



North Carolina Sentencing and Policy Advisory Commission

November 2014

Youth Development Center Population Projections: Fiscal Year 2015 to Fiscal Year 2019

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, 2014 (new population) and for all juveniles committed to a YDC as of June 30, 2014 (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 remain stable over the period with a projected need for 238 YDC beds by June 2015 and 239 YDC beds by June 2019.² A comparison of the projections with YDC capacity indicates that the projected YDC population will be below the YDC capacity for the five-year projection period. The YDC stock population was 241 on June 30, 2014. The YDC population on November 1, 2014 was 235.³

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% are for males.

³ Source: DACJJ's *Committed Youth Report*

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

**Table 1
Youth Development Center Population Projections
November 2014**

**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,c}	Difference between Current Projection and Capacity ^d
	Previous Projection	Current Projection		
2015	253	238	261	23
2016	257	235	254	19
2017	259	227	260	33
2018	257	229	260	31
2019	N/A	239	260	21

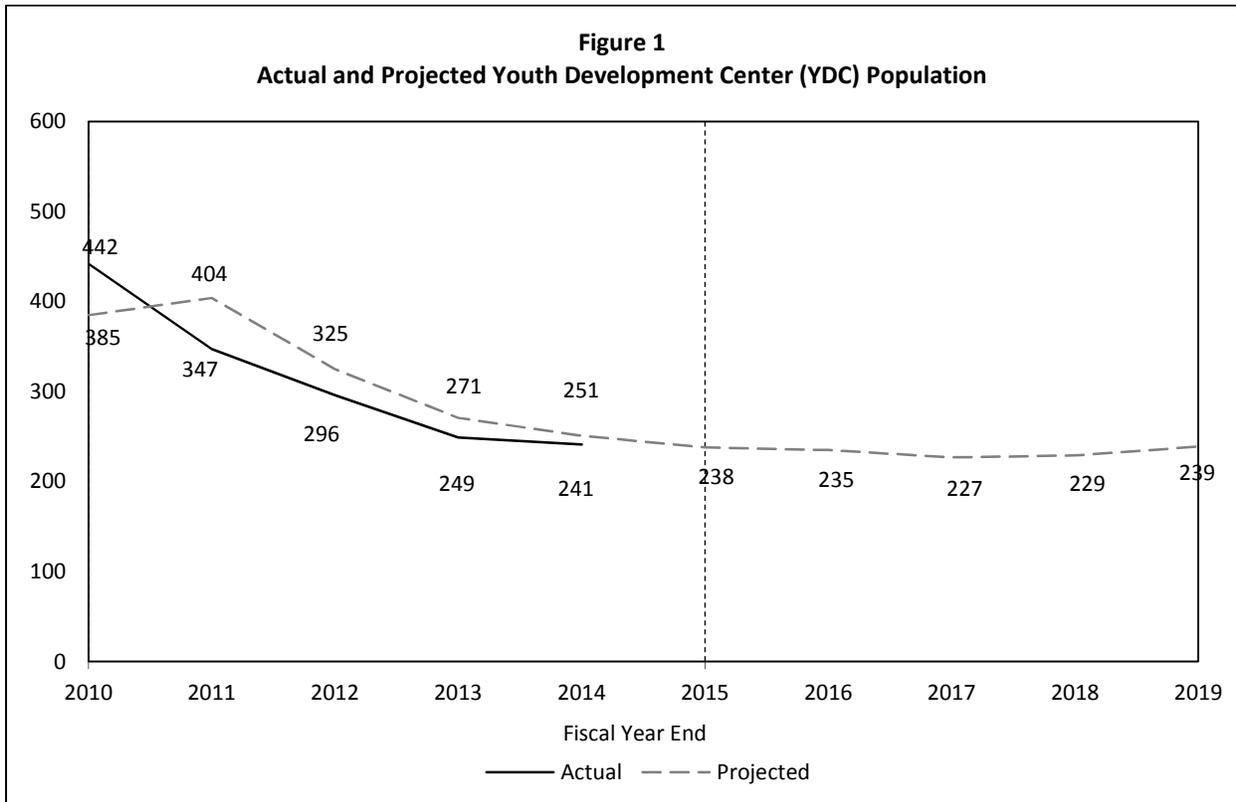
^a These projections include juveniles on-campus and off-campus (e.g., home visit, community commitment, hospitalization, escape).

^b For more information regarding YDC capacity figures, including renovations and closures, see DACJJ's *Juvenile Justice Facilities Strategic Plan* (<https://www.ncdps.gov/div/JJ/JJ%20Facilities%20Strategic%20Plan%20041014%20FINAL.pdf>) published April 10, 2014.

^c YDC capacity is contingent on staffing patterns in order to meet required ratios. The DACJJ 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.

^d 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%).



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 2014):

- Growth Rates:** The projections assume no growth in delinquent dispositions for the first three years and one percent growth for the fourth and fifth years 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 6 – 15) in the state is expected to decrease at an average annual rate of 0.12% over the next five years.⁴ Decreases 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 (2014).

⁵ The rate of delinquent complaints has declined since the late 1990s. In FY 2010, the rate of delinquent complaints was 29 per 1,000 juveniles compared to a rate of 22 in FY 2014. (Source: DACJJ.) In addition, the State Bureau of Investigation reports that from CY 2009 to CY 2013, overall arrests for index crimes committed by juveniles under the age of 16 dropped 24%. (Source:

- *Level 3 Dispositions:* In FY 2014, 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 found from FY 2014.
- *YDC Length of Stay:* The YDC average length of stay was 13.4 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 average length of stay was 17.2 months for juveniles adjudicated delinquent for a violent offense, 12.7 months for juveniles adjudicated delinquent for a serious offense, and 7.0 months for juveniles adjudicated delinquent for a minor offense. 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 2014.
- *YDC Commitments:* In FY 2014, 44% of all YDC commitments resulted from a new delinquent complaint, 44% from a technical revocation of probation, and 12% from a technical revocation of post-release supervision. The distribution of YDC commitments is assumed to match the distribution from FY 2014. The median lag-time between the imposition of a probation disposition and revocation to a YDC for a technical violation was 11 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 2014 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, 2014 stock population, form the basis of the five-year resource projections. This section details information on the 5,240 juveniles with a new delinquent disposition⁶ in FY 2014, including their offense classification, delinquency history level, and disposition level.

Crime in North Carolina-2013 Annual Summary Report of 2013 Uniform Crime Reporting Data, State Bureau of Investigation, <http://crimereporting.ncdoj.gov/Reports.aspx>.) In general, criminal complaints (Class A-I felonies and Class A1-3 misdemeanors) have declined from CY 2008 to CY 2013, with criminal complaints decreasing 6% from CY 2012 to CY 2013. (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, 11% of the juveniles with a delinquent disposition in FY 2014 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 5,240 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 2014, 2.5% were adjudicated for a violent offense, 22.9% were adjudicated for a serious offense, and 74.6% were adjudicated for a minor offense.⁷ Further, 72.0% of the dispositions involved a juvenile with a low delinquency history level, 15.6% involved a juvenile with a medium delinquency history level, and 12.4% involved a juvenile with a high delinquency history level. Of the 5,240 juveniles with a new delinquent disposition, more than half (n=2,922) 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 2014 by the offense classification of the most serious adjudicated offense. The court ordered Level 3 dispositions (commitment to a YDC) for 2.4% of the juveniles adjudicated delinquent, ordered Level 2 (intermediate) dispositions for 34.9% of the juveniles adjudicated delinquent, and ordered the remaining 62.7% juveniles adjudicated delinquent to Level 1 (community) dispositions. Of the 5,240 juveniles with a new delinquent disposition, over half (n=2,910) 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, 82.8% (or n=4,338) of the 5,240 dispositions were for misdemeanor offenses. Of the 1,201 adjudications for a serious offense, 35.9% (or n=431) were for Class A1 misdemeanor offenses. The remainder were for Class F-I felony offenses.

⁸ There were 195 juveniles (3.7%) 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	81 (61.4%)	23 (17.4%)	28 (21.2%)	132 (2.5%)
Serious Class F-I Felonies Class A1 Misdemeanors	769 (64.0%)	220 (18.3%)	212 (17.7%)	1,201 (22.9%)
Minor Class 1, 2, 3 Misdemeanors	2,922 (74.8%)	577 (14.8%)	408 (10.4%)	3,907 (74.6%)
Total	3,772 (72.0%)	820 (15.6%)	648 (12.4%)	5,240 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2014 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 (2.3%)	87 (65.9%)	42 (31.8%)	132 (2.5%)
Serious Class F-I Felonies Class A1 Misdemeanors	374 (31.1%)	776 (64.6%)	51 (4.3%)	1,201 (22.9%)
Minor Class 1, 2, 3 Misdemeanors	2,910 (74.5%)	966 (24.7%)	31 (0.8%)	3,907 (74.6%)
Total	3,287 (62.7%)	1,829 (34.9%)	124 (2.4%)	5,240 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2014 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: 1 (1.2%) Level 2: 67 (82.7%) Level 3: 13 (16.1%) n=81	Level 3 Level 1: 1 (4.3%) Level 2: 12 (52.2%) Level 3: 10 (43.5%) n=23	Level 3 Level 1: 1 (3.6%) Level 2: 8 (28.6%) Level 3: 19 (67.8%) n=28	Level 2/Level 3 Level 1: 3 (2.3%) Level 2: 87 (65.9%) Level 3: 42 (31.8%) n=132 (2.5%)
Serious Class F-I Felonies Class A1 Misdemeanors	Level 1/Level 2 Level 1: 355 (46.1%) Level 2: 412 (53.6%) Level 3: 2 (0.3%) n = 769	Level 2 Level 1: 18 (8.2%) Level 2: 201 (91.4%) Level 3: 1 (0.4%) n = 220	Level 2/Level 3 Level 1: 1 (0.5%) Level 2: 163 (76.9%) Level 3: 48 (22.6%) n=212	Level1/Level 2/Level 3 Level 1: 374 (31.1%) Level 2: 776 (64.6%) Level 3: 51 (4.3%) n = 1,201 (22.9%)
Minor Class 1, 2, 3 Misdemeanors	Level 1 Level 1: 2,809 (96.1%) Level 2: 113 (3.9%) n = 2,922	Level 1/Level 2 Level 1: 95 (16.5%) Level 2: 476 (82.5%) Level 3: 6 (1.0%) n = 577	Level 2 Level 1: 6 (1.5%) Level 2: 377 (92.4%) Level 3: 25 (6.1%) n = 408	Level 1/Level 2 Level 1: 2,910 (74.5%) Level 2: 966 (24.7%) Level 3: 31 (0.8%) n = 3,907 (74.6%)
Total	Level1/Level 2/Level 3 Level 1: 3,165 (83.9%) Level 2: 592 (15.7%) Level 3: 15 (0.4%) n = 3,772 (72.0%)	Level1/Level 2/Level 3 Level 1: 114 (13.9%) Level 2: 689 (84.0%) Level 3: 17 (2.1%) n = 820 (15.6%)	Level 2/Level 3 Level 1: 8 (1.2%) Level 2: 548 (84.6%) Level 3: 92 (14.2%) n = 648 (12.4%)	Level1/Level 2/Level 3 Level 1: 3,287 (62.7%) Level 2: 1,829 (34.9%) Level 3: 124 (2.4%) N = 5,240 (100.0%)

Note: In FY 2014, there were 195 juveniles (or 3.7%) 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 2014 Disposition Simulation Data

YDC Stock Population on June 30, 2014

The committed population or stock population is the number of juveniles committed to a YDC as of June 30, 2014, 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, 2014, there were 241 juveniles committed to a YDC. Seventy-three percent of the juveniles had a high delinquency history level. The majority of the committed juveniles (86.3%) were adjudicated with a felony as their most serious offense; 29.5% were adjudicated for a violent offense, 66.4% were adjudicated for a serious offense, and 4.1% were adjudicated for a minor offense. Overall, 51.1% were committed to a YDC due to a new crime, 42.3% were committed to a YDC for a technical revocation of probation, and 6.6% 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 2010 to FY 2014, admissions to YDCs, and correspondingly, releases from YDCs have generally decreased (see Table 6). During this time frame, the number of YDC admissions decreased nearly 45%. From FY 2013 to FY 2014, YDC admissions decreased 4%. In FY 2014, the average number of admissions per month was 18. Similar to YDC admissions, YDC releases also decreased over the past five years (by 40%). From FY 2013 to FY 2014, the number of YDC releases decreased 11%. In FY 2014, the average number of releases per month was 19. Looking at the average number of YDC admissions and releases per month over the past five years, admissions appear to experience fewer fluctuations than do releases. These trends will continue to be monitored given their influence on the resource projections.

In FY 2014, the overall average length of stay was 13.4 months (see Table 7). For juveniles adjudicated delinquent for a serious offense (70% of YDC admissions in FY 2014), the average length of stay was 12.7 months, which represents a decrease from FY 2013. The average length of stay for juveniles adjudicated for a violent offense gradually increased from FY 2010 to 2013, although there was a slight decrease from 17.7 months in FY 2013 to 17.2 months in FY 2014. For juveniles adjudicated delinquent of a minor offense (who represented only 6% of YDC admissions in FY 2014), the average length of stay has fluctuated from FY 2010 to FY 2012, with rates remaining relatively stable from FY 2012 to FY 2014.

**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
2010	395	---	33	378	---	32
2011	325	-17.7	27	418	10.6	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

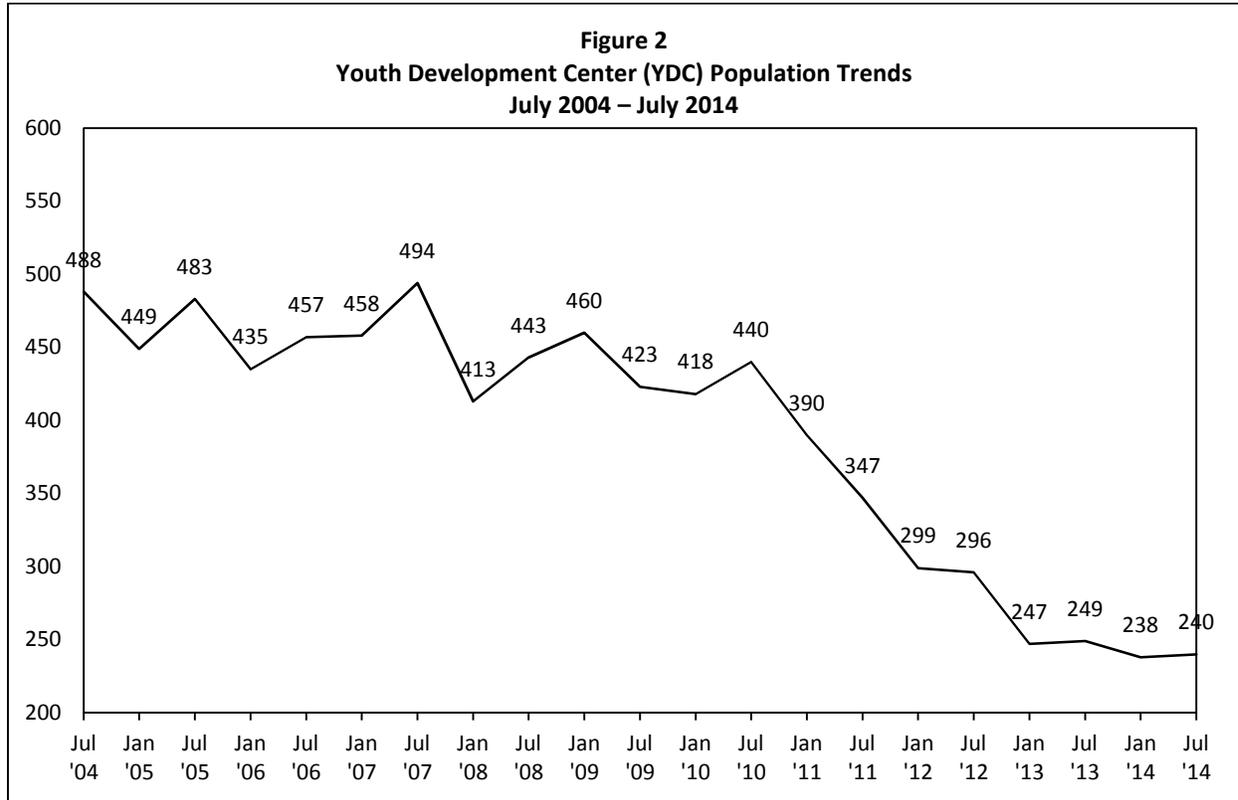
SOURCE: NC Department of Public Safety, Division of Adult Correction and Juvenile Justice

**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	
	2010	2011	2012	2013	2014	FY 2013 to FY 2014	FY 2010 to FY 2014
Violent Offense	15.5	16.7	16.6	17.7	17.2	-2.8	11.0
Serious Offense	12.7	12.3	12.1	13.3	12.7	-4.5	0.0
Minor Offense	8.7	9.8	7.1	7.0	7.0	0.0	-19.5
Overall	13.2	13.3	13.0	14.1	13.4	-5.0	1.5

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 – 51% over the past ten years and 45% over the past five years. However, the population has leveled off over the past two years. 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.



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