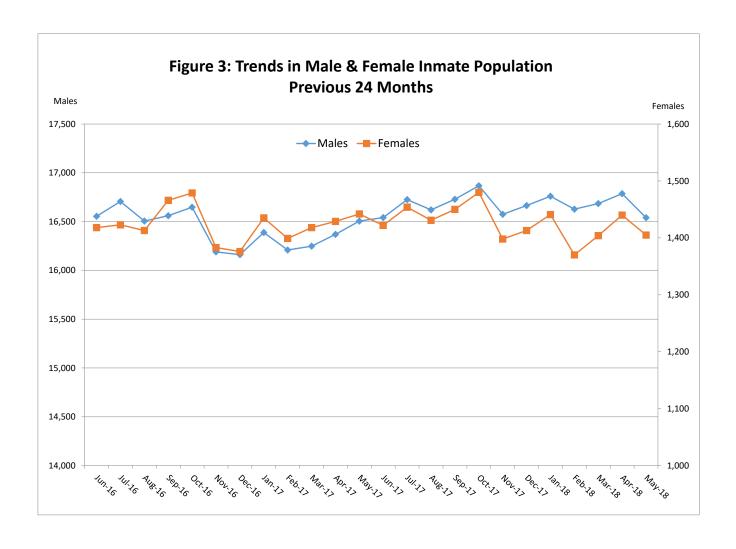
Security Group	2015 Parole Violator New Charge	2015 Parole Violator Technical	2015 Parole Violator Total	2016 Parole Violator New Charge	2016 Parole Violator Technical	2016 Parole Violator Total	2017 Parole Violator New Charge	2017 Parole Violator Technical	2017 Parole Violator Total
Males	3,372	1,241	4,613	3,241	1,282	4,523	3,305	746	4,051
SC group 1-6	2,353	890	3,243	2,256	960	3,216	2,332	555	2,887
SC group 7-10	870	280	1,150	835	268	1,103	854	159	1,013
Other	149	71	220	150	54	204	119	32	151
Females	332	137	469	362	180	542	326	104	430
SC group 1-6	257	106	363	288	148	436	254	86	340
SC group 7-10	68	24	92	68	26	94	67	14	81
Other	7	7	14	6	6	12	5	4	9
Total	3,704	1,378	5,082	3,603	1,462	5,065	3,631	850	4,481

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

TABLE 4
NEW COMMITMENTS ADMITTED TO ADC 2012 – 2017

Seriousness	New Commitments								
Level	2012	2013	2014	2015	2016	2017			
1	4	0	3	4	1	1			
2	197	217	270	282	273	229			
3	777	1,063	1,330	1,507	1,484	1,354			
4	732	826	842	876	782	709			
5	460	494	586	586	632	606			
6	810	1,102	1,146	1,174	1,196	1,138			
7	361	505	418	441	471	460			
8	634	463	361	325	386	271			
9	233	250	115	117	124	52			
10	135	121	55	54	58	4			
Other	94	173	43	158	62	290			
Total	4,437	5,214	5,169	5,524	5,468	5,114			

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



#### 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. The JFA Associates has produced forecasts for Arkansas over the past several years. This report presents an updated forecast for the 2018 – 2028 horizon as well as an update to the comprehensive analysis of all trends in the State's criminal justice system to include calendar year 2017 data. It should be noted that statistics in this report reflect trends based on the categories used in the simulation model to produce a 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 monthly projections of male and female inmates, 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 and 2017

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 10 of this report, the projections produced in 2017, using 2016 data extract files, averaged a monthly difference from actual counts of only 0.1 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 have focused on modernizing the extract files to reflect current business rules. This is an ongoing process, the fruits of which will likely produce updated extract files for the projections that will be generated in 2019.

#### II. THE SIMULATION MODEL AND SENTENCING POLICIES

The forecast of the correctional population in Arkansas was completed using the 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 using a simulation model originally constructed in 2001. New sentencing policies and any legislative acts that were passed since 2001 having an impact on future prison population levels have been incorporated into the model each year since the original model was built. Of note is the continued inclusion in the simulation model of Arkansas' use of the Emergency Powers Act. This particular aspect of the Arkansas criminal justice system has been tracked by the model for over a decade. Please refer to earlier full productions of this report for a complete description of the simulation model structure.

#### Factors the Wizard Model uses to Project the ADC Population

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. 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 courtimposed sentences, have the authority to release, recommit, give and restore a wide array of good time credits, and offer programs that may reduce recidivism.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> 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

For example, one of the most difficult numbers to estimate is the number of prison admissions for the next five years. 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 a particular state must take into account that state's sentencing laws. The following discussion details how JFA Associates has tuned the simulation model to reflect specific changes in Arkansas.

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 (of 1995), 1135 (of 1997) and 1268 (of 1999). Other legislation taken into account include comprehensive corrections reforms enacted in 2011 under Act 570, emergency jail release mechanisms enacted in Acts 418 (of 1987) and 1721 (of 2003). More detail follows.

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

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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.

crimes: Murder I, Rape, Kidnapping, Aggravated Robbery, Trafficking of Persons 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, Act 418, known as the Emergency Powers Act (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 releases 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 'special reporting section' 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.
- All requests for release of holds made by sheriffs or jail personnel must be in writing.
- 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.

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 has been incorporated into the simulation model and the projections presented in this document.

The next section of this report will examine the external trends (crime and resident population) that can impact the Arkansas criminal justice system.

#### III. EXTERNAL TRENDS IMPACTING THE ARKANSAS PRISON POPULATION

**Significant Finding:** The Arkansas resident population is projected to remain static over the next several years. Growth is projected to average less than 1.0 percent annually from 2017 estimated counts through the year 2025.

**Significant Finding:** UCR Part I reported crimes in Arkansas increased by 1.2 percent between 2015 and 2016 (the most recent years of data that are available). This increase is primarily due to a 5.7 percent increase in violent crimes.

#### **Arkansas Resident Population**

Growth in a state's resident population can indirectly impact its criminal justice system. In particular, growth in a state's "at-risk" population. As discussed previously, the at-risk population is defined as the portion of the resident population most likely to be incarcerated. Here, this demographic group is defined as all males between the ages of 18 and 35.

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 3,004,279 in 2017 to 3,148,708 in 2025 (an increase of 4.8 percent overall). These data are listed in Table 5. 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 atrisk population. 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 2016 (the most recent data since the last decennial census) in Table 6. 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 these trends.

TABLE 5
ARKANSAS PROJECTED RESIDENT POPULATION 2017 – 2025

Year	Total Resident Population	Annual Percent Change
Actual 2017	3,004,279	
2018	3,044,865	1.4%
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%
Average		
Percent		0.6%
Change 2017-2025		0.078

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

TABLE 6
HISTORICAL ARKANSAS AT-RISK POPULATION 2010 – 2016

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- 2015	0.2%

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

#### **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, a lower level of 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 7, 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.

However, there was an 8.6 percent increase in reported violent crime between 2014 and 2015. Violent crime increased again in 2016. Property crimes also increased in Arkansas in 2016, but only slightly. These increases in reported crime resulted in the first one year increase in total reported crime in the State since 2011. Table 6 provides detailed historical reported crime data for Arkansas.

#### **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 8, 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 6.0 percent compared to 8.0 percent for the United States. Crime in the nation, as a whole, has decreased by a far larger percentage when compared to Arkansas. From 2006 to 2016, reported crime in the U.S. decreased by 25.2 percent while Arkansas saw a 16.6 percent decrease in reported crime.

In terms of state prison populations (using the most recent national data available: year-end 2016), Arkansas has seen significantly larger overall growth as compared to the nation as a whole over the last ten years. Arkansas grew by 26.6 percent overall compared to a 4.5 percent decrease nationally. It is important to note that the Arkansas prison population appears to have stabilized in recent years. The ADC population decreased by 0.9 percent in 2015 and by 0.8 percent in 2016. While the ADC population increased slightly in 2017, average monthly growth has been negligible for the first five months of 2018.

According to the Bureau of Justice Statistics, Arkansas' adult incarceration rate in 2016 was 763 prisoners per 100,000 state residents. The Arkansas rate vastly exceeded the national rate of 513. 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. Also reported by the Bureau of Justice Statistics, Arkansas had a lower probationer rate than the nation as a whole in 2016. This indicates that the Arkansas criminal justice system relies more heavily on incarceration versus prison diversion than the U.S. as a whole.

TABLE 7
CHANGES IN REPORTED UCR CRIMES IN ARKANSAS 1990 – 2016

CHANGES IN REPOR	Total		
Year	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
2016	3,819.5	550.9	3,268.6
Average Percent Change 1990-1999	-1.9%	-2.3%	-1.9%
Average Percent Change 1990-2010	-0.8%	-0.1%	-0.9%
Average Percent Change 2005-2016	-1.4%	0.9%	-1.7%

Source: www.FBI.gov; Note: In 2004 AR UCR reporting methodology changed.

#### TABLE 8 **COMPARISON BETWEEN UNITED STATES AND ARKANSAS** ON KEY POPULATION AND CRIME DEMOGRAPHICS

ON NETT OF GEATION AND ONIM	United States	Arkansas
POPULATION <sup>2</sup>		
Total Population (7/1/17)	325,719,178	3,004,279
Change in Population		
1-year change (7/1/16 – 7/1/17)	0.8%	0.5%
10-year change (7/1/07 - 7/1/17)	8.0%	6.0%
CRIME RATE <sup>3</sup> (Rate per 100,000 inhabitants)		
UCR Part I Reported Crime Rates (2016)		
Total	2,847.8	3,819.5
Violent	397.1	550.9
Property	2,450.7	3,268.6
Change in Total Reported Crime Rate		
1-year change (2015-2016)	-0.8%	1.2%
10-year change (2006-2016)	-25.2%	-16.6%
PRISON POPULATION <sup>4</sup>		
Total Inmates (State Prisons Only) 2017**	1,316,205	18,078
1-year change (2016-2017)	-1.1%	3.1%
10-year change (2007-2017)	-4.5%	26.6%
Average annual change (2007-2017)	-0.4%	2.6%
State Incarceration Rate (per 100,000 residents) <sup>5</sup>	513	763
PAROLE POPULATION (2017) <sup>6***</sup>	760,392	24,425
Rate per 100,000 residents <sup>7</sup>	303	1,038
PROBATION POPULATION (2017)8***	3,655,836	33,184
Rate per 100,000 residents 9	1,459	1,347

\*\*Year end 2016 is the latest data available for the U.S.; \*\*\*U.S.: States only, federal supervision excluded, data are for year end 2016.

<sup>&</sup>lt;sup>2</sup> U.S. Census Bureau, Population estimates for July 1, 2017.

Uniform Crime Reports, Crime in the United States – 2016, Federal Bureau of Investigation.
 Prisoners in 2016, Bureau of Justice Statistics, Jan. 2018; Arkansas Department of Correction Statewide Population Report.

<sup>&</sup>lt;sup>5</sup> Prisoners in 2016, Bureau of Justice Statistics, Jan. 2018; US (excludes federal prisons); Rate is for adults only.

<sup>&</sup>lt;sup>6</sup> U.S. data source: Probation and Parole in the United States, 2016 Bureau of Justice Statistics, April 2018; Arkansas data source: Arkansas Dept. of Community Correction, Research & Evaluation.

<sup>&</sup>lt;sup>7</sup> U.S. and Arkansas data source: Probation and Parole in the United States, 2016 Bureau of Justice Statistics, April

<sup>&</sup>lt;sup>8</sup> U.S. data source: Probation and Parole in the United States, 2016 Bureau of Justice Statistics, April 2018; Arkansas data source: Arkansas Dept. of Community Correction, Research & Evaluation.

<sup>9</sup> U.S. and Arkansas data source: Probation and Parole in the United States, 2016 Bureau of Justice Statistics, April 2018.

#### **ACCURACY OF THE JUNE 2017 PROJECTIONS**

The previous inmate population forecast for the Arkansas Department of Correction was released in June 2017. Tracking the accuracy of the previous projections helps JFA Associates determine how well the Wizard model is simulating the Arkansas prison system.

**Significant Finding:** For the last 12 months, the projections for male inmates were estimated to increase at a monthly average of 0.14 percent, while the actual population decreased by 0.00 percent per month. The male population was overforecasted by an average monthly difference of only 0.1 percent.

**Significant Finding:** The Arkansas Department of Correction continued to exercise the Emergency Powers Act in 2017, 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 2017, 2,381 offenders were released via the Emergency Powers Act.

Tables 10 through 12 and Figure 7 present the accuracy of projections generated in June of 2017. Accuracy of the projections were tracked from June 2017 to May 2018 by comparing projected totals with the actual counts of male and female inmates.

- Through the most recent 12 months, the projected female population averaged a +1.9 percent difference from actual totals. On average, the 2017 simulation model averaged 26 more female inmates per month than actual counts.
- For the 2017 model, the forecasted counts of male inmates differed from the actual counts by a maximum over-estimation of 241 (May 2018) and by a maximum underestimation of 227 (October 2017).
- The total prison population forecast had an average percent difference of 0.1 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 2017. Table 9 details EPA releases since 2007. Over the past decade, an annual average of 2,447 persons were released via this method.

TABLE 9 EPA RELEASES 2007-2017

Year	Act 1721	Act 418	Total
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
2016	368	2,380	2,748
2017	203	2,178	2,381
Jan-17	4	25	29
Feb-17	32	457	489
Mar-17	43	142	185
Apr-17	13	59	72
May-17	20	401	421
Jun-17	23	88	111
Jul-17	3	49	52
Aug-17	5	366	371
Sep-17	23	69	92
Oct-17	14	49	63
Nov-17	18	406	424
Dec-17	5	67	72

Source: ADC Planning & Research.

TABLE 10
ACCURACY OF THE 2017 TOTAL PRISON POPULATION FORECAST

Month-	Total Population				
Year	Projected	Actual	Numeric Difference	Percent Difference	
Jun-17	17,975	17,963	12	0.1%	
Jul-17	18,045	18,180	-135	-0.7%	
Aug-17	18,043	18,051	-8	0.0%	
Sep-17	18,075	18,179	-104	-0.6%	
Oct-17	18,085	18,348	-263	-1.4%	
Nov-17	18,113	17,973	140	0.8%	
Dec-17	18,137	18,078	59	0.3%	
Jan-18	18,156	18,201	-45	-0.2%	
Feb-18	18,173	17,998	175	1.0%	
Mar-18	18,189	18,089	100	0.6%	
Apr-18	18,213	18,227	-14	-0.1%	
May-18	18,246	17,945	301	1.7%	
Average Difference			18	0.1%	

Source: ADC Planning & Research/JFA Associates' prison projections.

TABLE 11
ACCURACY OF THE 2017 FEMALE PRISON POPULATION FORECAST

Month-	Female				
Year	Projected	Actual	Numeric Difference	Percent Difference	
Jun-17	1,451	1,422	29	2.0%	
Jul-17	1,459	1,454	5	0.3%	
Aug-17	1,442	1,431	11	0.8%	
Sep-17	1,442	1,450	-8	-0.6%	
Oct-17	1,444	1,480	-36	-2.4%	
Nov-17	1,447	1,398	49	3.5%	
Dec-17	1,451	1,413	38	2.7%	
Jan-18	1,455	1,441	14	1.0%	
Feb-18	1,453	1,370	83	6.1%	
Mar-18	1,456	1,404	52	3.7%	
Apr-18	1,458	1,440	18	1.3%	
May-18	1,465	1,405	60	4.3%	
Average Difference			26	1.9%	

Source: ADC Planning & Research/JFA Associates' prison projections.

TABLE 12
ACCURACY OF THE 2017 MALE PRISON POPULATION FORECAST

Month-	Male				
Year	Projected	Actual	Numeric Difference	Percent Difference	
Jun-17	16,524	16,541	-17	-0.1%	
Jul-17	16,586	16,726	-140	-0.8%	
Aug-17	16,601	16,620	-19	-0.1%	
Sep-17	16,633	16,729	-96	-0.6%	
Oct-17	16,641	16,868	-227	-1.3%	
Nov-17	16,666	16,575	91	0.5%	
Dec-17	16,686	16,665	21	0.1%	
Jan-18	16,701	16,760	-59	-0.4%	
Feb-18	16,720	16,628	92	0.6%	
Mar-18	16,733	16,685	48	0.3%	
Apr-18	16,755	16,787	-32	-0.2%	
May-18	16,781	16,540	241	1.5%	
Average Difference			-8	0.0%	

Source: ADC Planning & Research/JFA Associates' prison projections.

#### IV. HISTORICAL ARKANSAS 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. 2017 saw further drama as total admissions fell by 13.3 percent compared to 2016.

**Significant Finding:** Total male admissions to prison decreased by 14.4 percent and total female admissions decreased by 6.2 percent between 2016 and 2017.

**Significant Finding:** Based on counts in the 2017 ADC admissions extract file, male parole violator admissions decreased by 10.4 percent in 2017 and male new commit admissions fell by 7.4 percent as compared to 2016 counts.

Table 13 and Figure 8 present the admissions to prison in Arkansas from 2007 to 2017 for males and females. These data reflect official counts verified by ADC staff. Table 14 presents admissions by intake reason (new commitment versus parole violator). Data for Table 14 differ from totals in Table 13 because of discrepancies in the 2017 admission extract file as discussed in the introduction of this report. Table 15 and Figure 9 present the year-end inmate populations for inmates from 2007 to 2017. Table 16 lists releases for the past 10 years. Verified ADC counts are the source for Tables 13, 15 and 16.

- The number of total admissions to prison in 2017 decreased by 13.3 percent when compared to 2016.
- Based on extract file data, male parole violator admissions numbered 4,523 in 2016. This number is estimated to have decreased to 4,051 in 2017. This is the second consecutive year that total male parole violator admissions has decreased.
- Based on extract file data, when comparing 2016 and 2017, the number of female new commitment admissions to prison decreased at a slower pace than males. Female new commitment admissions accounted for an estimated 70 percent of total female admissions in 2017.
- Releases from the ADC in 2017 decreased by 17.9 percent compared to 2016 counts. The decrease in releases outpaced the decline in admissions, fueling an increase in the overall ADC population.

- Over the past three years, the female prison population has remained static with an average annual increase of a scant 0.4 percent.
- At year end 2017, the total Arkansas prison population was 18,078, which was 26.6 percent larger than the total prison population at year end 2007. As of the end of May 2018, the total prison population was 17,945, a decrease of 0.7 percent from the December count.

TABLE 13
HISTORICAL ADMISSIONS TO THE ADC BY GENDER 2007-2017

YEAR	MALES	FEMALES	TOTAL
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*	8,970	1,397	10,367
2017	7,676	1,310	8,986
Numeric Change 2007 – 2017	1,231	547	1,778
Percent Change 2007 – 2017	19.1%	71.7%	24.7%
Average Annual Percent Change 2007 – 2017	2.9%	7.7%	3.4%
Percent Change 2016 – 2017	-14.4%	-6.2%	-13.3%

Source: ADC Research & Planning; \*Note: 2016 data have been revised since the last issuance of this report.

TABLE 14
HISTORICAL ADMISSIONS TO THE ADC BY ADMISSION TYPE 2009-2017

Year	New Commits		Parole Violator	
rear	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	4,412	1,057	4,523	542
2017	4,087	1,027	4,051	430
Average % Change 2009-2017	-0.9%	7.5%	14.4%	30.9%
% Change 2016-2017	-7.4%	-2.8%	-10.4%	-20.7%

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).

TABLE 15 HISTORICAL END OF YEAR ADC POPULATION 2007 - 2017

YEAR	MALE	FEMALE	TOTAL
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
2017	16,665	1,413	18,078
Numeric Change 2007 – 2017	3,448	345	3,793
Percent Change 2007 – 2017	26.1%	32.3%	26.6%
Average Annual Percent Change 2007 – 2017	2.5%	3.2%	2.6%
Percent Change 2016 – 2017	3.1%	2.7%	3.1%

Source: ADC Research & Planning; Note: population as of May 2018 was 17,945.

TABLE 16
HISTORICAL RELEASES FROM THE ADC 2007-2017

Year	Males	Females	Total
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*	8,873	1,425	10,298
2017	7,214	1,240	8,454
Numeric Change 2007 – 2017	1,505	519	2,024
Percent Change 2007 – 2017	26.4%	72.0%	31.5%
Average Annual Percent Change 2007 – 2017	3.5%	6.8%	3.9%
Percent Change 2016 – 2017	-18.7%	-13.0%	-17.9%

\*Note: 2006-2009, 2011 counts were calculated by JFA Associates. Source for 2010, 2012-2016: ADC Research & Planning; \*Note: 2016 data have been revised since the last issuance of this report.

#### V. CURRENT ARKANSAS INMATE POPULATION CHARACTERISTICS

#### A. 2017 Admissions to Prison

**Significant Finding:** The average sentence applied to the entire admissions population (excluding lifers) in 2017 was 96.6 months (8.1 years), versus 93.8 months (7.8 years) in 2016.

Table 18 provides information about the population admitted to prison in 2017 based on the ADC admissions extract data file. The admissions population in Table 18 is divided into Identification (ID) groups based on a combination of factors that include offense 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 rest of admissions are divided into new commitment and parole violator categories and further categorized by gender and the seriousness level of their most serious admitting offense.

Data from the ADC admissions extract file is used to generate Figure 10 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 11 which details the average sentences for each group in 2017. These figures are contained in the Appendix of this report. Note: unless specifically stated, all ID groups discussed below are assumed to exclude lifers, habitual offenders, seriousness level unknown cases and 50 & 70 percent inmates

#### **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 2017, parole violator admissions remain at elevated levels but saw marked decreases from 2016 counts.
- In 2017, 3.8 percent of admissions had minimum serving time restrictions.
   This 3.8 percent is comprised of 53 admissions for 50% methamphetamine crimes, 18 admissions for life sentences, 51 admissions for habitual offenders and 242 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 (45.6 percent) or rape (33.5 percent).
- 18 new lifers were admitted to the ADC in 2017. On December 31, 2017, the number of lifers held in the ADC was 1,338, about 7.4 percent of the population. 50 and 70 percenters accounted for 16.8 percent (3,042) of the year-end population in 2017. Habitual offenders accounted for 2.9 percent (519) of the prison population at the end of 2017.

#### **Sentence Lengths**

- New commitment males had an average sentence of 80.4 months (6.7 years) in 2017.
- New commitment females averaged a sentence of 55.2 months (4.6 years) in 2017.
- In 2017 new commitment males in seriousness levels 6 and 7 saw a notable increase in their average sentence compared with 2016. Male new commitments in seriousness level 4 saw a decrease from an average of 77.9 months (6.5 years) in 2016 to an average of 67.6 months (5.6 years) in 2017.
- In 2017 new commitment females in seriousness levels 7-10 saw slightly lower average sentences as compared to 2016. The average sentence in 2017 was 113.3 months compared to 118.6 months in 2016.
- Sentences for male parole violators remained static between 2017 and 2016 data. Female parole violators saw a slight increase in average sentences from 74.3 months (6.2 years) in 2016 to 79.5 months (6.6 years) in 2017.
- Among those admitted under 50 & 70 percent sentencing restrictions:
  - 50 percenters convicted of manufacturing methamphetamine in 2017 had an average sentence of 134.2 months (11.2 years), up from the average of 119.7 months (10.0 years) in 2016.
  - Those convicted of aggravated robbery and rape in 2017 had average sentences of 193.4 months (16.1 years) and 313.5 months (26.1 years), respectively.
  - The average sentence for the 57 inmates admitted for first degree murder in 2017 was 423.0 months (35.3 years), by far the most severely sanctioned group excluding lifers.

In 2015 JFA Associates began 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). In 2017, this group numbered seven (7) admissions.

Table 17 shows the historical growth in the inmate population in reference to the impact that 50 & 70 percenters have had on the year end population. This group's growth in the ADC year-end population has been static between 2007 and 2017.

In 2017, 50 & 70 percenter admissions did not change significantly from levels seen in 2016. The number held in prison at year end 2017 also did not change appreciably from 2016 counts. The number of habitual offenders admitted in 2017 was slightly larger compared to 2016 (51 versus 39).

TABLE 17
HISTORICAL 50 & 70 PERCENT ACTS ADMISSIONS & YEAR END COUNT 2007-2017

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
2007	249	-	225	2,762	-
2008	274	ı	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
2017	242	53	261	2,877	165
Numeric Change 2007-2017	-7	1	70	115	1
Percent Change 2007-2017	-2.8%	1	31.1%	4.2%	-
Percent Change 2016-2017	-4.7%	-39.8%	-13.7%	1.3%	-21.8%

Source: ADC data extract admission and stock files.

**TABLE 18** ADC ADMISSIONS COUNTS AND AVERAGE SENTENCE BY ID GROUP IN 2017

ID Group	Number Admitted	Percent of Total	Average Sentence (mos.) 2017	Average Sentence (mos.) 2016
Lifers	18	0.2%	Life	Life
Habitual Offenders (Act 1805)	51	0.5%	228.2	211.8
50 & 70 Percent Acts Inmates	295	3.1%	260.7	219.3
1 <sup>st</sup> Degree Murder	57	0.6%	423.0	431.4
Rape	81	0.8%	313.5	291.7
Aggravated Robbery	103	1.1%	193.4	175.1
Kidnapping	1	0.0%	360.0	230.4
Drug – Methamphetamine 50%	53	0.6%	134.2	119.7
New Commitments – Males	3,822	39.8%	80.4	78.5
Seriousness levels 1-2	195	2.0%	39.4	36.4
Seriousness level 3	1,017	10.6%	40.1	37.8
Seriousness level 4	546	5.7%	67.6	77.9
Seriousness level 5	493	5.1%	70.4	74.6
Seriousness level 6	903	9.4%	97.1	91.2
Seriousness level 7	378	3.9%	126.7	118.1
Seriousness levels 8-10	290	3.0%	177.4	176.2
New Commitments – Females	1,002	10.4%	55.2	50.9
Seriousness levels 1-6	883	9.2%	47.4	42.1
Seriousness levels 7-10	119	1.2%	113.3	118.6
Contraction to the contract of	110	1.270	110.0	110.0
Parole Violators – Males	3,900	40.6%	109.9	108.7
Seriousness levels 1-6:	2,887	30.1%	94.3	93.5
Seriousness levels 7-10:	1,013	10.6%	154.2	152.9
Parole Violators – Females	421	4.4%	79.5	74.3
Seriousness levels 1-6:	340	3.5%	74.3	65.4
Seriousness levels 7-10:	81	0.8%	101.4	115.4
Unknown seriousness level	86	0.9%	n/a	n/a
TOTAL*	9,595	100.0%	96.6	93.8

<sup>\*</sup>Average sentence for all admissions excluding lifers; Source: ADC data extract admissions file.

### B. New Commitment Sentence Length Comparison 2012-2017

**Significant Finding:** Average new commitment sentences by offense seriousness level for 2017 saw no appreciable differences compared to 2016.

Table 19 and Figure 12 depict average sentences for new commitments by seriousness level for 2011 through 2016.

- Compared to 2012, seriousness level 6 average sentences in 2017 have declined 13 months (or 12.5 percent).
- Compared to 2012, seriousness level 5 average sentences in 2017 have declined 16 months (or 19.3 percent).
- Seriousness level 4 average sentences have remained static since 2012.
- Compared to 2012, seriousness level 3 average sentences in 2017 have declined 5 months (or 11.4 percent).

TABLE 19
AVERAGE SENTENCES OF NEW COMMITMENTS TO ADC BY SERIOUSNESS
LEVEL 2012 - 2017

			2017								
	Average Sentence (mos.)										
Seriousness Level	2012	2013	2014	2015	2016	2017					
Seriousness levels 1-2	35	41	39	43	34	39					
Seriousness level 3	44	46	42	37	36	39					
Seriousness level 4	66	67	60	60	70	63					
Seriousness level 5	83	85	75	68	70	67					
Seriousness level 6	104	105	90	87	86	91					
Seriousness level 7	150	144	128	117	116	120					
Seriousness level 8	158	160	141	149	164	160					
Seriousness level 9	340	302	308	301	294	297					
Seriousness level 10	421	458	419	492	422	475					

Source: ADC data extract admissions files.

### C. 2017 Release Population

**Significant Finding:** The average length of stay in prison for persons released from the ADC in 2017 was 19.4 months.

**Significant Finding:** The majority of offenders released in 2017 (89.9 percent) exited incarceration via parole or supervised release, followed by 8.9 percent released via discharge, and the remaining 1.3 percent released via various other mechanisms such as administrative closure.

Table 20 provides information about the population released from prisons in Arkansas in 2017. For each ID group, Table 20 presents the number of people released, the average time served in months, and the percent of releases by release type. The data were generated using the ADC release data extract file. As mentioned earlier in this report, slight discrepancies exist between the verified ADC release counts and the counts generated from the extract file in 2016 and 2017. The data presented here should be considered as good estimates of the actual population.

### **Average Time Served**

- The average time served for male new commitments showed a direct correlation with seriousness level in 2017. Average length of stay ranged from between 8.6 months for seriousness levels 1-2, to 77.1 months for seriousness levels 8-10 (combined).
- The average length of stay of female new commitments across all seriousness levels in 2017 was 10.5 months.
- Regardless of release type or id group, total releases in 2017 had an average length of stay of 19.4 months (1.62 years) which represents a slight increase over the 2016 ADC release LOS of 18.6 months (1.60 years).
- The average LOS of male parole violators released in 2017 was 10.3 months (0.8 years).
- In 2017, 22 habitual offenders sentenced under Act 1805 stipulations were released from prison after serving an average length of stay of 79.3 months (6.6 years).

### Releases by Release Mechanism 2017

- As with most previous years, the primary release mechanism for the ADC in 2017 was by Parole Board action.
- In 2017, male new commitments were released via discharge at a rate of 5.7 percent. Female new commitments were released via discharge at a rate of only 1.7 percent.

TABLE 20
AVERAGE LENGTH OF STAY AND RELEASE TYPE FOR ADC RELEASES IN 2017

ID Group	Number of	Percent	LOS		ent by Releas /lechanism	se
-	Releases		(mos.)	Parole	Discharge	Other
Lifers	32	0.4%	309.1	9.3%	6.4%	84.3%
Habitual Offenders (Act 1805)	22	0.3%	67.1	18.2%	68.2%	13.6%
70 Percent Acts Inmates	306	3.6%	79.3	79.1%	16.0%	4.9%
New Commitments – Males	3,125	37.2%	22.0	93.1%	5.7%	1.2%
Seriousness levels 1-2	213	2.5%	8.6	92.0%	7.0%	0.9%
Seriousness level 3	885	10.5%	12.1	92.2%	7.0%	0.8%
Seriousness level 4	408	4.9%	15.4	90.4%	9.1%	0.5%
Seriousness level 5	409	4.9%	16.4	96.6%	2.7%	0.7%
Seriousness level 6	728	8.7%	22.1	93.8%	4.8%	1.4%
Seriousness level 7	256	3.0%	38.0	95.7%	2.7%	1.6%
Seriousness level 8-10	226	2.7%	77.1	90.7%	4.9%	4.4%
New Commitments – Females	747	8.9%	10.5	98.3%	1.7%	0.0%
Seriousness levels 1-6	674	8.0%	8.2	98.1%	1.9%	0.0%
Seriousness levels 7-10	73	0.9%	31.9	100.0%	0.0%	0.0%
Parole Violators – Males	3,674	43.7%	14.7	87.5%	12.0%	0.5%
Seriousness levels 1-6	2,641	31.4%	12.6	85.4%	14.1%	0.5%
Seriousness levels 7-10	1,033	12.3%	20.2	92.8%	6.6%	0.6%
Parole Violators – Females	448	5.3%	10.3	90.4%	9.6%	0.0%
Seriousness levels 1-6	352	4.2%	9.0	88.4%	11.6%	0.0%
Seriousness levels 7-10	96	1.1%	15.2	97.9%	2.1%	0.0%
Unknown	44	0.5%	16.2	n/a	n/a	n/a
TOTAL*	8,398	100.0%	19.4	89.9%	8.9%	1.3%

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. Note: Total average LOS excludes lifers.

#### 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. Wizard 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 2017.

New law transfer rates will remain constant at the rates observed during 2017 throughout the forecast horizon. Table 21 displays the number and rates at which new law offenders were not released at the transfer eligibility dates for 2016 and 2017. As can be seen in Table 21, approximately 52.2 percent of all new commitment inmates released via discharge or parole are held beyond their transfer eligibility date and serve an average of 8.7 months beyond that date before being released. The statistics shown in Table 21 are included in the simulation model, broken out by gender, and are assumed to continue 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 2017.

Table 19 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 eliqibility.

### C. Parole revocation admissions to ADC will be at the level observed during 2017.

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. In 2017, as a result of efforts by the Parole Board and expanded use of the 90 day violator return program, parole violator admissions to prison fell by 11.5 percent to 4,481, near 2014 levels.

Parole Board leadership has informed JFA Associates that the largest declines are completed and it is expected that the Board will maintain the 2017 levels of return in the near future.

As a result, it is assumed the level of both parole board revocations and waivers to ADC observed in 2017 will continue throughout the forecast horizon. 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 0.6 percent per year throughout the forecast horizon. Projected overall new commitment growth was determined by average annual projected growth in the state demographic population.

# TABLE 21 ADC INMATES (RELEASED VIA DISCHARGE OR PAROLE) HELD BEYOND TRANSFER ELIGIBILITY DATE IN 2016 & 2017

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						
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						
	20	17								
New Commitments – Males	3,097	1,686	54.4%	9.5						
New Commitments – Females	754	324	43.0%	4.0						
TOTAL	3,851	2,010	52.2%	8.7						

<sup>\*</sup>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 2018-2028

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

### A. Projected Inmate Population

Tables 22 and 23 and Figure 4 display the historical and projected inmate populations for the period 2007 to 2028. The tables include 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:

### Admissions x Length of Stay = 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 2028, 19,947 offenders are projected to be housed in the Arkansas Department of Correction.
- At the end of 2017, the inmate prison population was 18,078. Under the baseline projection, the population is projected to increase to 18,286 inmates at the end of 2018 and to 19,126 in 2023. The projected growth represents average annual increases of 0.9 percent per year through the year 2028.
- Under the baseline projections, the male inmate population is projected to grow an average of 0.9 percent between 2018 and 2028 while the female inmate population is projected to grow by an average of 1.1 percent per year through 2028.

Historical 10-year average growth (2.6 percent) in the prison population exceeds the projected future annual 10-year growth (0.9 percent). The factors producing these results include, previous three-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 no increase in offenders held beyond their transfer eligibility date and a declining/flat number of new commitment sentenced to prison in the most recent years.

TABLE 22 HISTORICAL AND PROJECTED ADC POPULATION 2007-2028

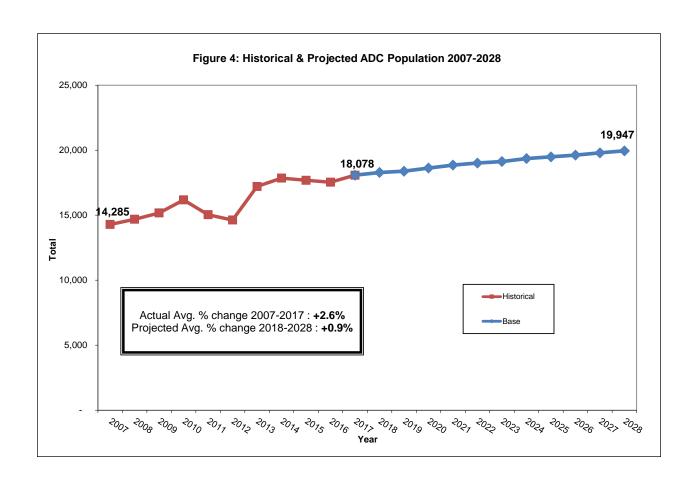
Year	Historical	Projected
2007	14,285	
2008	14,686	
2009	15,171	
2010	16,176	
2011	15,035	
2012	14,627	
2013	17,211	
2014	17,850	
2015	17,684	
2016	17,537	
2017	18,078	18,078
2018		18,286
2019		18,384
2020		18,627
2021		18,856
2022		19,011
2023		19,126
2024		19,359
2025		19,489
2026		19,619
2027		19,794
2028		19,947
Numeric Diff.	3,793	
2007-2017	0,700	
Percent Diff. 2007-2017	26.6%	
Average Percent		
Diff. 2007-2017	2.6%	
Numeric Diff.		1,661
2018-2028		1,001
Percent Diff. 2018-2028		9.1%
Average Percent		0.9%
Diff. 2018-2028		

Source: JFA Simulation Model.

TABLE 23
HISTORICAL AND PROJECTED ADC POPULATION BY GENDER 2007-2028

ONICAL AND				1
Year	Historical Males	Historical Females	Projected Males	Projected Females
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		
2017	16,665	1,413	16,665	1,413
2018			16,835	1,451
2019			16,917	1,467
2020			17,142	1,485
2021			17,355	1,501
2022			17,495	1,516
2023			17,594	1,532
2024			17,810	1,549
2025			17,925	1,564
2026			18,039	1,580
2027			18,196	1,598
2028			18,327	1,620
Numeric Diff. 2007-2017	3,448	345		
Percent Diff. 2007-2017	26.1%	32.3%		
Average Percent Diff. 2007-2017	2.5%	3.6%		
Numeric Diff. 2018-2028			1,492	169
Percent Diff. 2018-2028			8.9%	11.6%
Average Percent Diff. 2018-2028			0.9%	1.1%

Source: JFA Simulation Model.



## APPENDIX ADDITIONAL TABLES AND FIGURES

TABLE 24
PROJECTED TOTAL ADC POPULATION BY MONTH 2018-2028

Year	January	February	March	April	May	June	July	August	September	October	November	December
Actual 2018	18,201	17,998	18,089	18,227	17,945							
2018	18,062	18,057	18,077	18,102	18,111	18,125	18,190	18,249	18,245	18,261	18,284	18,286
2019	18,281	18,292	18,329	18,281	18,279	18,302	18,320	18,316	18,308	18,392	18,364	18,384
2020	18,332	18,377	18,394	18,445	18,458	18,438	18,457	18,424	18,516	18,574	18,622	18,627
2021	18,643	18,625	18,638	18,642	18,658	18,653	18,650	18,660	18,723	18,753	18,787	18,856
2022	18,824	18,841	18,877	18,859	18,888	18,860	18,899	18,920	18,939	18,943	18,991	19,011
2023	19,073	19,054	19,094	19,083	19,098	19,146	19,136	19,101	19,100	19,162	19,150	19,126
2024	19,121	19,173	19,179	19,211	19,250	19,260	19,252	19,260	19,287	19,324	19,382	19,359
2025	19,368	19,412	19,339	19,406	19,407	19,416	19,432	19,455	19,462	19,466	19,475	19,489
2026	19,501	19,496	19,497	19,508	19,515	19,533	19,566	19,583	19,593	19,570	19,614	19,619
2027	19,654	19,662	19,684	19,711	19,704	19,705	19,715	19,727	19,733	19,744	19,781	19,794
2028	19,805	19,840	19,881	19,862	19,873	19,894	19,917	19,907	19,914	19,927	19,931	19,947

TABLE 25
PROJECTED TOTAL FEMALE ADC POPULATION BY MONTH 2018-2028

Year	January	February	March	April	May	June	July	August	September	October	November	December
Actual 2018	1,441	1,370	1,404	1,440	1,405							
2018	1,431	1,433	1,434	1,430	1,435	1,432	1,444	1,448	1,452	1,458	1,459	1,451
2019	1,453	1,452	1,454	1,458	1,461	1,467	1,462	1,466	1,469	1,462	1,461	1,467
2020	1,466	1,463	1,465	1,470	1,471	1,477	1,482	1,480	1,481	1,483	1,481	1,485
2021	1,484	1,485	1,483	1,485	1,490	1,491	1,488	1,493	1,499	1,495	1,496	1,501
2022	1,504	1,506	1,509	1,504	1,505	1,507	1,508	1,505	1,504	1,513	1,503	1,516
2023	1,518	1,520	1,524	1,523	1,521	1,525	1,526	1,528	1,529	1,531	1,533	1,532
2024	1,531	1,535	1,538	1,539	1,540	1,542	1,541	1,541	1,543	1,544	1,548	1,549
2025	1,548	1,546	1,550	1,552	1,549	1,553	1,556	1,560	1,562	1,565	1,564	1,564
2026	1,569	1,571	1,572	1,568	1,571	1,576	1,573	1,579	1,581	1,576	1,582	1,580
2027	1,578	1,581	1,585	1,588	1,591	1,589	1,590	1,594	1,599	1,598	1,596	1,598
2028	1,602	1,596	1,594	1,600	1,605	1,609	1,611	1,615	1,607	1,612	1,618	1,620

TABLE 26
PROJECTED TOTAL MALE ADC POPULATION BY MONTH 2018-2028

Year	January	February	March	April	May	June	July	August	September	October	November	December
Actual 2018	16,760	16,628	16,685	16,787	16,540							
2018	16,631	16,624	16,643	16,672	16,676	16,693	16,746	16,801	16,793	16,803	16,825	16,835
2019	16,828	16,840	16,875	16,823	16,818	16,835	16,858	16,850	16,839	16,930	16,903	16,917
2020	16,866	16,914	16,929	16,975	16,987	16,961	16,975	16,944	17,035	17,091	17,141	17,142
2021	17,159	17,140	17,155	17,157	17,168	17,162	17,162	17,167	17,224	17,258	17,291	17,355
2022	17,320	17,335	17,368	17,355	17,383	17,353	17,391	17,415	17,435	17,430	17,488	17,495
2023	17,555	17,534	17,570	17,560	17,577	17,621	17,610	17,573	17,571	17,631	17,617	17,594
2024	17,590	17,638	17,641	17,672	17,710	17,718	17,711	17,719	17,744	17,780	17,834	17,810
2025	17,820	17,866	17,789	17,854	17,858	17,863	17,876	17,895	17,900	17,901	17,911	17,925
2026	17,932	17,925	17,925	17,940	17,944	17,957	17,993	18,004	18,012	17,994	18,032	18,039
2027	18,076	18,081	18,099	18,123	18,113	18,116	18,125	18,133	18,134	18,146	18,185	18,196
2028	18,203	18,244	18,287	18,262	18,268	18,285	18,306	18,292	18,307	18,315	18,313	18,327

