



North Carolina Sentencing and Policy Advisory Commission

December 2015

Youth Development Center Population Projections: Fiscal Year 2016 to Fiscal Year 2020

Introduction

North Carolina General Statutes §§ 164-40(b) and 164-42.1(b) direct the North Carolina Sentencing and Policy Advisory Commission to develop a computerized simulation model to be used to prepare Youth Development Center (YDC) population projections and to help assess North Carolina's long-term resource needs for juvenile dispositions. The projections are prepared in conjunction with the North Carolina Department of Public Safety's Division of Adult Correction and Juvenile Justice (DACJJ). Data for the projections are extracted from the North Carolina Juvenile Online Information Network (NC-JOIN), DACJJ's juvenile management information system.

The YDC population projections are completed in two parts.¹ The Sentencing Commission prepares YDC population projections for all juveniles adjudicated delinquent and disposed on or after July 1, 2015 (new population) and for all juveniles committed to a YDC as of June 30, 2015 (YDC stock population), the beginning of the current projection period. The final combined projections take into account the decline of the committed stock population and the buildup of the new YDC population (new YDC commitments that occur through the imposition of a Level 3 (YDC) disposition or as a result of revocations of probation or post-release supervision).

Changes in the juvenile justice system that affect the number of YDC admissions, the number of YDC releases, or the YDC length of stay – all critical factors in projecting the YDC population – directly impact the accuracy of the projections. With a system that is largely policy-driven, it is important to note that these changes can also be the result of shifts in policy and/or practice with regard to the use of dispositional resources.

Youth Development Center Population Projections and Capacity

The juvenile population projections were developed using a computer simulation model. The simulation model relies on empirical information about how juveniles are processed through the juvenile justice system. Table 1 shows the projected YDC population and capacity over the five-year projection period. YDC capacity projections were provided by DACJJ. The resource needs are projected to increase over the period with a projected need for 226 YDC beds by June 2016 and 251 YDC beds by June 2020.² A comparison of the projections with YDC capacity indicates that the projected YDC population will be within available YDC capacity for the first two years of the five-year projection period and slightly above available YDC capacity for the remaining three years of the five-year projection. The YDC stock population was 219 on June 30, 2015. The YDC population on December 1, 2015 was 234.³

¹ Throughout this document, any reference to the YDC population includes juveniles on-campus and off-campus (e.g., home visit, community commitment, hospitalization, escape).

² Separate housing units are required for male and female juveniles. Of the projected YDC beds needed for each year of the five year projections, 88% to 89% are for males.

³ Source: DACJJ's *Committed Youth Report*.

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

**Table 1
Youth Development Center Population Projections
December 2015**

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

Fiscal Year End	YDC Population as of June 30^a		YDC Capacity^b	Difference between Current Projection and Capacity^c
	Previous Projection	Current Projection		
2016	235	226	245	19
2017	227	243	246	3
2018	229	249	246	-3
2019	239	251	246	-5
2020	N/A	251	246	-5

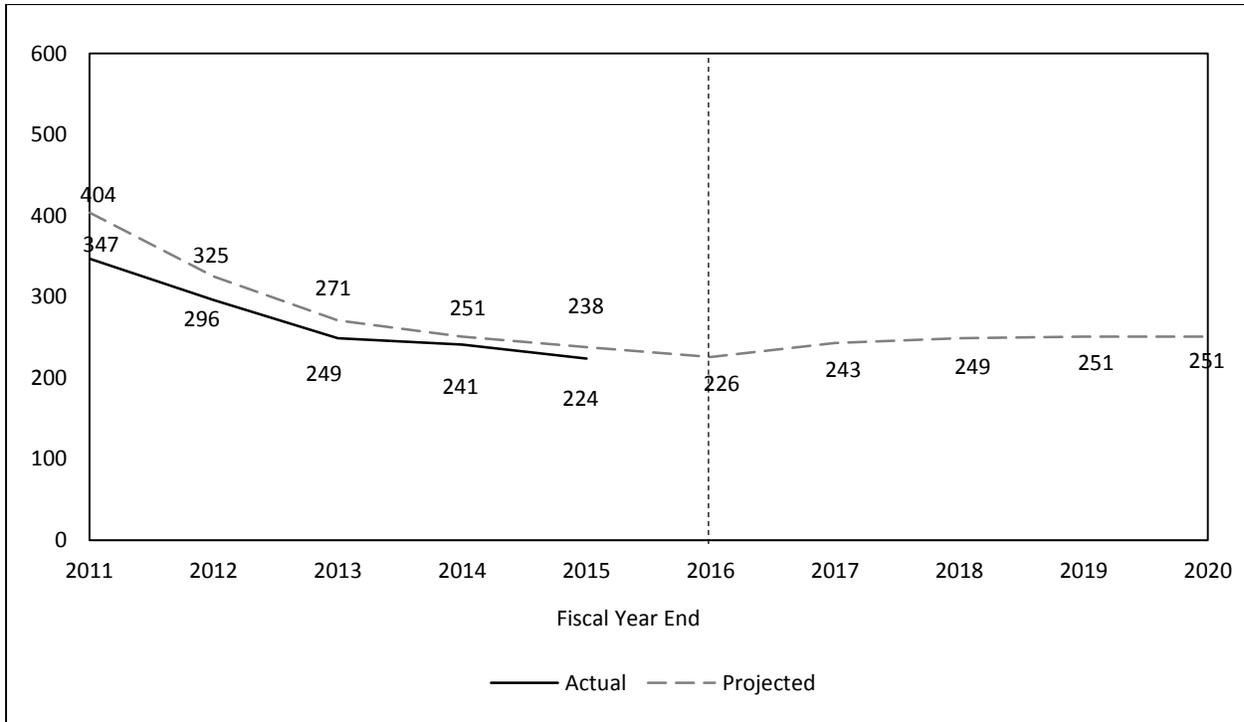
^a These projections include juveniles on-campus and off-campus (e.g., home visit, community commitment, hospitalization, escape).

^b YDC capacity is contingent on staffing patterns in order to meet required ratios. The DACJ maintains a need to operate a YDC vacancy rate of 10% (26 beds) in order to respond to emergency situations that could require an influx of youth or relocation of youth due to an emergency situation.

^c 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.

Figure 1 provides a comparison of the previous YDC population projections with the actual YDC population. The figure also includes the current five-year projections. The chart illustrates the historical accuracy of the first year of the juvenile resource projections produced for the previous five projections. The difference between the projected YDC population and the actual YDC population ranged between 10 and 57 beds (or between 4% and 14%).

**Figure 1
Actual and Projected Youth Development Center (YDC) Population**



SOURCE: NC Sentencing and Policy Advisory Commission and NC Department of Public Safety, Division of Adult Correction and Juvenile Justice

Assumptions

The projections are based on the following assumptions that were determined using empirical data from the most recent fiscal year (FY 2015):

- Growth Rates:** The projections assume a one percent growth in delinquent dispositions for each year of the five-year projection period. The growth rates are based on census projections for North Carolina’s youth population and several juvenile justice indicators. Population projections prepared by North Carolina’s State Demographics Unit show that the juvenile population (age 10 – 15) in the state is expected to increase at an average annual rate of 0.44% over the next five years.⁴ Slow growth in the youth population coupled with recent data showing declining trends in juvenile crime help to inform the growth rate estimates.⁵

⁴ Source: www.demog.state.nc.us (2015).

⁵ The rate of delinquent complaints has declined since the late 1990s. In FY 2011, the rate of delinquent complaints was 28 per 1,000 juveniles compared to a rate of 21 in FY 2015. (Source: DACJJ.) In addition, the State Bureau of Investigation reports that from CY 2010 to CY 2014 overall arrests for index crimes committed by juveniles under the age of 16 dropped 23%. (Source: *Crime in North Carolina - 2014*, State Bureau of Investigation, <http://crimereporting.ncdoj.gov/Reports.aspx>.) In general,

- *Level 3 Dispositions:* In FY 2015, 2% of juveniles adjudicated delinquent received a Level 3 disposition (or YDC commitment). Over the projection period, the rate of Level 3 dispositions for juveniles adjudicated delinquent is assumed to match the rate from FY 2015.
- *YDC Length of Stay:* The YDC average length of stay was 13.8 months for all adjudicated juveniles, including juveniles committed to a YDC for a new adjudication or for a technical revocation of their probation or post-release supervision. The YDC average length of stay for the projection period is assumed to match the average length of stay by offense classification for juveniles released during FY 2015.
- *YDC Admission Type:* In FY 2015, 50% of all YDC admissions resulted from a new delinquent complaint, 39% from a technical revocation of probation, and 11% from a technical revocation of post-release supervision. The distribution of YDC admissions is assumed to match the distribution from FY 2015. The median lag-time between the imposition of a probation disposition and revocation to a YDC for a technical violation was 12 months. The median lag-time between release from YDC onto post-release supervision and revocation to a YDC for a technical violation was 5 months.
- *Court Practices and Policy Changes:* The five-year projections assume no change in judicial or prosecutorial behavior. In addition, the projections do not incorporate any potential increases or decreases in the YDC population due to recent budgetary changes or policy-driven changes implemented by DACJJ and/or other agencies that provide services for juveniles.

FY 2015 Juvenile Delinquent Dispositions

The Juvenile Disposition Chart (see Table 2) and the empirical data from the latest available fiscal year, in conjunction with the June 30, 2015 stock population, form the basis of the five-year resource projections. This section details information on the 5,041 juveniles with a new delinquent disposition⁶ in FY 2015, including their offense classification, delinquency history level, and disposition level.

criminal complaints (Class A-I felonies and Class A1-3 misdemeanors) have declined from FY 2011 to FY 2015, with criminal complaints decreasing 4% from FY 2014 to FY 2015. (Source: DACJJ.)

⁶ A delinquent disposition is identified from NC-JOIN records as the disposition imposed for the most serious adjudicated offense for a given disposition hearing date during a fiscal year. Using this definition, 10% of the juveniles with a delinquent disposition in FY 2015 were represented in the sample more than once.

**Table 2
Juvenile Disposition Chart**

Offense Classification	Delinquency History Level		
	Low 0-1 Points	Medium 2-3 Points	High 4 or More Points
Violent Class A-E Felonies	Level 2 or 3	Level 3	Level 3
Serious Class F-I Felonies Class A1 Misdemeanors	Level 1 or 2	Level 2	Level 2 or 3
Minor Class 1, 2, 3 Misdemeanors	Level 1	Level 1 or 2	Level 2

Table 3 displays the distribution of the 5,041 delinquent dispositions by offense classification of the most serious adjudicated offense and delinquency history level of the juvenile adjudicated. Of the juveniles adjudicated delinquent in FY 2015, 2.0% were adjudicated for a violent offense, 24.0% were adjudicated for a serious offense, and 74.0% were adjudicated for a minor offense.⁷ Further, 72.0% of the dispositions involved a juvenile with a low delinquency history level, 16.1% involved a juvenile with a medium delinquency history level, and 11.9% involved a juvenile with a high delinquency history level. Of the 5,041 juveniles with a new delinquent disposition, more than half (n=2,798) involved a juvenile with a low delinquency history level who was adjudicated for a minor offense (Class 1, 2, or 3 misdemeanor).

Table 4 summarizes dispositions imposed in FY 2015 by the offense classification of the most serious adjudicated offense. The court ordered Level 3 dispositions (commitment to a YDC) for 2.0% of the juveniles adjudicated delinquent, ordered Level 2 (intermediate) dispositions for 33.8% of the juveniles adjudicated delinquent, and ordered the remaining 64.2% juveniles adjudicated delinquent to Level 1 (community) dispositions. Of the 5,041 juveniles with a new delinquent disposition, over half (n=2,820) involved a juvenile adjudicated for a minor offense who received a Level 1 (community) disposition.

Table 5 combines the information contained in Table 3 and Table 4, displaying how judges used dispositional resources given each combination of offense classification and delinquency history level. As indicated by the vertical "Total" column, the likelihood of the imposition of a Level 3 YDC commitment increased as the seriousness of the offense classification increased. Similarly, the likelihood of the imposition of a Level 3 YDC commitment increased as the delinquency history level increased.⁸

⁷ Overall, 82.6% (or n=4,166) of the 5,041 dispositions were for misdemeanor offenses. Of the 1,210 adjudications for a serious offense, 35.9% (or n=434) were for Class A1 misdemeanor offenses. The remainder were for Class F-I felony offenses.

⁸ There were 168 juveniles (3.3%) with a disposition not specified by the dispositional chart. These dispositions were used in the projections, as imposed, to ensure the accuracy of the projections.

Table 3
Dispositions by Offense Classification and Delinquency History Level
Juveniles Adjudicated Delinquent

Offense Classification	Delinquency History Level			Total
	Low 0-1 Point	Medium 2-3 Points	High 4+ Points	
Violent Class A-E Felonies	71 71.7%	13 13.1%	15 15.2%	99 2.0%
Serious Class F-I Felonies Class A1 Misdemeanors	762 63.0%	244 20.2%	204 16.8%	1,210 24.0%
Minor Class 1, 2, 3 Misdemeanors	2,798 75.0%	555 14.9%	379 10.1%	3,732 74.0%
Total	3,631 72.0%	812 16.1%	598 11.9%	5,041 100.0%

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2015 Disposition Simulation Data

Table 4
Dispositions by Offense Classification and Disposition Level
Juveniles Adjudicated Delinquent

Offense Classification	Disposition Level			Total
	Level 1 Community	Level 2 Intermediate	Level 3 Commitment	
Violent Class A-E Felonies	3 3.0%	72 72.7%	24 24.3%	99 2.0%
Serious Class F-I Felonies Class A1 Misdemeanors	411 34.0%	746 61.6%	53 4.4%	1,210 24.0%
Minor Class 1, 2, 3 Misdemeanors	2,820 75.6%	886 23.7%	26 0.7%	3,732 74.0%
Total	3,234 64.2%	1,704 33.8%	103 2.0%	5,041 100.0%

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2015 Disposition Simulation Data

Table 5
Dispositions by the Dispositional Chart for Juveniles Adjudicated Delinquent

Offense Classification	Delinquency History Level			Total
	Low 0-1 Point	Medium 2-3 Points	High 4+ Points	
Violent Class A-E Felonies	Level 2/Level 3 Level 1: 3 (4.2%) Level 2: 60 (84.5%) Level 3: 8 (11.3%) n=71	Level 3 Level 2: 7 (53.9%) Level 3: 6 (46.1%) n=13	Level 3 Level 2: 5 (33.3%) Level 3: 10 (66.7%) n=15	Level 2/Level 3 Level 1: 3 (3.0%) Level 2: 72 (72.7%) Level 3: 24 (24.3%) n=99 (2.0%)
Serious Class F-I Felonies Class A1 Misdemeanors	Level 1/Level 2 Level 1: 375 (49.2%) Level 2: 387 (50.8%) n = 762	Level 2 Level 1: 36 (14.8%) Level 2: 207 (84.8%) Level 3: 1 (0.4%) n = 244	Level 2/Level 3 Level 2: 152 (74.5%) Level 3: 52 (25.5%) n=204	Level1/Level 2/Level 3 Level 1: 411 (34.0%) Level 2: 746 (61.6%) Level 3: 53 (4.4%) n = 1,210 (24.0%)
Minor Class 1, 2, 3 Misdemeanors	Level 1 Level 1: 2,711 (96.9%) Level 2: 87 (3.1%) n = 2,798	Level 1/Level 2 Level 1: 106 (19.1%) Level 2: 449 (80.9%) n = 555	Level 2 Level 1: 3 (0.8%) Level 2: 350 (92.3%) Level 3: 26 (6.9%) n = 379	Level 1/Level 2 Level 1: 2,820 (75.6%) Level 2: 886 (23.7%) Level 3: 26 (0.7%) n = 3,732 (74.0%)
Total	Level1/Level 2/Level 3 Level 1: 3,089 (85.1%) Level 2: 534 (14.7%) Level 3: 8 (0.2%) n = 3,631 (72.0%)	Level1/Level 2/Level 3 Level 1: 142 (17.5%) Level 2: 663 (81.6%) Level 3: 7 (0.9%) n = 812 (16.1%)	Level 2/Level 3 Level 1: 3 (0.5%) Level 2: 507 (84.8%) Level 3: 88 (14.7%) n = 598 (11.9%)	Level1/Level 2/Level 3 Level 1: 3,234 (64.2%) Level 2: 1,704 (33.8%) Level 3: 103 (2.0%) N = 5,041 (100.0%)

Note: In FY 2015, there were 168 juveniles (or 3.3%) with a disposition not specified by the dispositional chart. However, it must be noted that certain provisions of the juvenile code allow a judge to impose a disposition other than those specified by the chart. Under G.S. 7B-2508(e), judges may find “extraordinary needs” and impose a lower level disposition. Under G.S. 7B-2508(g), juveniles adjudicated delinquent for a minor offense with four or more prior adjudications may be committed to a YDC. Finally, under G.S. 7B-2508(d), juveniles adjudicated delinquent for a minor offense with a previous Level 3 disposition may be committed to a YDC.

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2015 Disposition Simulation Data

YDC Stock Population on June 30, 2015

The committed population or stock population is the number of juveniles committed to a YDC as of June 30, 2015, the beginning of the current projection period. Stock population is an important component of the model as it represents the starting point of the projection. On June 30, 2015, there were 219 juveniles committed to a YDC. Seventy-three percent of the juveniles had a high delinquency history level. The majority of the committed juveniles (83.6%) were adjudicated with a felony as their most serious offense; 23.3% were adjudicated for a violent offense, 70.8% were adjudicated for a serious offense, and 5.9% were adjudicated for a minor offense. Overall, 45.7% were committed to a YDC due to a new crime, 45.7% were committed to a YDC for a technical revocation of probation, and 8.6% were committed to a YDC for a technical revocation of post-release supervision.

YDC Population Trends

As previously mentioned, changes in the juvenile justice system that affect the number of YDC admissions, the number of YDC releases, or the YDC length of stay directly impact the accuracy of the projections. This section highlights YDC statistics showing the year-to-year variations in several key components used to produce the projections.

From FY 2011 to FY 2015, admissions to YDCs, and correspondingly, releases from YDCs have decreased (see Table 6). During this time frame, the number of YDC admissions decreased nearly 37%. From FY 2014 to FY 2015, YDC admissions decreased 6%. In FY 2015, the average number of admissions per month was 17. Similar to YDC admissions, YDC releases also decreased over the past five years (by 50%). From FY 2014 to FY 2015, the number of YDC releases decreased nearly 9%. In FY 2015, the average number of releases per month was 17. Looking at the average number of YDC admissions and releases per month over the past five years, admissions appear to experience fewer fluctuations than releases. These trends will continue to be monitored given their influence on the resource projections.

In FY 2015, the overall average length of stay was 13.8 months (see Table 7). For juveniles adjudicated delinquent for a serious offense, the average length of stay was 12.8 months, which represents a very slight increase over the previous fiscal year. The average length of stay for juveniles adjudicated for a violent offense generally increased, from 16.7 months in FY 2011 to 18.6 months in FY 2015, with slight decreases noted in FY 2012 and FY 2014. For juveniles adjudicated delinquent of a minor offense, the average length of stay remained relatively stable from FY 2012 to FY 2014, and increased slightly to 7.8 months in FY 2015.

Table 6
Youth Development Center (YDC) Admissions and Releases

Fiscal Year	YDC Admissions			YDC Releases		
	Total Number	Percent Change	Average Number Per Month	Total Number	Percent Change	Average Number Per Month
2011	325	--	27	418	--	35
2012	285	-12.3	24	303	-27.5	25
2013	229	-19.6	19	255	-15.8	21
2014	219	-4.4	18	227	-11.0	19
2015	206	-5.9	17	207	-8.8	17

SOURCE: NC Department of Public Safety, Division of Adult Correction and Juvenile Justice

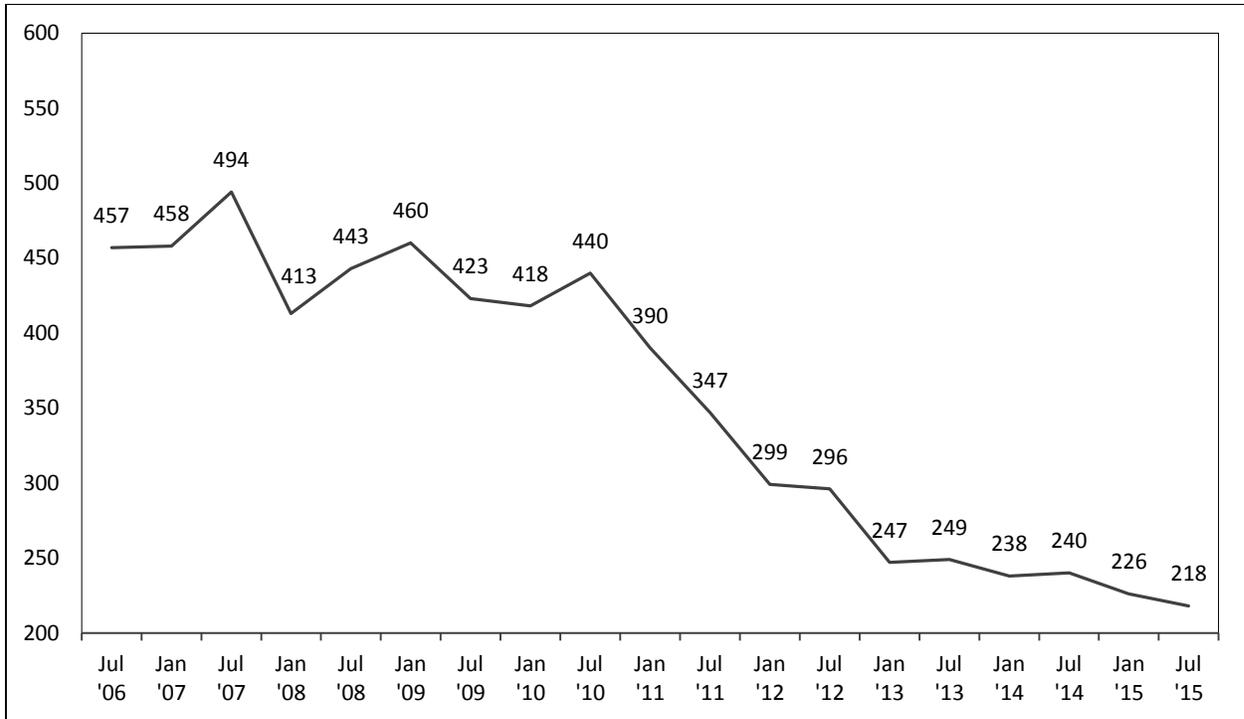
Table 7
Average Length of Stay for Youth Development Center (YDC) Releases

Juveniles Adjudicated of a:	Length of Stay (in months) by Fiscal Year					% Change	
	2011	2012	2013	2014	2015	FY 2014 to FY 2015	FY 2011 to FY 2015
Violent Offense	16.7	16.6	17.7	17.2	18.6	8.1	11.4
Serious Offense	12.3	12.1	13.3	12.7	12.8	0.8	4.1
Minor Offense	9.8	7.1	7.0	7.0	7.8	11.4	-20.4
Overall	13.3	13.0	14.1	13.4	13.8	3.0	3.8

SOURCE: NC Department of Public Safety, Division of Adult Correction and Juvenile Justice

Figure 2 depicts the consistent decline in North Carolina’s YDC population – 52% over the past ten years and 37% over the past five years. However, the population has leveled off over the past two years. In FY 2015 the lowest YDC population was 218 and the highest YDC population was 250. The most important factors contributing to YDC population trends include youth population trends, juvenile and criminal justice trends, and policy changes that affect YDC admissions, releases, and length of stay.

Figure 2
Youth Development Center (YDC) Population Trends
July 2006 - July 2015



SOURCE: NC Department of Public Safety, Division of Adult Correction and Juvenile Justice, *Committed Youth Report*