

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

CURRENT POPULATION PROJECTIONS *FISCAL YEAR 2012 to FISCAL YEAR 2021*

**Prepared in Conjunction with the
North Carolina Department of Public Safety's Office of Research and Planning**

RELEASED: FEBRUARY 2012

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 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, 2011 (new population). The Department of Public Safety's Office of Research and Planning prepared projections for all offenders in prison as of June 30, 2011 (resident prison population). The final combined projections take into account the decline of the resident prison population (felony Structured Sentencing Act releases, Fair Sentencing Act releases, and pre-Fair Sentencing Act releases) and the buildup of the new inmate population (new sentences, probation revocations, post-release supervision revocations, and parole revocations). Added to these figures is the estimated number of Structured Sentencing Act misdemeanants sentenced to prison, "safekeepers," and DWI offenders held in the state prison system.

PRISON POPULATION PROJECTIONS AND CAPACITY

The prison population projections were developed using a computerized simulation model.¹ The simulation model relies on empirical information about how offenders are processed through the criminal justice system. 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.² Data on convictions and sentences imposed in FY 2011 (July 1, 2010 through June 30, 2011) provide the foundation for the prison population projections. By using the most recent empirical data available, the projection accounts for changes in criminal justice trends (arrests, court filings, dispositions, and convictions) that occur from year to year.

¹ To produce the prison population projections, the computerized simulation model simulates releases for the resident prison population while simultaneously processing new prison admissions that occur through the imposition of active sentences or the revocation of probation or post-release supervision.

² The Structured Sentencing Act applies to offenses committed on or after October 1, 1994.

With the passage of the Justice Reinvestment Act (JRA) of 2011, North Carolina is in the process of implementing substantial changes to the state's sentencing practices and correctional policies.³ The JRA redefines community and intermediate punishments, expands the delegation of authority to probation officers, and limits the time an offender may serve for violations of probation. It creates a new status offense of habitual breaking and entering, changes habitual felon punishments, authorizes early release from prison under certain conditions, and expands post-release supervision to all incarcerated felons. To keep offenders in the community, the new law expands the diversion program for certain drug offenses and refocuses the Criminal Justice Partnership Program. Finally, the JRA requires the Department of Public Safety to use a validated instrument to assess each probationer for risk of reoffending and criminogenic needs and to place the probationer in the appropriate supervision level. Overall, the JRA is expected to result in decreases to North Carolina's prison population.

The changes to the criminal justice system under JRA will impact prison admissions, prison releases, and time to be served – all critical factors in determining the prison population. However, empirical information on these changes to the criminal justice system under JRA will not be available until cases are processed through the court and correctional systems under the new law. As a result, two prison population projections were prepared.

The first, or Pre-JRA, projection provides an estimate of the prison population based on the policies and practices of the criminal justice system as it existed prior to the implementation of JRA. It is based on empirical information from FY 2011, and accounts for the impact of changes to the felony punishment chart from the 2009 legislative session and changes to earned time credits effective June 2011. Overall, the Pre-JRA Projection is based on the assumption that the criminal justice policies and practices represented by the empirical information from the past year will continue throughout the ten-year projection period.

The second, or JRA, projection provides an estimate of the prison population based on assumptions about how the criminal justice system will operate under JRA.⁴ The Pre-JRA Projection serves as the foundation for the JRA Projection. Overall, it is based on the assumption that criminal justice practices will change significantly under JRA. However, since there are no empirical data on criminal justice practices under JRA, assumptions regarding the operation of the criminal justice system under JRA were made by extrapolating from other sources where possible or by making informed estimates based upon the legal interpretation of the JRA and policies and procedures that have been developed for its implementation. In addition, the JRA Projection is subject to the simulation model limitations noted within this document.

Table 1 presents the projected prison population and capacity for FY 2012 through FY 2021. Prison capacity projections were provided by the Section of Prisons of the Division of

³ Further information on the Justice Reinvestment Act can be found on the following websites: <http://jr.nc.gov/index.html>, <http://www.sog.unc.edu/node/2044>, and <http://www.ncga.state.nc.us/gascripts/BillLookUp/BillLookUp.pl?Session=2011&BillID=hb+642>.

⁴ The JRA Projection was prepared using the same computerized simulation model used to produce the Pre-JRA Projection. It is important to note that the computerized simulation model was designed to simulate the processes of the criminal justice system as it existed prior to the JRA. As a result, the model's accuracy in incorporating some of the assumptions for the JRA Projection is, by definition, limited. The Sentencing Commission is seeking funding for a new simulation model that will simulate the new criminal justice processes.

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

**TABLE 1
PRISON POPULATION PROJECTIONS AND CAPACITY:
UPDATED FEBRUARY 2012**

Prepared in Conjunction with the
North Carolina Department of Public Safety’s Office of Research and Planning

Fiscal Year End	Previous Projection as of June 30	Current Projection		Expanded Operating Prison Capacity	Standard Operating Prison Capacity
		Pre-JRA Projection as of June 30	JRA Projection as of June 30		
2012	41,987	40,392	39,142	40,170	34,355
2013	42,013	40,340	38,999	40,926	34,937
2014	42,267	40,310	39,062	40,926	34,937
2015	42,562	40,402	39,091	40,926	34,937
2016	42,898	40,432	39,047	40,926	34,937
2017	43,220	40,548	39,135	40,926	34,937
2018	43,664	40,689	39,291	40,926	34,937
2019	44,208	40,848	39,490	40,926	34,937
2020	44,840	41,050	39,699	40,926	34,937
2021	N/A	41,342	39,976	40,926	34,937

Previous Projection: Prison population projection released in January 2011 for FY 2011 - FY 2020.

Pre-JRA (Justice Reinvestment Act) Projection: Projection for FY 2012 - FY 2021 based on the policies and practices of the criminal justice system as it existed prior to the implementation of JRA. This projection is based on empirical information from FY 2011 and accounts for the impact of changes to the felony punishment chart from the 2009 legislative session and changes to earned time credits effective June 2011. Overall, this projection assumes that the criminal justice policies and practices represented by the empirical information from the past year will continue throughout the ten-year projection period.

JRA (Justice Reinvestment Act) Projection: Projection for FY 2012 - FY 2021 based on assumptions about how the criminal justice system will operate under JRA. This projection has the following limitations: 1) No empirical data on the changes under JRA will be available until a few years after implementation as cases are processed through the court and correctional systems and result in a new empirical base; and 2) The current simulation model was designed to simulate the processes of the criminal justice system as it existed prior to the passage and implementation of JRA and, as a result, the model’s accuracy in incorporating the changes under JRA into the projection is limited.

Adult Correction of the Department of Public Safety.^{5,6} Two prison projections are provided for FY 2012 through FY 2021. As noted previously, the Pre-JRA Projection provides an estimate of the prison population based on the policies and practices of the criminal justice system as it existed prior to the implementation of JRA, while the JRA Projection provides an estimate of the prison population based on expectations of how the criminal justice system will operate under JRA. A description of the major assumptions used for each of the projections is provided in the next section.

As shown in Table 1 and Figure 1, the Pre-JRA Projection and the JRA Projection both indicate a decline in the prison population. The lower projected prison population under the Pre-JRA Projection can be attributed to changes in demographic trends (including the decrease in the rate of growth for North Carolina's population, particularly for males ages 16-24) decreases in crime trends, and the enactment of policy changes prior to JRA. As can be seen in Figure 1 and, more specifically, in Figure 2, after years of growth, the prison population has leveled off and has actually declined for the first time in a decade. From FY 2000 through FY 2009, the prison population increased each year over the previous fiscal year, with an average yearly increase of 3%. From FY 2009 to FY 2011, there was a net decline (0.3%) in the prison population. At the beginning (July) of each of the past three fiscal years, the prison population has remained stable. The prison population has been declining since July 2011, primarily as a result of policy changes to earned time credits that went into effect in June 2011. It is expected to decline further as a result of the policy changes under JRA.

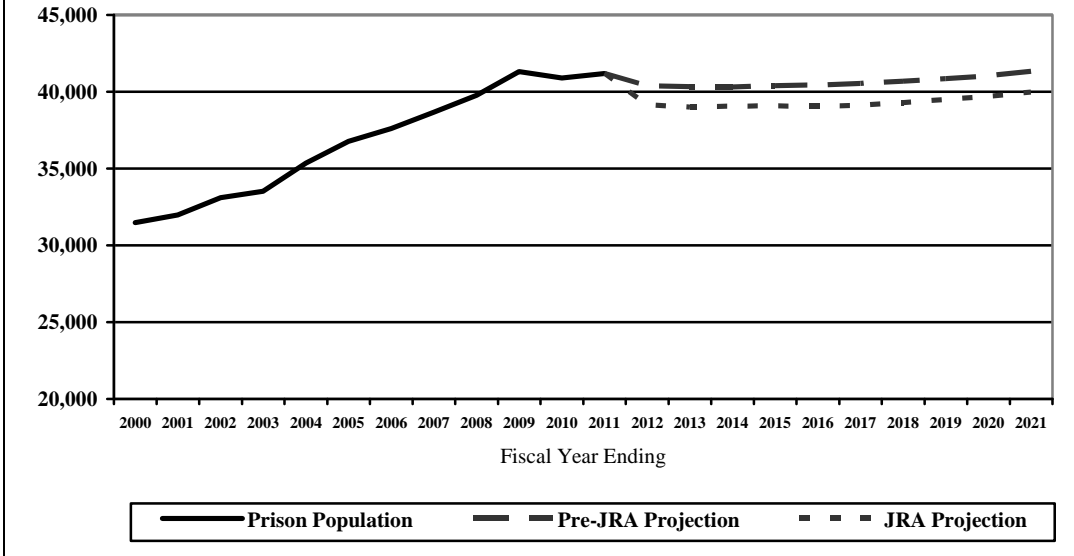
Figure 3 and Figure 4 highlight criminal justice trends that factor into the lower prison population. As shown in Figure 3, felony convictions have decreased the past two fiscal years, with an overall decrease of nearly 9% since FY 2009. Corresponding to the decrease in felony convictions, total prison entries (for both active sentences for new convictions and for technical revocations of probation) have decreased 4.5% since FY 2009. Prison exits have also decreased since FY 2009, and, as a result, are not a significant contributor to the recent decline in the prison population. Figure 4 highlights the recent declines in North Carolina's crime rate. There also has been a decline in the overall number of arrests for Index and non-Index crimes from CY 2008 to CY 2010.⁷

⁵ 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. Expanded Operating Capacity (EOC) is the number of inmates housed in dormitories that operate at varying percentages (not to exceed 130%) beyond their SOC, plus the number of single cells with one inmate per cell, plus the number of single cells that house two inmates per cell.

⁶ The EOC and SOC capacity estimates for 2012 include expansions at Bertie CI (504 medium custody), Lanesboro CI (504 medium custody), Alexander CI (252 minimum custody), and Swannanoa CCW (Phase 2 – Gilliat 96) and closures at Durham CC, Haywood CC, Cabarrus CC, and Charlotte CC (total of 798 EOC and 664 SOC). The increases in funded capacity for 2013 include expansions at Maury CI (504 medium custody) and Tabor CI (252 minimum custody).

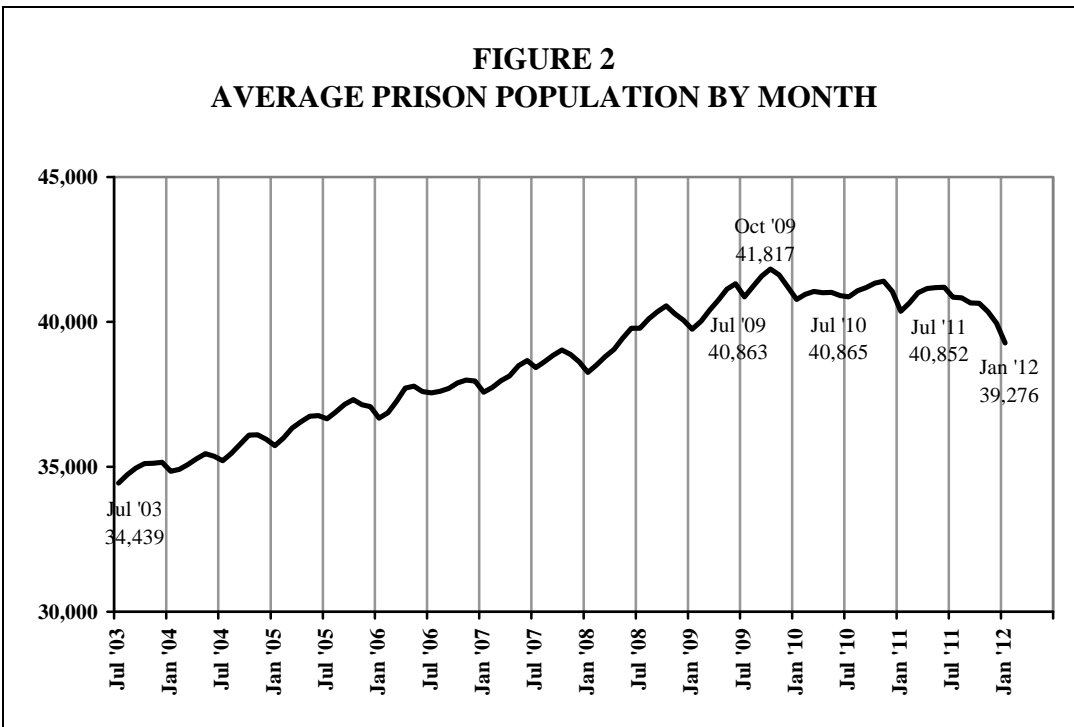
⁷ Index crimes include murder, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. Arson is also an Index offense, but is typically excluded from Index crime totals.

**FIGURE 1
NC PRISON POPULATION AND PROJECTION:
FY 2000 - FY 2021**



SOURCE: NC Sentencing and Policy Advisory Commission and Division of Adult Correction of the NC Department of Public Safety

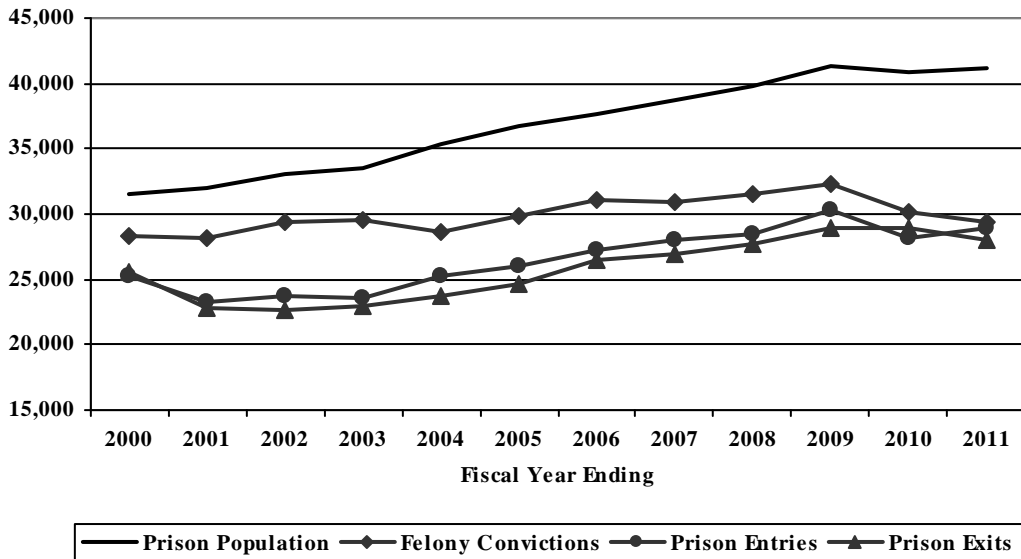
**FIGURE 2
AVERAGE PRISON POPULATION BY MONTH**



NOTE: Vertical lines separate each fiscal year.

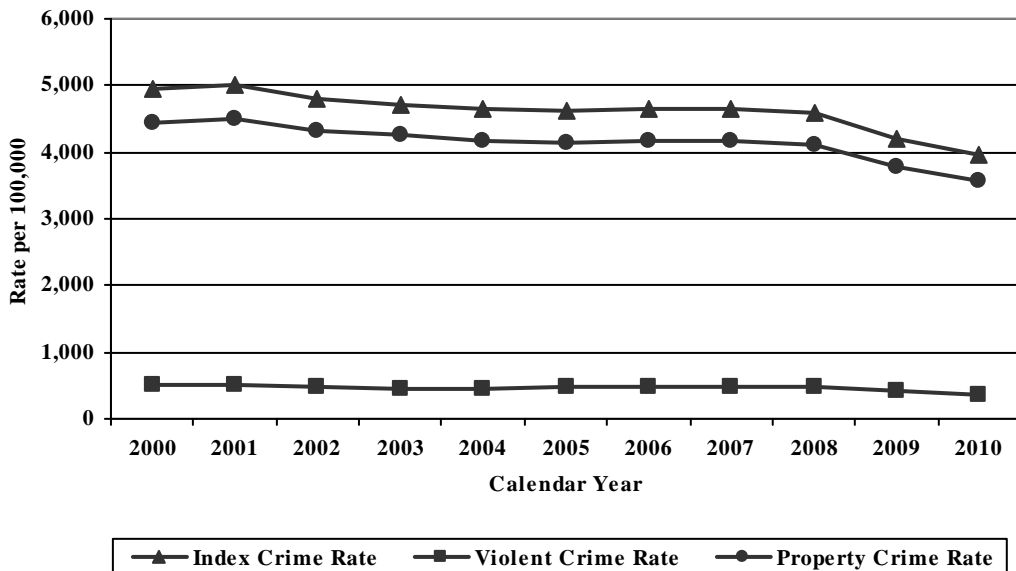
SOURCE: Division of Adult Correction of the NC Department of Public Safety, Daily Unit Population Reports and Inmates on Backlog Reports

FIGURE 3
NC PRISON POPULATION AND CRIMINAL JUSTICE
TRENDS: FY 2000 - FY 2011



SOURCE: NC Sentencing and Policy Advisory Commission,
 Division of Adult Correction of the NC Department of Public Safety, and
 Office of Research and Planning of the NC Department of Public Safety

FIGURE 4
NC CRIME RATE: CY 2000 - CY 2010



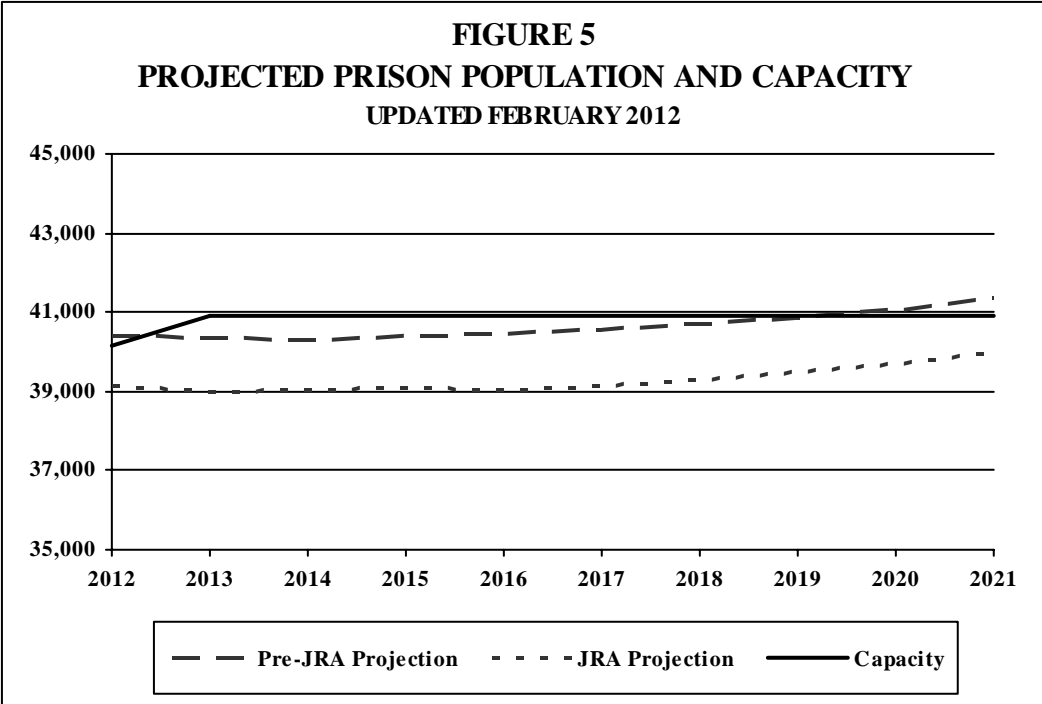
SOURCE: NC Department of Justice, State Bureau of Investigation, *Crime in North Carolina*

Under the Pre-JRA Projection the prison population is projected to increase from 40,392 in June 2012 to 41,342 in June 2021, while under the JRA Projection the prison population is projected to increase from 39,142 to 39,976 over this same time period. As shown in Table 1 and Figure 5, a comparison of the projections with Expanded Operating Capacity indicates that the projected prison population will be below prison capacity for most, if not all, of the ten-year projection period.

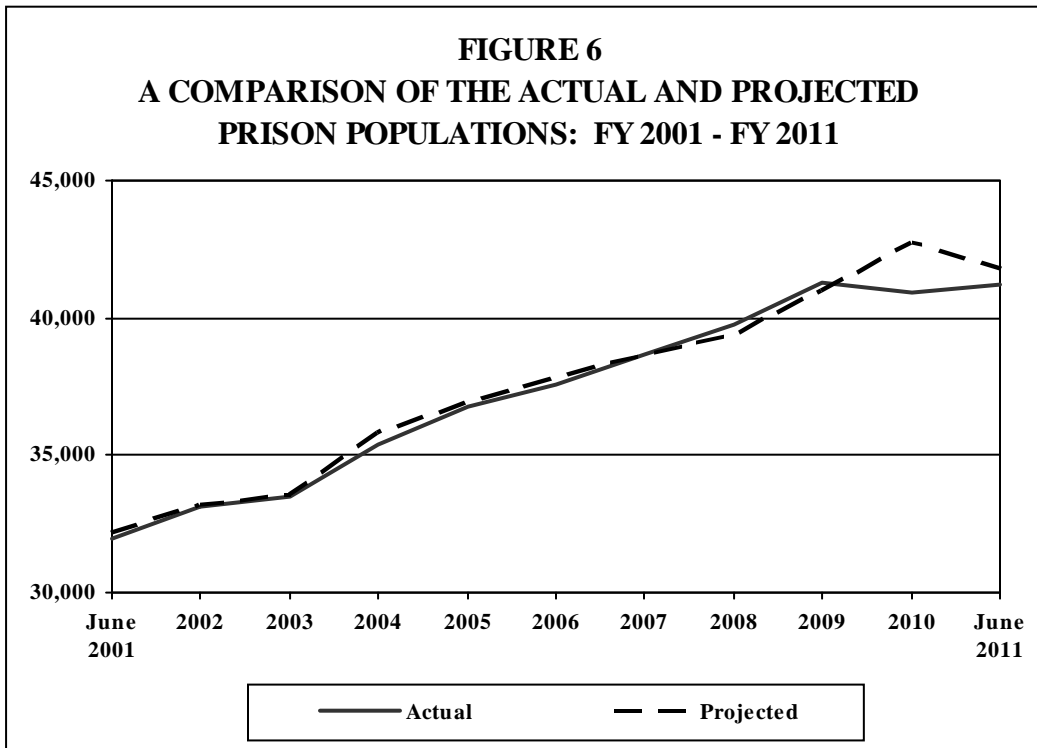
For the majority of the past decade, the accuracy of the prison population projections has been within two percent.⁸ A comparison of the actual average prison population with the projected prison population for June of each year is provided in Figure 6. The population projected by the Commission's simulation model for June 2011 was 41,811. The actual average population for June 2011 was 41,195 – a difference of about one and one-half percent.

Demographic, crime, and systemic indicators nationwide point to a multi-year decline in prison populations – a trend supported by the two projections presented here for North Carolina as well. The Pre-JRA Projection, while more solidly grounded in empirical data from previous years, is flawed by an assumption of “all other things being equal” – *i.e.*, no significant changes in law, policy, or criminal justice practices. The passage of JRA, with its sweeping changes in sentencing and corrections is, in fact, a guarantee that things will not remain “equal.” The JRA Projection model constructs one plausible scenario of the new law's long-term impact on the state's prison population. Its flaw is that it is based on extrapolations and assumptions not yet fully supported by empirical data, depicting a scenario that may not play out as assumed. For that reason, the current projections present both the Pre-JRA and JRA models to compensate for a different set of flaws in each approach.

⁸ 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.



NOTE: Prison capacity figures reflect Expanded Operating Capacity.
SOURCE: NC Sentencing and Policy Advisory Commission and
Division of Adult Correction of the NC Department of Public Safety



SOURCE: NC Sentencing and Policy Advisory Commission and
Division of Adult Correction of the NC Department of Public Safety

ASSUMPTIONS

Significant changes in criminal justice policies and practices are being implemented as a result of JRA. The use of currently available historical data is limited in its applicability for estimating such changes. As a result, assumptions must be made about the changes in policies and practices that will occur, until actual cases are processed through the court and correctional systems and a new empirical base is established.

The following section details the assumptions that were used to develop the prison population projections for FY 2012 through FY 2021.⁹ The assumptions for the Pre-JRA Projection were determined using data from the most recent fiscal year (FY 2011). The assumptions for the JRA Projection were developed by extrapolating from existing information where possible or by making informed estimates based upon the interpretation of JRA and policies and procedures that have been developed for implementation. Differences in assumptions between the Pre-JRA Projection and the JRA Projection are noted where applicable.¹⁰

- *Growth Rates:* The projections assume a negative growth rate (-1%) in felony convictions for FY 2012, 0% for FY 2013, and 1% for FY 2014 through FY 2021, as adopted by the Sentencing Commission’s *Forecasting Advisory Group*. The projected growth rates for felony convictions were adjusted downward based on a decrease in the rate of growth for North Carolina’s population (particularly for males ages 16 – 24, the group most likely to be arrested) and a continued downward trend across juvenile justice system (delinquent complaints) and criminal justice system indicators (arrests, filings, and convictions).¹¹

Felony Convictions

<u>Time Period</u>	<u>Previous Growth Rate</u>	<u>Current Growth Rate</u>
FY 2012	0%	-1%
FY 2013	1%	0%
FY 2014	1%	1%
FY 2015	2%	1%
FY 2016	2%	1%

⁹ A more detailed summary of the assumptions used for this year’s prison population projections is available upon request.

¹⁰ The computerized simulation model used to prepare the prison population projections was designed to simulate the processes of the criminal justice system as it existed prior to the JRA. As a result, the model’s accuracy in incorporating some of these assumptions into the projection is, by definition, limited. The Sentencing Commission is seeking funding for a new simulation model that will simulate the new criminal justice processes.

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, Office of Indigent Defense Services, Department of Public Safety’s Office of Research and Planning, Department of Public Safety’s Division of Juvenile Justice, State Bureau of Investigation, Governor’s Crime Commission, Office of State Budget and Management, 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.

- *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, 2011. This punishment chart incorporates changes to the minimum sentence lengths and prior record point distributions that were passed during the 2009 Session and the changes to maximum sentence lengths that were passed during the 2011 Session of the General Assembly.
- *Prison Admissions:* In FY 2011, 59% of all felony admissions to prison resulted from Active sentences for a new conviction and 41% from technical revocations of probation (*i.e.*, not revocations due to new arrests). Under the Pre-JRA Projection, it is assumed that this distribution of prison admissions will continue throughout the projection period. Under the JRA Projection, it is assumed that the distribution of prison admissions will fall into three broad categories: new conviction, revocation of probation or post-release supervision due to commission of a new offense or absconding, and confinement in response to violation of the conditions of probation or post-release supervision.
- *Active Rates and Time Served for Active Sentences:* In FY 2011, 40% of felons received an Active sentence, with an average estimated time served of 34 months. Overall, it is assumed for both projections that the rates of Active sentences for new felony convictions and average estimated time served will match the rates for FY 2011. Exceptions to this assumption for the JRA Projection are noted where applicable.
- *Percent of Active Sentence Served:* In FY 2011, SSA felons released from prison served 110% of their minimum Active sentences.¹² 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, 114% for Class I). As a result of policy changes to earned time credits that went into effect in June 2011, both the Pre-JRA Projection and the JRA Projection assume that there will be a decrease in the percent of sentence served.
- *Probation:* In FY 2011, 40% of exits from probation for felons resulted from revocation of probation. The median lag-time between the imposition of a probation sentence and revocation to prison for a technical violation was 16 months. Under the Pre-JRA Projection, it is assumed that the probation revocation rates and lag-time to revocation found in FY 2011 will remain constant throughout the projection period, and that probationers who are revoked will serve the suspended sentence that was imposed upon conviction. Under the JRA Projection, it is assumed that overall probation revocation rates (including confinement in response to violation)¹³ would decrease 10% and that lag-time to revocation would decrease

¹² The maximum sentence length is set at 120% of the minimum sentence length rounded to the next highest month plus the period of post-release supervision.

¹³ Due to computerized simulation model limitations, it is not possible to differentiate between “revocation” (for probationers who commit new crimes or abscond) and “confinement in response to violation” (CRV) (for probationers who violate the conditions of probation other than new crime or absconding) in terms of rates applied. It is also not possible to take into account incremental changes in revocation rates over time or to model multiple periods of CRV using the current simulation model. Data from the Sentencing Commission’s 2010 biennial recidivism study were used to develop assumptions relating to revocations of probation under the JRA.

to 7 months. Also, it is assumed that time served for revocation will vary according to the form of non-compliance.

- *Post-Release Supervision (PRS)*:¹⁴ In FY 2011, 21% of exits from post-release supervision (Class B1-E felons) resulted from revocation. The median lag-time between release from prison onto post-release supervision and revocation to prison for a technical violation was 6 months. Under the Pre-JRA Projection, it is assumed that the PRS revocation rate and lag-time to revocation will match that found in FY 2011, and that offenders revoked from PRS will serve the nine-month period remaining on the sentence. Under the JRA Projection, it is assumed that the overall PRS revocation rate¹⁵ will increase to 25% and that lag-time to revocation would decrease to 4 months. Also, it is assumed that time served for revocation will vary according to the form of non-compliance.
- *Advanced Supervised Release (ASR)*: For the JRA Projection, it is assumed that 10% of eligible convictions with an active sentence (based on offense class and prior record level as set in statute) would complete ASR program(s) and be released at the ASR date (*i.e.*, the lowest mitigated sentence if the sentence was in the presumptive range, or 80% of the minimum sentence imposed if the sentence was in the mitigated range).
- *Habitual Felons*: For the JRA Projection, it is assumed that habitual felons with an underlying Class H felony would be sentenced as Class D felons and those with an underlying Class I felony would be sentenced as Class E felons. It is assumed that the rates of Active sentences will match the rates for FY 2011, based on the dispositions available in the felony punishment chart as determined by the offense class of the principal offense and prior record points. Also, it is assumed that sentences will be imposed at the midpoint of the presumptive range as determined by offense class and prior record points.
- *Habitual Breaking and Entering (Class E)*: For the JRA Projection, it is assumed that 26% of eligible offenders would be sentenced as habitual breaking and entering felons.¹⁶ It is assumed that the rates of Active sentences will match the rates for FY 2011, based on the dispositions available in the felony punishment chart as determined by the offense class of the principal offense and prior record points. Also, it is assumed that sentences will be

¹⁴ Prior to 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. Data from the Sentencing Commission's 2010 biennial recidivism study were used to develop assumptions relating to revocations of post-release supervision under the JRA.

¹⁵ Due to computerized simulation model limitations, it is not possible to differentiate between "revocation" and "three-month confinement" for violations in terms of rates applied. It is also not possible to take into account incremental changes in revocation rates over time or to model multiple three-month periods of confinement using the current simulation model. The estimated increase in PRS revocations accounts for the higher revocation and recidivism rates for Class F-I felons and an estimated increase in revocations for Class B1-E felons due to the longer period of supervision.

¹⁶ Eligible offenders were defined as offenders with 2 or more prior record points who were convicted of an eligible breaking and entering offense. Using prior criminal history data obtained from the Department of Public Safety's Office of Research and Planning, it was estimated that 26% of eligible offenders would have one or more prior breaking and entering offense and would be sentenced as habitual breaking and entering felons.

imposed at the midpoint of the presumptive range as determined by offense class (Class E) and prior record points.

- *Misdemeanor Sentences under the Structured Sentencing Act:* Under JRA most misdemeanants sentenced under the Structured Sentencing Act will serve any active sentence imposed in jail rather than prison.¹⁷ Based on these changes, the Department of Public Safety's Office of Research and Planning prepared projections for the estimated misdemeanor prison population.
- *Sentences under the Fair Sentencing Act (FSA) and Prior:* Prison population projections continue to be affected by parole practices due to the number of Fair Sentencing Act (FSA) and pre-FSA offenders currently in prison. On December 31, 2011, there were 2,699 FSA and pre-FSA offenders in prison (including 1,921 with life sentences and 66 with death sentences), representing about 7% of the state's inmates. The projections assume that all FSA and pre-FSA prisoners will serve the average percentage of sentence imposed that was served by FSA and pre-FSA prisoners released in FY 2011 and that parole revocation rates will match FY 2011 rates.
- *Legislative Changes to Criminal Penalties:* The Pre-JRA Projection and the JRA Projection take into account the reclassification of intimidating or interfering with witnesses (G.S. 14-226) from a Class H felony to a Class G felony and the reclassification of assault or affray on emergency personnel from a Class I felony to a Class H felony that occurred during the past legislative session. Except as noted within the previous assumptions, the projections provided do not account for any other legislative changes to criminal penalties from the past legislative session since 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.

¹⁷ Effective January 1, 2012, a defendant who is convicted of a misdemeanor offense and sentenced under Structured Sentencing with a sentence imposed of more than 90 days and up to 180 days is required to serve the period of confinement in a local confinement facility through the Statewide Misdemeanant Confinement Program. Prior to this change, only misdemeanants with sentences imposed of 90 days or less were required to serve the period of confinement in a local confinement facility.