

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

JUVENILE DELINQUENT POPULATION PROJECTIONS FISCAL YEAR 2011/12 to FISCAL YEAR 2015/16

RELEASED: FEBRUARY 2012

INTRODUCTION

North Carolina General Statutes 164-40(b) and 164-42.1(b) direct the North Carolina Sentencing and Policy Advisory Commission to prepare annual projections of the juvenile delinquent population and 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 Juvenile Justice (DJJ). It is important to note that the juvenile justice system is largely policy-driven; therefore, any change in policy and/or practice with regard to the use of dispositional resources greatly influences the accuracy of the resource projections.

The following analysis has two components. The first part examines the 6,533 juveniles with a new delinquent disposition in FY 2010/11 (referred to in this document as the "new population"). Information about these dispositions is extracted from the North Carolina Juvenile Online Information Network (NC-JOIN), DJJ's management information system. The second part of the analysis examines the juveniles who were committed to a Youth Development Center¹ (YDC) as of July 1, 2011 – the beginning of the current projection period. This group is referred to as the "stock" population. The projections model takes into account both the decline of the committed "stock" population and the buildup of the new YDC population (new adjudicated delinquent dispositions, probation revocations, and post-release supervision revocations). The Juvenile Disposition Chart forms the foundation of the projections (*see* Table 1).

**TABLE 1
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

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).

METHOD AND ASSUMPTIONS

Projections Method

The simulation model used to produce resource projections relies on historical data and other empirical information about how juveniles are processed through the juvenile justice system. The model simulates releases for the stock population while simultaneously processing YDC admissions (through Level 3 commitments or revocations of probationary supervision) to produce the population projections.

Producing the final resource projections is a two-stage process: 1) the “reality check” stage and 2) the projection stage. In the first stage, the validity of the data assumptions (*e.g.*, commitment rates, revocation rates, length of stay) is assessed by using the model to produce the past fiscal year’s admissions to YDCs. Once the model successfully approximates the past fiscal year’s YDC admissions, the second stage of the process begins. In the second stage, growth rates for the number of juvenile delinquent adjudications and stock population data are added to the model, thereby producing the five-year population projections.

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 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 also can be the result of changes in policy and/or practice with regard to the use of dispositional resources.

Assumptions for the Projections

The projections are based on the following assumptions that were determined using empirical data from the most recent fiscal year (FY 2010/11):

- The projections assume no growth for any of the five-year projection period. This rate is based on census projections for North Carolina’s youth population and several juvenile justice indicators, and was approved by the Forecasting Technical Advisory Group. Population projections prepared by North Carolina’s State Demographics Unit show that the juvenile population (age 6 – 15) in the state is expected to increase at an average annual rate of 1.5% over the next five years.² Although the youth population has been growing and is projected to continue to grow, recent data show declining trends in juvenile crime.³

² Source: www.demog.state.nc.us (2011).

³ There has been a decline in the rate of delinquent complaints since the late 1990s. In FY 1996/97 the rate of delinquent complaints was 54 per 1,000 juveniles compared to a rate of 28 in FY 2010/11. (Source: DJJ.) In addition, the State Bureau of Investigation reports that from 2006 to 2010, there was a 22% drop in overall arrests for index crimes committed by juveniles under the age of 16. (Source: *Crime in North Carolina-2010 Annual Summary Report of Uniform Crime Reporting Data*, NC Department of Justice, State Bureau of Investigation, www.sbi2.jus.state.nc.us/crp/public/default.htm.) Criminal complaints (Class A-I felonies and Class A1-3 misdemeanors) decreased 7% from CY 2009 to CY 2010. (Source: *DJJDP 2010 Annual Report*.)

- The five-year projections assume no change in judicial or prosecutorial behavior.
- Over the projection period, the rates of Level 1, Level 2, and Level 3 dispositions for juveniles adjudicated delinquent are assumed to match the rates during FY 2010/11 (63.9%, 33.5%, and 2.6%, respectively).
- YDC length of stay is assumed to match the average length of stay by offense classification for juveniles released during FY 2010/11. The average length of stay was 16.7 months for juveniles adjudicated delinquent for a violent offense, 12.3 months for juveniles adjudicated delinquent for a serious offense, and 9.8 months for juveniles adjudicated delinquent for a minor offense. The average length of stay for juveniles committed to YDC due to a technical violation of post-release supervision was 9 months.
- Over the projection period, the proportion of admissions to YDCs resulting from technical violations (*i.e.*, not revocations due to new complaints) of probation is assumed to remain constant at the proportion found during FY 2010/11 (36%).
- This projection does not incorporate any potential increases or decreases in the YDC population from legislative changes that occurred during the past legislative session, from budgetary changes, or from policy-driven changes implemented by DJJ in the recent past because there are no empirical data to estimate the potential impact of such decisions.

FY 2010/11 JUVENILE DELINQUENT DISPOSTIONS

Table 2 displays the distribution of the dispositions based on the offense classification and the type of offense (felony or misdemeanor). Of the 6,533 dispositions, most were for misdemeanor offenses (81.3%). Of the dispositions for felony offenses (n=1,220), most were for serious offenses (n=1,085, or 89%).

**TABLE 2
DISTRIBUTION OF CASES BY OFFENSE CLASSIFICATION AND
OFFENSE TYPE
JUVENILES ADJUDICATED DELINQUENT**

OFFENSE CLASSIFICATION	OFFENSE TYPE		TOTAL
	FELONY	MISDEMEANOR	
VIOLENT Class A-E felonies	135 (100.0%)	0 (0.0%)	135 (2.1%)
SERIOUS Class F-I felonies Class A1 misdemeanors	1,085 (64.7%)	593 (35.3%)	1,678 (25.7%)
MINOR Class 1, 2, 3 misdemeanors	0 (0.0%)	4,720 (100.0%)	4,720 (72.2%)
TOTAL	1,220 (18.7%)	5,313 (81.3%)	6,533 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2010/11 Disposition Simulation Data

Table 3 displays the distribution of the 6,533 delinquent dispositions by the offense classification of the most serious adjudicated offense and the delinquency history level of the juvenile adjudicated. Of the juveniles adjudicated delinquent in FY 2010/11, 2.1% were adjudicated for a violent offense, 25.7% were adjudicated for a serious offense, and 72.2% were adjudicated for a minor offense. Further, 72.1% of the dispositions involved a juvenile with a low delinquency history level, 15.1% involved a juvenile with a medium delinquency history level, and 12.8% involved a juvenile with a high delinquency level. Of the 6,533 juveniles with a new delinquent disposition, slightly more than half (n=3,608) involved a juvenile with a low delinquency history level adjudicated for a minor offense (Class 1, 2, or 3 misdemeanor).

Table 4 summarizes dispositions imposed in FY 2010/11 by offense classification of the most serious adjudicated offense. In applying the dispositional chart, the court imposed a Level 3 disposition (Commitment to a YDC) in 2.6% of the cases, ordered Level 2 (Intermediate) dispositions in 33.5% of the cases, and ordered the remaining 63.9% of the cases to Level 1 (Community) dispositions. Of the 6,533 juveniles with a new delinquent disposition, over half (n=3,636) involved a juvenile adjudicated for a minor offense who received a community level disposition.

TABLE 3
DISTRIBUTION OF CASES 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	93 (68.9%)	11 (8.2%)	31 (22.9%)	135 (2.1%)
SERIOUS Class F-I felonies Class A1 misdemeanors	1,011 (60.3%)	301 (17.9%)	366 (21.8%)	1,678 (25.7%)
MINOR Class 1, 2, 3 misdemeanors	3,608 (76.5%)	671 (14.2%)	441 (9.3%)	4,720 (72.2%)
TOTAL	4,712 (72.1%)	983 (15.1%)	838 (12.8%)	6,533 (100.0%)

TABLE 4
DISTRIBUTION OF CASES 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	4 (2.9%)	85 (63.0%)	46 (34.1%)	135 (2.1%)
SERIOUS Class F-I felonies Class A1 misdemeanors	537 (32.0%)	1,032 (61.5%)	109 (6.5%)	1,678 (25.7%)
MINOR Class 1, 2, 3 misdemeanors	3,636 (77.0%)	1,068 (22.6%)	16 (0.4%)	4,720 (72.2%)
TOTAL	4,177 (63.9%)	2,185 (33.5%)	171 (2.6%)	6,533 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2010/11 Disposition Simulation Data

TABLE 5
DISTRIBUTION OF CASES BY THE DISPOSITIONAL CHART
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	<u>Level 2/Level 3</u> Level 1: 3 (3.2%) Level 2: 72 (77.4%) Level 3: 18 (19.4%) n = 93	<u>Level 3</u> Level 1: 0 (0.0%) Level 2: 5 (45.5%) Level 3: 6 (54.5%) n = 11	<u>Level 3</u> Level 1: 1 (3.2%) Level 2: 8 (25.8%) Level 3: 22 (71.0%) n = 31	Level 1: 4 (3.0%) Level 2: 85 (63.0%) Level 3: 46 (34.0%) n = 135 (2.1%)
SERIOUS Class F-I felonies Class A1 misdemeanors	<u>Level 1/Level 2</u> Level 1: 501 (49.6%) Level 2: 509 (50.3%) Level 3: 1 (0.1%) n = 1,011	<u>Level 2</u> Level 1: 25 (8.3%) Level 2: 272 (90.4%) Level 3: 4 (1.3%) n = 301	<u>Level 2/Level 3</u> Level 1: 11 (3.0%) Level 2: 251 (68.6%) Level 3: 104 (28.4%) n = 366	Level 1: 537 (32.0%) Level 2: 1,032 (61.5%) Level 3: 109 (6.5%) n = 1,678 (25.7%)
MINOR Class 1, 2, 3 misdemeanors	<u>Level 1</u> Level 1: 3,488 (96.7%) Level 2: 120 (3.3%) Level 3: 0 (0.0%) n = 3,608	<u>Level 1/Level 2</u> Level 1: 131 (19.5%) Level 2: 540 (80.5%) Level 3: 0 (0.0%) n = 671	<u>Level 2</u> Level 1: 17 (3.9%) Level 2: 408 (92.5%) Level 3: 16 (3.6%) n = 441	Level 1: 3,636 (77.0%) Level 2: 1,068 (22.6%) Level 3: 16 (0.4%) n = 4,720 (72.2%)
TOTAL	Level 1: 3,992 (84.7%) Level 2: 701 (14.9%) Level 3: 19 (0.4%) n = 4,712 (72.1%)	Level 1: 156 (15.9%) Level 2: 817 (83.1%) Level 3: 10 (1.0%) n = 983 (15.1%)	Level 1: 29 (3.4%) Level 2: 667 (79.6%) Level 3: 142 (17.0%) n = 838 (12.8%)	Level 1: 4,177 (63.9%) Level 2: 2,185 (33.5%) Level 3: 171 (2.6%) n = 6,533 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2010/11 Disposition Simulation Data

NOTE: In FY 2010/10, there were 211 juveniles (or 3.2%) 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.

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. Along with the data for the “stock” population, these data form the basis of the five-year resource projections. 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.

There were 211 juveniles (3.2%) with a disposition not specified by the dispositional chart. It should be noted that certain provisions of the juvenile code allow a judge to impose dispositions 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. These dispositions were used in the projections, as imposed, to ensure the accuracy of the projections.

YDC COMMITTED POPULATION

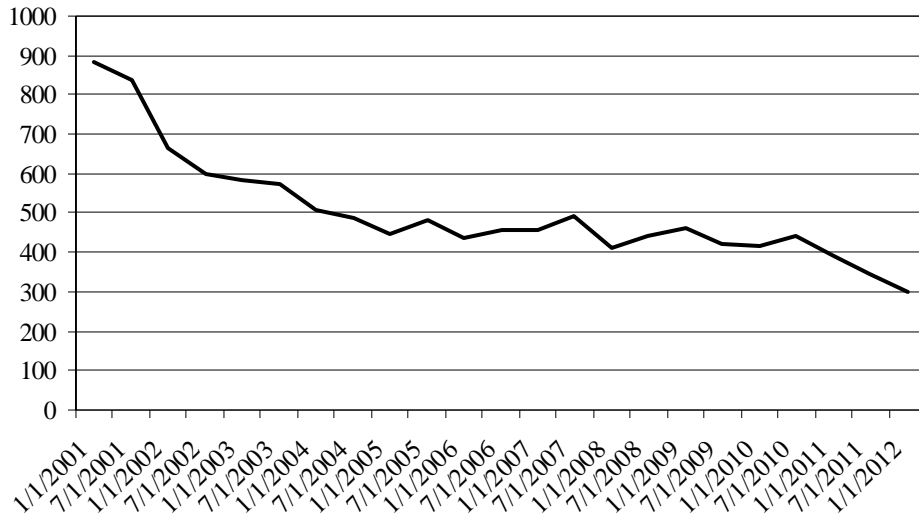
YDC Population on July 1, 2011

The committed population or “stock” is the number of juveniles committed to a YDC at the beginning of the projection period, which is July 1, 2011, for the current projection. Stock population is an important component of the model as it represents the starting point of the projection. On July 1, 2011, there were 347 juveniles committed to a YDC. Seventy-five percent of the juveniles had a high delinquency history level. The majority (88.2%) of the committed juveniles were adjudicated with a felony as their most serious offense. Of the juveniles committed to a YDC on July 1, 2011, 68.3% were adjudicated for a serious offense, 28.5% were adjudicated for a violent offense, and 3.2% were adjudicated for a minor offense.

Historical YDC Population Trends

As intended by the Juvenile Justice Reform Act of 1998, the YDC population has declined since July 2000 (*see* Figure 1). The next section discusses the factors that contribute to this trend.

FIGURE 1
YOUTH DEVELOPMENT CENTER (YDC) POPULATION TRENDS
JANUARY 2001 – JANUARY 2012



SOURCE: NC Department of Public Safety, Division of Juvenile Justice

YDC ADMISSIONS,⁴ RELEASES, AND LENGTH OF STAY 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 – all critical factors in projecting the YDC population – directly impact the accuracy of the projections. The following section highlights YDC statistics showing the year-to-year variations in several key components used to produce the projections.

YDC Admissions

Admissions to YDC include court admissions (for new offenses), technical probation revocation admissions, and technical post-release supervision revocation admissions. From FY 2001/02 to FY 2010/11, there has been a 44% decrease in the number of YDC admissions. (*See* Table 6.) As intended by the Juvenile Justice Reform Act of 1998, much of the initial decrease in YDC admissions can be attributed to the fact that juveniles adjudicated delinquent for a Class 1, Class 2 or Class 3 misdemeanor, except under certain rare conditions, cannot be committed to a YDC. Pre-reform, misdemeanor offenders accounted for about 40% of annual admissions to

⁴ The term YDC admission refers to a Level 3 disposition or YDC commitment (whether on-campus or off-campus).

YDCs. By FY 2010/11, juveniles adjudicated of a minor offense (Class 1, 2, or 3 misdemeanors) who were admitted to a YDC accounted for 4% of annual admissions. YDC admissions decreased nearly 18% from FY 2009/10 to FY 2010/11, continuing the overall decreasing trend in the number of YDC admissions since FY 2001/02. In FY 2010/11, there was an average of 27 admissions per month.

YDC Releases

As the YDC admissions decreased from FY 2001/02 to FY 2010/11, YDC releases also decreased (49%). (See Table 6.) In general, releases exceeded admissions for most of those years. From FY 2009/10 to FY 2010/11, there was an 11% increase in the number of YDC releases. In FY 2010/11, the average number of releases per month was 35.

It is important to note that the number of admissions and releases is extremely sensitive to changes in policies and practices. 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 to help assess the accuracy of the resource projections.

**TABLE 6
YOUTH DEVELOPMENT CENTER (YDC) ADMISSIONS AND RELEASES
JUVENILES ADJUDICATED DELINQUENT**

Fiscal Year	YDC ADMISSIONS			YDC RELEASES		
	Total Number	Percent Change	Average Number Per Month	Total Number	Percent Change	Average Number Per Month
2001/02	583	--	49	825	--	69
2002/03	569	-2.4	47	577	-30.1	48
2003/04	469	-17.6	39	548	-5.0	46
2004/05	473	0.9	39	470	-14.2	39
2005/06	448	-5.3	37	479	1.9	40
2006/07	470	4.9	39	420	-12.3	35
2007/08	450	-4.3	38	499	18.8	42
2008/09	401	-10.9	33	422	-15.4	35
2009/10	395	-1.5	33	378	-10.4	32
2010/11	325	-17.7	27	418	10.6	35

SOURCE: NC Department of Public Safety, Division of Juvenile Justice

YDC Length of Stay

Over the past few years, the length of stay for all committed juveniles increased slightly (by 6.4%). The average length of stay for the largest group of juveniles entering YDCs – those adjudicated delinquent for a serious offense – has been fairly stable. (*See* Table 7.) For juveniles adjudicated delinquent for a serious offense (who represented 75% of YDC admissions in FY 2010/11) the average length of stay was 12.3 months, which represents a slight decrease from FY 2009/10. From FY 2006/07 to FY 2007/08, the average length of stay for juveniles adjudicated for a violent offense declined from 17.2 months to 14.2 months (-17%); however, the average length of stay for this group has increased since FY 2008/09, with a 12% increase in the length of stay (from 14.9 months to 16.7 months). For juveniles adjudicated delinquent of a minor offense, the average length of stay decreased each year from FY 2006/07 to FY 2008/09. For the past two years, there has been an increase in the YDC length of stay for this group, with an average of 9.8 months in FY 2010/11.

TABLE 7
AVERAGE YOUTH DEVELOPMENT CENTER (YDC)
LENGTH OF STAY (IN MONTHS)
FOR RELEASED JUVENILES ADJUDICATED DELINQUENT

Juveniles Adjudicated of a:	Fiscal Year					% Change	
	2006/07	2007/08	2008/09	2009/10	2010/11	FY 2009/10 to FY 2010/11	FY 2006/07 to FY 2010/11
Violent Offense	17.2	14.2	14.9	15.5	16.7	7.7	-2.9
Serious Offense	11.5	11.9	11.2	12.7	12.3	-3.1	7.0
Minor Offense	8.9	8.0	6.4	8.7	9.8	12.6	10.1
Overall	12.5	12.2	11.7	13.2	13.3	0.8	6.4

SOURCE: NC Department of Public Safety, Division of Juvenile Justice

PROJECTED JUVENILE DELINQUENT POPULATIONS⁵

Table 8 shows the projected Level 3 resource needs over the five-year projection period.⁶ Level 3 resource needs are projected to remain stable over the period, with a projected need for 325 YDC beds by June 2012 and 329 YDC beds by June 2016. The YDC population was 347 on July 1, 2011. On February 1, 2012, the YDC population was 295.

TABLE 8
LEVEL 3 COMMITMENT RESOURCE PROJECTIONS:
JUVENILES ADJUDICATED DELINQUENT
RELEASED FEBRUARY 2012

PREPARED IN CONJUNCTION WITH
THE DEPARTMENT OF PUBLIC SAFETY'S DIVISION OF JUVENILE JUSTICE

Fiscal Year	Current Projection as of June 30
2012	325
2013	321
2014	325
2015	327
2016	329

SOURCE: NC Sentencing and Policy Advisory Commission,
FY 2010/11 Disposition Simulation Data

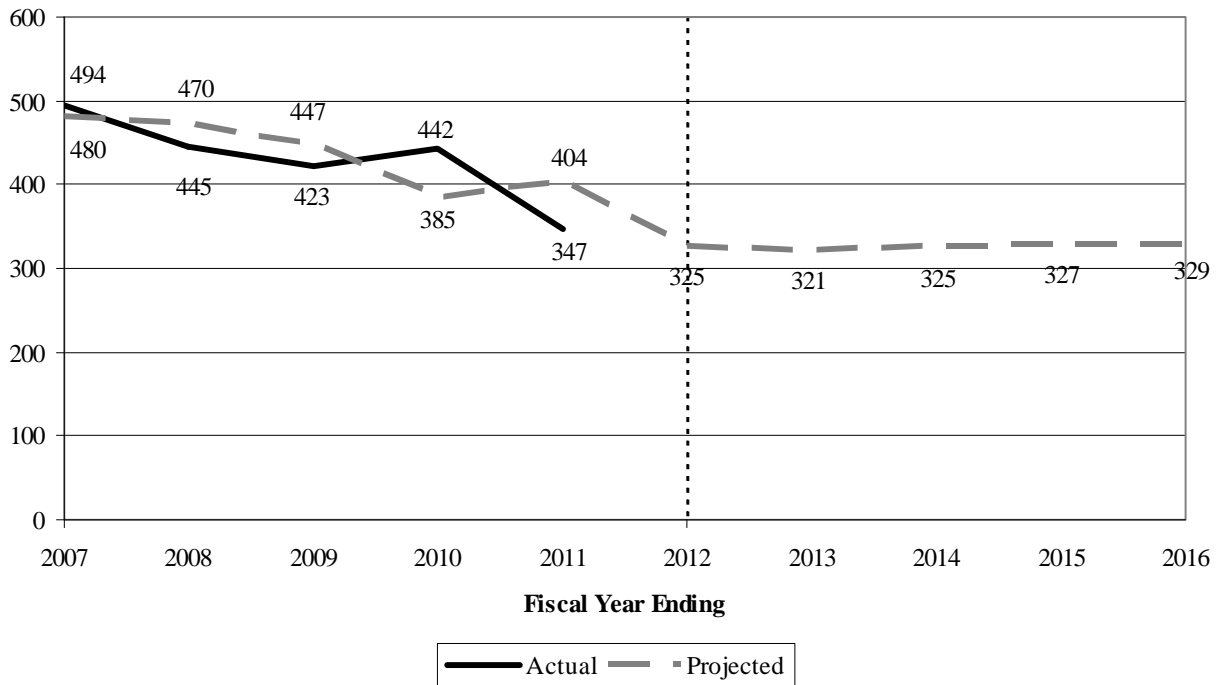
⁵ YDC population figures (projected and actual) include juveniles on-campus and off-campus (e.g., home visit, community commitment, hospitalization, escape).

⁶ Table 8 does not present available capacity for Level 3 dispositional resources.

Accuracy of the Level 3 Resource Projections

Figure 2 provides a comparison of the previous Level 3 (YDC) resource projections with the actual YDC population. The figure also includes the current five-year projections. The chart shows a graphic representation of the historical accuracy of the first year of the juvenile resource projections produced for the past five years. The difference between the projected Level 3 (or YDC) population and the actual YDC population ranged between 10 to 57 beds (or between 2% and 15%) for the past five years. Again, it is important to note that the system is largely policy-driven and any change in policy and/or practice with regard to the use of dispositional resources greatly influences the accuracy of the resource projections.

**FIGURE 2
ACTUAL AND PROJECTED
LEVEL 3 (YOUTH DEVELOPMENT CENTER) POPULATION**



SOURCE: NC Sentencing and Policy Advisory Commission, Disposition Simulation Data and NC Department of Public Safety, Division of Juvenile Justice

NOTE: The actual YDC population is based on the number of adjudicated delinquent juveniles located in a YDC (which includes Level 3 community-based commitments) on June 30th of each fiscal year provided.