



North Carolina Sentencing and Policy Advisory Commission

February 2016

Prison Population Projections: Fiscal Year 2016 to Fiscal Year 2025

Introduction

North Carolina General Statute §164-40 sets forth the North Carolina Sentencing and Policy Advisory Commission's original mandate to develop a computerized simulation model to be used to prepare prison population projections. The projections are prepared on an annual basis in conjunction with the North Carolina Department of Public Safety's (DPS) Division of Adult Correction and Juvenile Justice (DACJJ) and are used to help determine long-term resource needs.

The prison population projections contained herein were completed in two parts. The Sentencing Commission prepared prison population projections for all offenders sentenced on or after July 1, 2015 (new population). The Rehabilitative Programs and Services Section of the DACJJ prepared projections for all offenders in prison as of June 30, 2015 (resident prison population). The final combined projections take into account the decline of the resident prison population (Structured Sentencing Act releases, Fair Sentencing Act releases, and pre-Fair Sentencing Act releases) and the buildup of the new inmate population (new prison admissions that occur through the imposition of active sentences or as the result of violations of probation or post-release supervision).¹ The ten-year prison population projections include all inmates in the state prison system.

Prison Population Projections and Capacity

The prison population projections were developed using SAS® Simulation Studio.² The simulation model utilizes empirical information about how offenders are processed through the criminal justice system to produce the projections. The composition of the current and projected prison populations is primarily determined by the empirical distribution of offenders convicted and sentenced under the Structured Sentencing Act. Data on convictions and sentences imposed in FY 2015 (July 1, 2014 through June 30, 2015) provide the foundation for the prison population projections. By using the most recent empirical data available, the projections account for changes in criminal justice trends (arrests, court filings, dispositions, and convictions) that occur from year to year.

Following the 2011 Session of the North Carolina General Assembly, North Carolina implemented substantial changes to the state's sentencing practices and correctional policies in response to the passage of the Justice Reinvestment Act (JRA) of 2011.³ The JRA redefined community and intermediate

¹ The Structured Sentencing Act applies to offenses committed on or after October 1, 1994. There is no parole for offenders sentenced under the Structured Sentencing Act, with the exception of the possibility of life with parole for offenders convicted of first degree murder who were under age 18 at the time of offense. Otherwise, only those offenders sentenced under the Fair Sentencing Act or pre-Fair Sentencing Act may be eligible for parole.

² To produce the prison population projections, SAS® Simulation Studio (herein also referred to as the simulation model) simulates releases for the resident prison population while simultaneously processing new prison admissions that occur over the projection period.

³ Further information on the JRA can be found on the following websites: <http://jr.nc.gov/index.html>, <http://www.nccourts.org/Courts/CRS/Councils/spac/Publication/JRIReports.asp>, and <http://www.sog.unc.edu/node/2044>.

punishments, created the Treatment for Effective Community Supervision (TECS) program, expanded the delegation of authority to probation officers, limited the time an offender may serve for technical violations of probation or post-release supervision (PRS) to 90 days, and required the use of a validated risk and needs assessment as a strategy in managing offenders. The Act created a new status offense of habitual breaking and entering, changed habitual felon punishments, authorized early release from prison under certain conditions through Advanced Supervised Release (ASR), and expanded PRS to include all felons. It also required misdemeanants with a sentence imposed of more than 90 days and up to 180 days to be housed in county jails through the Statewide Misdemeanant Confinement Program (SMCP). Technical and clarifying changes to the JRA were made during subsequent legislative sessions. During the 2014 Session, the SMCP was expanded to include misdemeanants with sentences greater than 180 days, as well as those sentenced for impaired driving. Also during the 2014 Session, the General Assembly authorized the DPS to establish Confinement in Response to Violation (CRV) Centers for offenders with technical violations of probation. The DPS opened two pilot CRV Centers in December 2014.⁴ These changes to the criminal justice system have impacted prison admissions, prison releases, and time to be served – all critical factors in determining the prison population.

The projections provide estimates of the prison population over the next ten years based on empirical data from FY 2015, the third full fiscal year of data since the provisions of the JRA went into effect. The most significant changes of the JRA affected supervision of offenders in the community – changing supervision strategies for offenders on probation supervision, mandating nine (9) months of PRS for Class F through Class I felons, and lengthening the period of PRS for Class B1 through Class E felons to twelve (12) months. While the JRA provisions relating to probation supervision apply to probation *violations* occurring on or after December 1, 2011, the provisions for PRS apply for *offenses* committed on or after December 1, 2011. As a result, the changes to probation will be reflected in the data sooner than the changes to PRS. While the probation changes and some of the PRS changes are already reflected in the data, it will take some time before the data are representative of the changes to PRS. The annual adjustment to the ten-year projections, using updated empirical information, will reflect the shift in JRA cases and criminal justice practices, ultimately enhancing the accuracy of the projections.

Table 1 and Figure 1 present the projected prison population and capacity for FY 2016 through FY 2025. Prison capacity projections were provided by the Adult and Juvenile Facilities Administration of the DPS. Capacity estimates are based on projects funded or authorized. This year's projection also takes into account a recent DPS policy change related to CRV Centers. During the initial pilot, CRV Center beds were classified as prison beds. Following the pilot, DPS reclassified CRV Center beds as treatment beds effective January 1, 2016. As a result, offenders in CRV Centers are excluded from the prison population projections and CRV Center beds are excluded from the capacity estimates.

As shown in the Current Projection column in Table 1, the prison population is projected to increase from 37,095 in June 2016 to 39,224 in June 2025 – an increase of almost 6%. Expanded Operating Capacity (EOC) is projected to be 38,373 and Standard Operating Capacity (SOC) is projected to be 32,820 for each year of the ten-year projection. A comparison of the projections with EOC indicates that the projected prison population will be below prison capacity for all but the last three years of the ten-year projection period.

⁴ Further information about CRV Centers can be found at <https://www.ncdps.gov/Index2.cfm?a=000003,002223,003129>.

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

**Table 1
Prison Population Projections and Capacity
February 2016**

**Prepared in Conjunction with the
North Carolina Department of Public Safety’s Division of Adult Correction and Juvenile Justice**

Fiscal Year End	Prison Population as of June 30 ⁵		Expanded Operating Capacity ^{6,7}	Difference between Current Projection and Capacity ⁸
	Previous Projection	Current Projection		
2016	37,360	37,095	38,373	1,278
2017	37,522	37,304	38,373	1,069
2018	37,348	37,601	38,373	772
2019	37,462	37,367	38,373	1,006
2020	37,610	37,385	38,373	988
2021	37,829	37,642	38,373	731
2022	38,139	37,927	38,373	446
2023	38,581	38,395	38,373	-22
2024	38,983	38,868	38,373	-495
2025	N/A	39,224	38,373	-851

⁵ See <http://www.nccourts.org/Courts/CRS/Councils/spac/Publication/Projections/Adult.asp> for previous prison population projections. The current projection excludes offenders in Confinement in Response to Violation (CRV) Centers.

⁶ Prison capacity estimates were updated by the Adult and Juvenile Facilities Administration of the NC Department of Public Safety (DPS). Expanded Operating Capacity (EOC) is the number of inmates housed in dormitories that operate at varying percentages (not to exceed 130%) beyond their Standard Operating Capacity, plus the number of single cells with one inmate per cell, plus the number of single cells that house two inmates per cell. Standard Operating Capacity (SOC) is the number of single cells with one inmate per cell plus the number of inmates who can be housed in dormitories by dividing the gross square feet of each dormitory by 50 square feet and rounding to the closest double bunk configuration. SOC is projected to be 32,820 for each year of the ten-year projection.

⁷ Capacity estimates are based on projects funded or authorized. Effective January 1, 2016, CRV Center beds were reclassified as treatment beds by the DPS and are excluded from EOC and SOC estimates (Burke CRV Center: 200 SOC, 248 EOC; Robeson CRV Center: 152 SOC, 192 EOC; Eastern Correctional Institution: 96 SOC, 96 EOC).

⁸ Positive numbers indicate that the current projected population is lower than capacity, while negative numbers indicate that the current projected population is higher than capacity.

Overall, the current projection indicates a decrease in the prison population compared to last year's projection. While fluctuations in the projections are expected as changes in criminal justice practices continue with the implementation of the JRA, the primary explanation for the decrease is the exclusion of offenders in CRV Centers from the prison population projections, as described above.

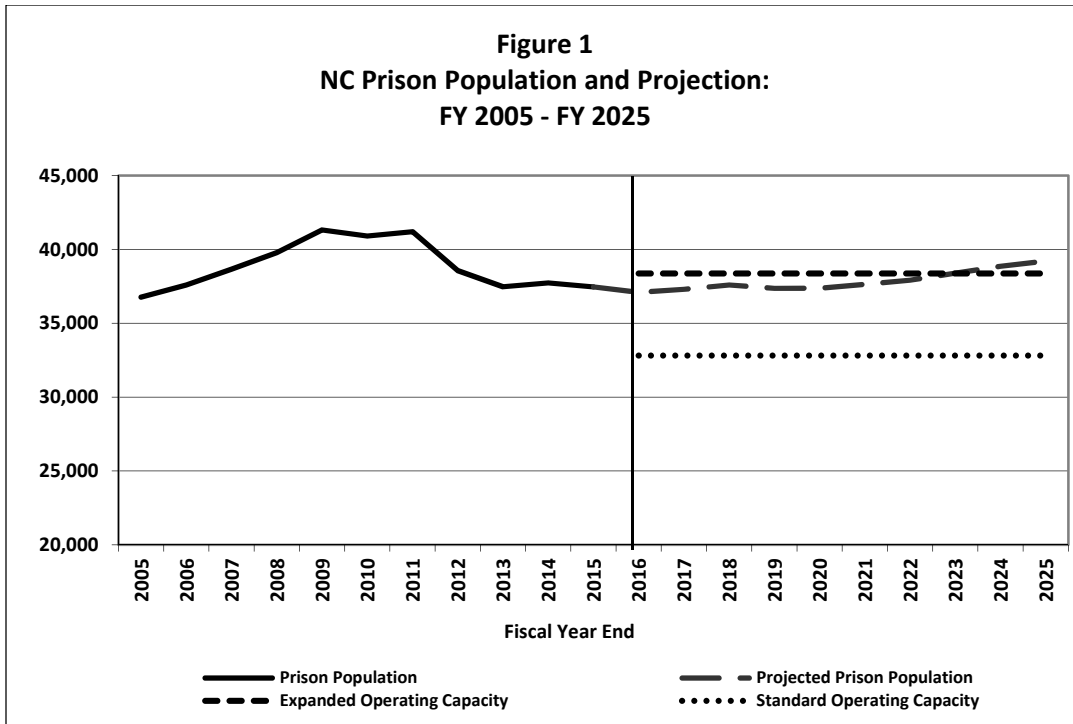
Figure 1 and Figure 2 provide a historical examination of the prison population, while Figure 1 also graphically presents the ten-year prison population projection within the context of prison capacity. As can be seen in both figures, but particularly in Figure 2, the prison population leveled off and then began to decline after years of consistent growth. From FY 2004 through FY 2009, the prison population increased nearly 17%, with an average yearly increase of about 3%. The prison population leveled off from FY 2009 through FY 2011 as a result of declines in criminal justice trend indicators (such as arrests and convictions) and in response to legislative changes in 2009 to the minimum sentence lengths and prior record point distributions in the felony punishment chart. The declines in the first half of FY 2012 (from July to December 2011) can be attributed to changes to earned time credits for prisoners that went into effect in June 2011, while the declines in the second half of FY 2012 can be attributed to changes in prison entries as a result of the JRA. While the intent of the JRA is to reduce the prison population by changing offender behavior, this initial decline resulted from two immediate changes: shifting most misdemeanants from prison to local jails through the establishment of the SMCP, and the legal change that places limits on revocations of probation and establishes 90-day CRV for technical violations of probation.

The prison population has remained around FY 2006 levels since January 2013. The prison population was trending upward for much of 2014 until legislative changes went into effect that resulted in further decreases to the prison population. The legislative changes shifted the remainder of offenders sentenced for misdemeanor offenses and offenders sentenced for impaired driving offenses to local jails through the SMCP (effective for sentences on or after October 1, 2014, and January 1, 2015, respectively).

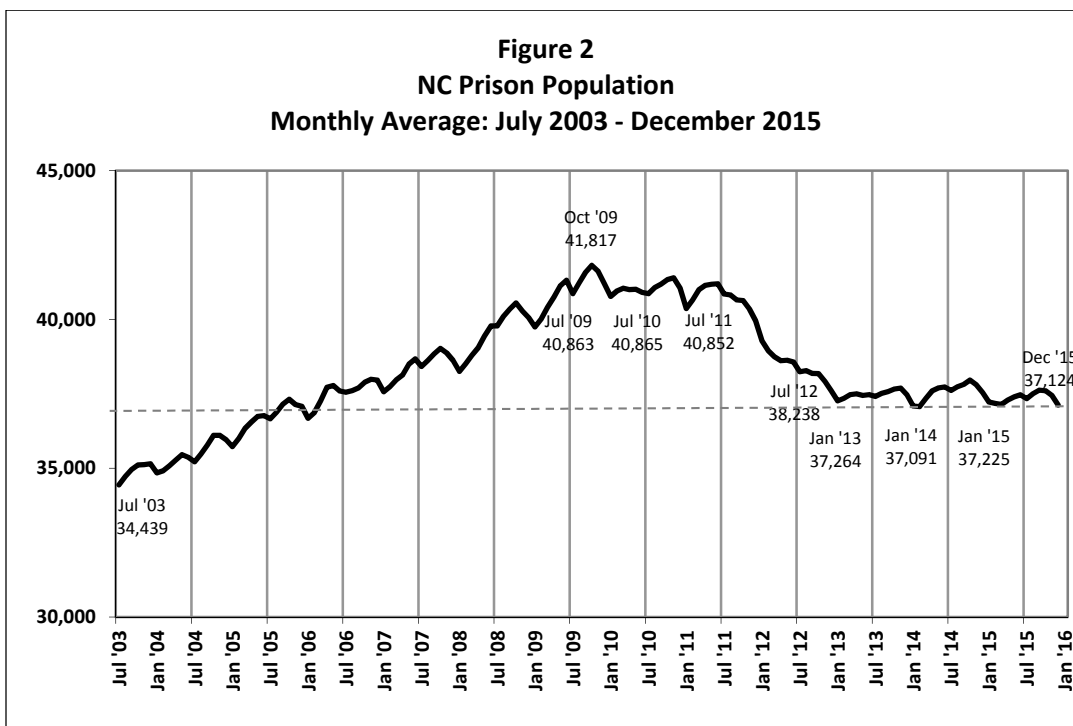
Figure 3 and Figure 4 further highlight criminal justice trends that factor into the lower prison population. As shown in Figure 3, felony convictions, prison entries, and prison exits have all decreased from their highest point in FY 2009, which corresponds with a decrease in the prison population. Prison entries experienced a sharp decrease as a result of the JRA changes described above, with a 17% decline from FY 2011 to FY 2012 and a 10% decline from FY 2012 to FY 2013. However, prison entries have increased over the past two years. This increase is primarily a result of entries to prison for violations of PRS, which is an expected result of the expansion of PRS to all felons. From FY 2014 to FY 2015, felony convictions, prison entries, and prison exits all increased (4%, 3%, and 3% respectively). The prison population decreased by nearly 1%, primarily resulting from the change in confinement location for offenders sentenced for misdemeanor offenses and offenders sentenced for impaired driving offenses, as described above.

Consistent with national trends, North Carolina's crime rate has also been declining (see Figure 4). In addition to declines in Index, Violent, and Property crime rates since CY 2008, there has been a decline in the overall number of arrests for Index and non-Index crimes.⁹

⁹ Index crimes include murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. Arson is also an Index offense, but is typically excluded from Index crime totals.

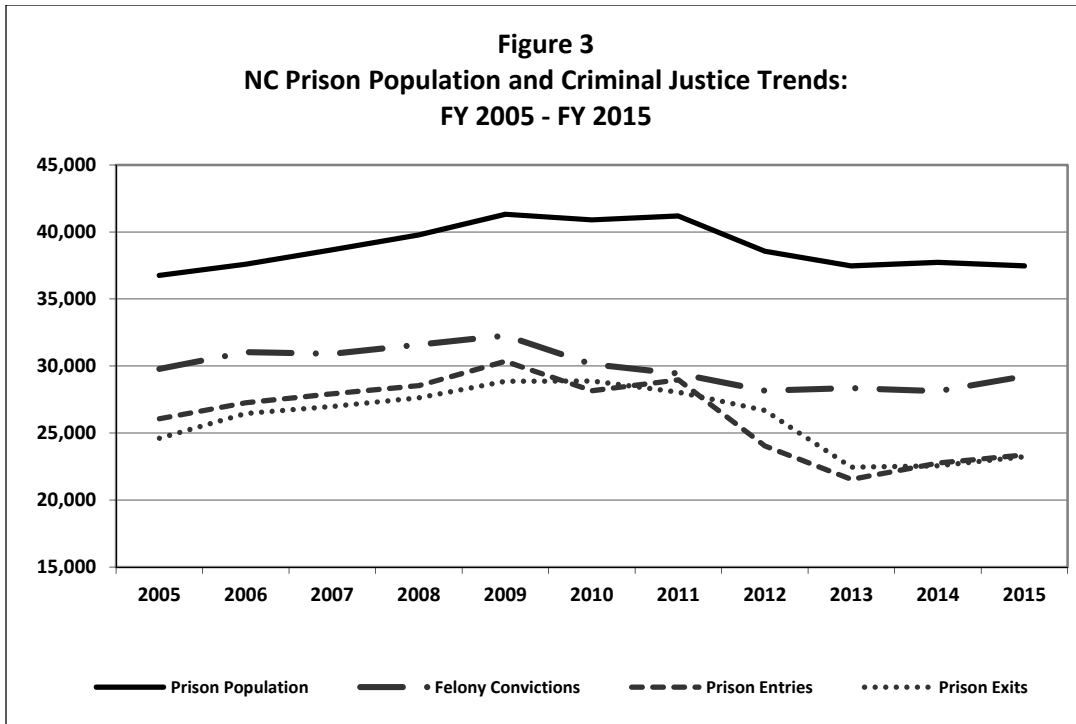


SOURCE: NC Sentencing and Policy Advisory Commission and NC Department of Public Safety

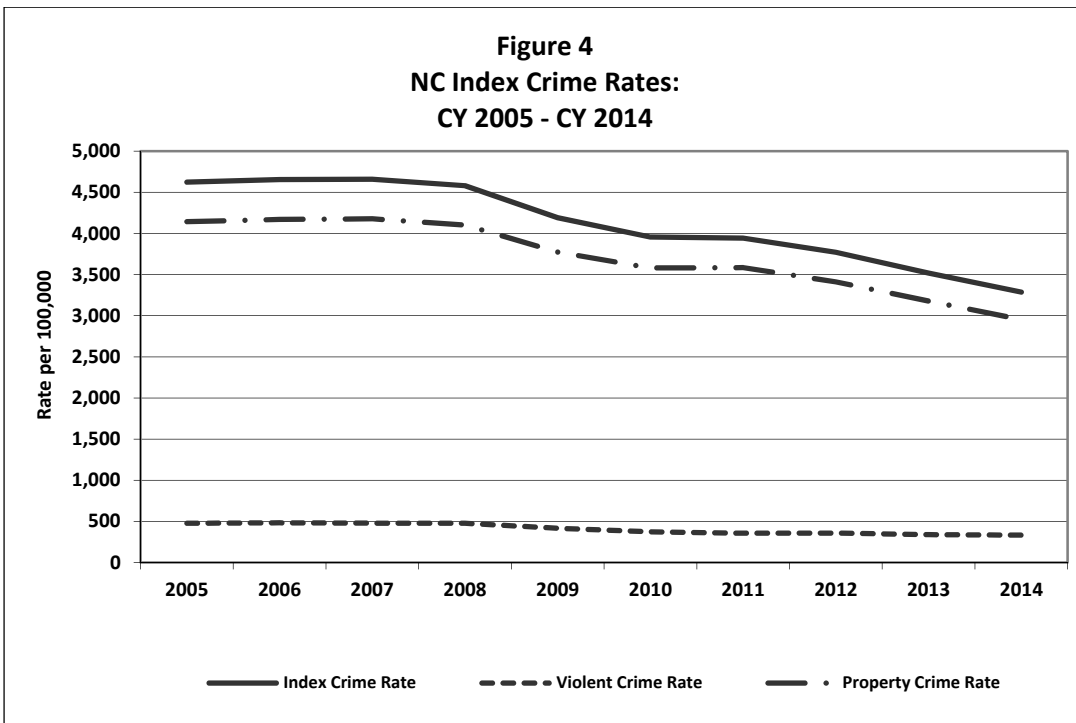


Note: Solid vertical lines separate each fiscal year. The dashed horizontal line allows for a comparison of the current prison population with historical prison populations.

SOURCE: NC Department of Public Safety, Division of Adult Correction and Juvenile Justice, Daily Unit Population Reports and Inmates on Backlog Reports

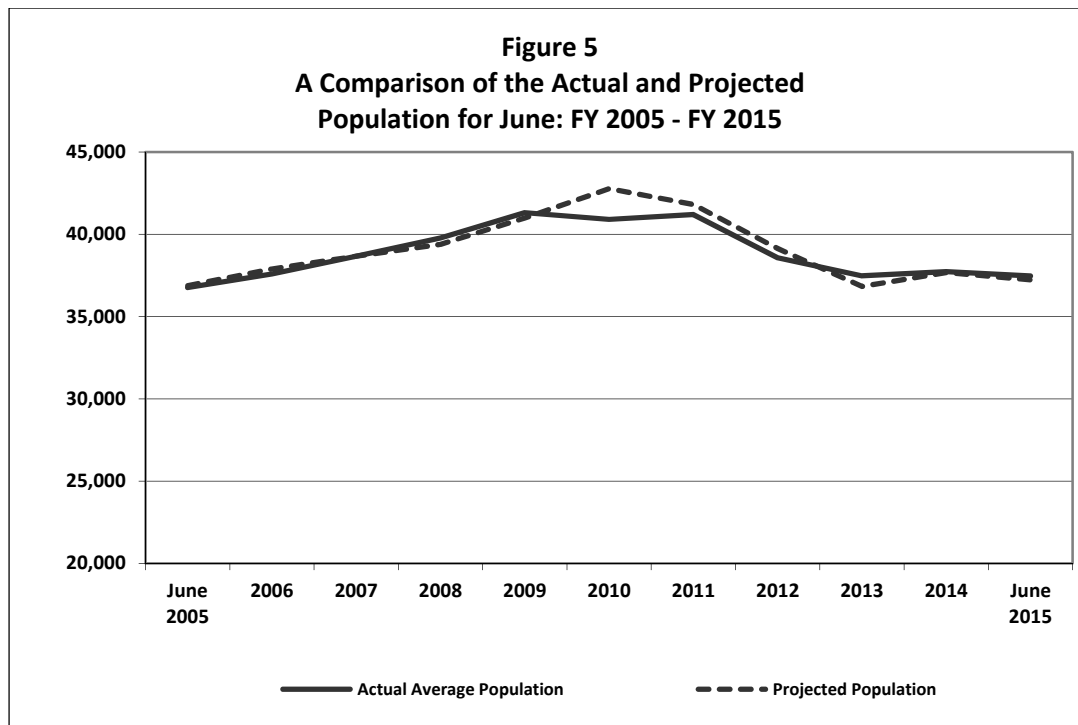


SOURCE: NC Sentencing and Policy Advisory Commission and NC Department of Public Safety



SOURCE: NC Department of Public Safety, State Bureau of Investigation, *Crime in North Carolina*

For the majority of the past decade, the accuracy of the prison population projections has been within 2%.¹⁰ Figure 5 provides a comparison of the actual average prison population with the projected prison population for June of each year. The projected prison population for June 2015 was 37,236. The actual average population for June 2015 was 37,468 – a difference of 232 beds, or less than 1%.



SOURCE: NC Sentencing and Policy Advisory Commission and NC Department of Public Safety

Assumptions

This section details the assumptions that were used to develop the prison population projections for FY 2016 through FY 2025. The assumptions were determined using data from the most recent fiscal year (FY 2015) and are based on the premise of no significant changes in demographics, crime rates, or criminal justice laws and policies in North Carolina.

As noted previously, the data from FY 2015 represent the third full fiscal year of data since implementation of the JRA began in late 2011, offering an early view of changes in criminal justice practices brought forth by the JRA. With the possibility of further legislative amendments to the JRA and with continued changes in court and correctional implementation, fluctuations in the empirical parameters (particularly relating to violations of probation or PRS) are not only possible but expected during the early years of implementation.

- Growth Rates:** As adopted by the Sentencing Commission’s *Forecasting Advisory Group*, the projections assume 1% growth in felony convictions for FY 2016 and FY 2017, no growth for FY 2018, 2% growth for FY 2019, and 1% growth for the remaining years of the projection. The projected

¹⁰ While the accuracy of the 2010 projection was within the acceptable accuracy range for projections (under 5%), it was less accurate than the projections have been over the past decade. Factors contributing to the lesser accuracy of the 2010 projection include unexpected and substantial decreases in court filings, dispositions, and convictions.

growth rates for felony convictions were adopted after considering continued decreases in juvenile justice system indicators (delinquent complaints) and in some criminal justice system indicators (index crime rates), an increase in felony convictions after several years of decreases, and upcoming improvements to fingerprint matching technology. The continued slowing of the growth rate for the state's population (particularly for males ages 16 – 24, the group most likely to be arrested) was also a factor in determining the growth rates.¹¹

- *Punishment Chart*: The projections assume all new felony convictions will be sentenced under the punishment chart effective for offenses committed on or after December 1, 2013. This punishment chart incorporates changes to the minimum sentence lengths and prior record point distributions that were passed during the 2009 Session and changes to maximum sentence lengths that were passed during the 2011 Session and the 2013 Session of the General Assembly.
- *Court Practices*: The projections assume no change in judicial or prosecutorial behavior relating to convictions and sentencing, including practices relating to the imposition of Advanced Supervised Release (ASR) and relating to the conviction and sentencing of habitual offenders.
- *Prison Admissions*: The distribution of prison admissions is expected to match the distribution from FY 2015. In FY 2015, 63% of all felony admissions to prison resulted from Active sentences for a new conviction, 22% resulted from probation revocations other than conviction for a new crime, and 15% resulted from PRS revocations other than conviction for a new crime. As expected, this distribution has experienced considerable changes during the early years of implementation of the JRA, primarily resulting from the use of different responses to probation violations and from the increasing population of and changing composition of offenders supervised on PRS with the expansion of PRS to all felons. The substantial shift in the distribution for FY 2015 can be attributed to the exclusion of offenders in CRV Centers from the prison population projections.¹²
- *Active Rates and Time Served for Active Sentences*: In FY 2015, 38% of felons received an Active sentence, with an average estimated time served of 35 months. Overall, it is assumed that the rates of Active sentences for new felony convictions and average estimated time served will match the rates for FY 2015.
- *Percent of Active Sentence Served*: The projections assume that, on average, all Structured Sentencing Act (SSA) felons will serve 108% of their minimum Active sentences (the average percentage served by SSA felons released from prison during FY 2015).¹³ The percentage of sentence served varies by offense class with prisoners in the more serious offense classes serving a lower percentage of their maximum sentence since they have the potential to accrue more earned time due to their longer sentence lengths (e.g., 102% for Class C, 113% for Class I).

¹¹ The *Forecasting Advisory Group* adopts growth rates for convictions on an annual basis. The *Group* consists of representatives from the Sentencing Commission, Administrative Office of the Courts, Conference of District Attorneys, Conference of Clerks of Superior Court, Office of Indigent Defense Services, Division of Adult Correction and Juvenile Justice, State Bureau of Investigation, Office of State Budget and Management, UNC School of Government, and Fiscal Research Division of the General Assembly. The group forecasts growth rates after reviewing demographic trends, crime trends, arrest trends, court filing and disposition trends, and prison entry and exit trends.

¹² As noted previously, effective January 1, 2016, CRV Center beds were reclassified as treatment beds by the DPS. As a result, offenders who receive 90-day confinement in a CRV Center will no longer be considered part of the prison population.

¹³ The maximum sentence length is set at 120% of the minimum sentence length rounded to the next highest month plus the period of PRS.

- *Probation:* It is assumed that probation revocation rates, lag-time from placement on probation to revocation, and time served will match FY 2015 figures. In FY 2015, 23% of exits from probation for felons resulted from revocation of probation.
- *Post-Release Supervision (PRS):*¹⁴ It is assumed that PRS revocation rates, lag-time from placement on PRS to revocation, and time served will match FY 2015 figures. In FY 2015, 24% of exits from PRS resulted from revocation.
- *Confinement in Response to Violation (CRV) Centers:* A 90-day period of confinement may be imposed for offenders who commit technical violations of the conditions of their supervision.¹⁵ It is assumed that the majority of these offenders will be housed in CRV Centers, although some may serve their period of confinement in prison due to medical or mental health issues, program non-compliance, or other reasons. On December 31, 2015, the CRV Center population was 301.
- *Misdemeanor Sentences:* Misdemeanants sentenced under the SSA and offenders sentenced for impaired driving are mandated to serve any active sentence imposed in jail rather than prison. The projections assume that nearly all of these offenders will serve their sentences in local jails, although a small number may serve their sentences in prison due to medical or other reasons as part of the SMCP. On December 31, 2015, the SMCP population was 979.
- *Sentences under the Fair Sentencing Act (FSA) and Prior:* Prison population projections continue to be affected by parole practices due to the number of FSA and pre-FSA offenders currently in prison. On December 31, 2015, there were 2,302 FSA and pre-FSA offenders in prison (including 1,786 with life sentences and 61 with death sentences), representing 6% of the state's inmates.
- *Legislative Changes to Criminal Penalties:* The projections do not include any potential impact from legislative changes to criminal penalties from the past legislative session. The potential impact for these changes cannot be determined because the legislative changes either created new offenses for which there are no historical data or amended penalties for existing offenses with elements that could not be modeled.

¹⁴ Prior to the JRA, a nine-month period of PRS was required for offenders convicted of Class B1-E felonies. Under the JRA, the period of PRS is extended from nine months to twelve months for Class B1-E felons and a nine-month period of PRS is required for Class F-I felons. A five-year period of PRS is required for sex offenders.

¹⁵ Technical violations of conditions of supervision include, for example, missing appointments, curfew violations, and positive drug screens.