

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

JUVENILE DELINQUENT POPULATION PROJECTIONS FISCAL YEAR 2013 to FISCAL YEAR 2017

RELEASED: NOVEMBER 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 6,384 juveniles with a new delinquent disposition in FY 2012 (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.¹ The second part of the analysis examines the juveniles who were committed to a Youth Development Center² (YDC) as of July 1, 2012 – 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 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, 12% of the juveniles in this report were represented in the sample more than once.

² 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 admissions³ (through Level 3 commitments or revocations of probation or post-release 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 2012):

- *Growth Rates:* The projections assume no growth for any years of the five-year projection period. This assumption of the growth in the delinquent dispositions is 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 increase at an average annual rate of 0.7% over the next five years.⁴ Although the youth population has been growing and is projected to continue to grow, recent data show declining trends in juvenile crime.⁵

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

⁴ Source: www.demog.state.nc.us (2012).

⁵ There has been a decline in the rate of delinquent complaints since the late 1990s. In FY 2008 the rate of delinquent complaints was 33 per 1,000 juveniles compared to a rate of 26 in FY 2012. (Source: DJJ.) In addition, the State Bureau of Investigation reports that from CY 2007 to CY 2011, there was a 25% drop in overall arrests for index crimes committed by juveniles under the age of 16. (Source: *Crime in North Carolina-2011 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.) After a steady decline from CY 2007 to CY 2010 in criminal complaints (Class A-I felonies and Class A1-3 misdemeanors), criminal complaints increased 1% from CY 2010 to CY 2011. (Source: *DJJ 2011 Annual Report*.)

- *Level 3 Dispositions:* In FY 2012, 2% of juveniles adjudicated delinquent received a Level 3 (or YDC commitment) with an average estimated length of stay of 13.0 months. Over the projection period, the rate of Level 3 dispositions for juveniles adjudicated delinquent is assumed to match the rate found from FY 2012.
- *YDC Length of Stay:* The YDC average length of stay was 16.6 months for juveniles adjudicated delinquent for a violent offense, 12.1 months for juveniles adjudicated delinquent for a serious offense, and 7.1 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 10.6 months. The YDC average length of stay is assumed to match the average length of stay by offense classification for juveniles released during FY 2012.
- *YDC Commitments:* In FY 2012, 45% of all YDC commitments (or Level 3 dispositions) resulted from a new delinquent complaint, 43% from a technical revocation of probation, and 12% from a technical revocation of post-release supervision. It is assumed that the distribution of YDC commitments that resulted from a new Level 3 disposition and that resulted from a technical revocation of probation or a technical revocation of post-release supervision will match the distribution during FY 2012. 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 YDC for a technical violation was 5 months.
- *Behavioral and/or Policy Changes:* The five-year projections assume no change in judicial or prosecutorial behavior. In addition, this projection does not incorporate any potential increases or decreases in the YDC population from budgetary changes or from policy-driven changes implemented by DJJ and/or other agencies that provide services for juveniles in the recent past because there are no empirical data to estimate the potential impact of such decisions.

FY 2012 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 6,384 dispositions, most were for misdemeanor offenses (81.3%). Of the dispositions for felony offenses (n=1,196), most were for serious offenses (n=1,046, or 87%).

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	150 (100.0%)	0 (0.0%)	150 (2.4%)
SERIOUS Class F-I felonies Class A1 misdemeanors	1,046 (66.2%)	533 (33.8%)	1,579 (24.7%)
MINOR Class 1, 2, 3 misdemeanors	0 (0.0%)	4,655 (100.0%)	4,655 (72.9%)
TOTAL	1,196 (18.7%)	5,188 (81.3%)	6,384 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2012 Disposition Simulation Data

Table 3 displays the distribution of the 6,384 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 2012, 2.4% were adjudicated for a violent offense, 24.7% were adjudicated for a serious offense, and 72.9% were adjudicated for a minor offense. Further, 72.6% of the dispositions involved a juvenile with a low delinquency history level, 14.8% involved a juvenile with a medium delinquency history level, and 12.6% involved a juvenile with a high delinquency level. Of the 6,384 juveniles with a new delinquent disposition, more than half (n=3,578) 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 2012 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 2.1% of the cases, ordered Level 2 (Intermediate) dispositions in 33.8% of the cases, and ordered the remaining 64.1% of the cases to Level 1 (Community) dispositions. Of the 6,384 juveniles with a new delinquent disposition, over half (n=3,623) involved a juvenile adjudicated for a minor offense who received a Level 1 (Community) 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	90 (60.0%)	22 (14.7%)	38 (25.3%)	150 (2.4%)
SERIOUS Class F-I felonies Class A1 misdemeanors	964 (61.0%)	257 (16.3%)	358 (22.7%)	1,579 (24.7%)
MINOR Class 1, 2, 3 misdemeanors	3,578 (76.9%)	667 (14.3%)	410 (8.8%)	4,655 (72.9%)
TOTAL	4,632 (72.6%)	946 (14.8%)	806 (12.6%)	6,384 (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 (2.7%)	108 (72.0%)	38 (25.3%)	150 (2.4%)
SERIOUS Class F-I felonies Class A1 misdemeanors	466 (29.5%)	1,031 (65.3%)	82 (5.2%)	1,579 (24.7%)
MINOR Class 1, 2, 3 misdemeanors	3,623 (77.8%)	1,020 (21.9%)	12 (0.3 %)	4,655 (72.9%)
TOTAL	4,093 (64.1%)	2,159 (33.8%)	132 (2.1%)	6,384 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2012 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: 4 (4.4%) Level 2: 80 (88.9%) Level 3: 6 (6.7%) n = 90	<u>Level 3</u> Level 1: 0 (0.0%) Level 2: 13 (59.1%) Level 3: 9 (40.9%) n = 22	<u>Level 3</u> Level 1: 0 (0.0%) Level 2: 15 (39.5%) Level 3: 23 (60.5%) n = 38	Level 1: 4 (2.7%) Level 2: 108 (72.0%) Level 3: 38 (25.3%) n = 150 (2.4%)
SERIOUS Class F-I felonies Class A1 misdemeanors	<u>Level 1/Level 2</u> Level 1: 436 (45.2%) Level 2: 527 (54.7%) Level 3: 1 (0.1%) n = 964	<u>Level 2</u> Level 1: 29 (11.3%) Level 2: 223 (86.8%) Level 3: 5 (1.9%) n = 257	<u>Level 2/Level 3</u> Level 1: 1 (0.3%) Level 2: 281 (78.5%) Level 3: 76 (21.2%) n = 358	Level 1: 466 (29.5%) Level 2: 1,031 (65.3%) Level 3: 82 (5.2%) n = 1,579 (24.7%)
MINOR Class 1, 2, 3 misdemeanors	<u>Level 1</u> Level 1: 3,489 (97.5%) Level 2: 89 (2.5%) Level 3: 0 (0.0%) n = 3,578	<u>Level 1/Level 2</u> Level 1: 122 (18.3%) Level 2: 544 (81.6%) Level 3: 1 (0.1%) n = 667	<u>Level 2</u> Level 1: 12 (2.9%) Level 2: 387 (94.4%) Level 3: 11 (2.7%) n = 410	Level 1: 3,623 (77.8%) Level 2: 1,020 (21.9%) Level 3: 12 (0.3%) n = 4,655 (72.9%)
TOTAL	Level 1: 3,929 (84.8%) Level 2: 696 (15.0%) Level 3: 7 (0.2%) n = 4,632 (72.6%)	Level 1: 151 (16.0%) Level 2: 780 (82.4%) Level 3: 15 (1.6%) n = 946 (14.8%)	Level 1: 13 (1.6%) Level 2: 683 (84.7%) Level 3: 110 (13.7%) n = 806 (12.6%)	Level 1: 4,093 (64.1%) Level 2: 2,159 (33.8%) Level 3: 132 (2.1%) n = 6,384 (100.0%)

SOURCE: NC Sentencing and Policy Advisory Commission, FY 2012 Disposition Simulation Data

NOTE: In FY 2012, there were 181 juveniles (or 2.8%) 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.

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YDC COMMITTED POPULATION

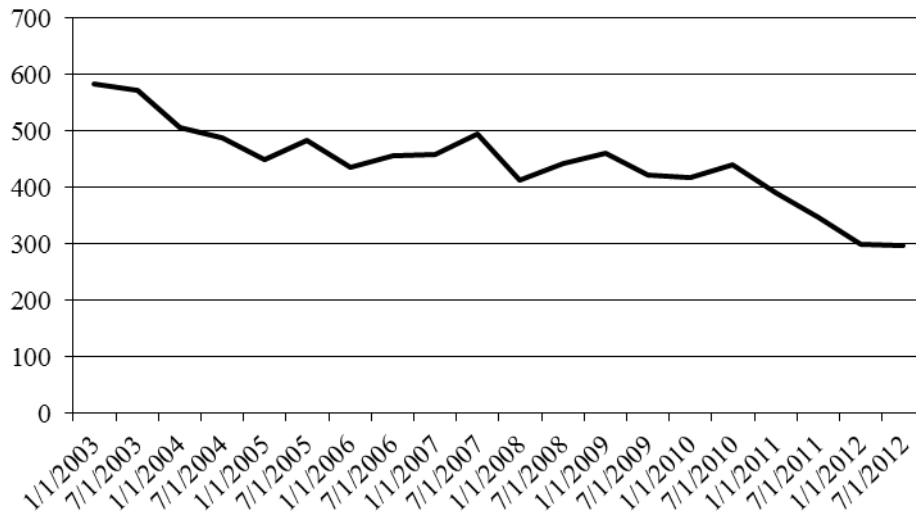
YDC Population on July 1, 2012

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, 2012, 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, 2012, there were 295 juveniles committed to a YDC. Seventy-eight percent of the juveniles had a high delinquency history level. The majority (88.5%) of the committed juveniles were adjudicated with a felony as their most serious offense; 71.2% were adjudicated for a serious offense, 26.8% were adjudicated for a violent offense, and 2.0% were adjudicated for a minor offense. Of the juveniles committed to a YDC on July 1, 2012, 48.5% were committed to a YDC due to a technical revocation of probation, 41.7% were committed to a YDC due to a new crime, and 9.8% were committed to a YDC due to a technical revocation of post-release supervision.

Historical YDC Population Trends

The YDC population has declined since January 2003 (see Figure 1). The next section discusses the factors that contribute to this trend.⁶

FIGURE 1
YOUTH DEVELOPMENT CENTER (YDC) POPULATION TRENDS
JANUARY 2003 – JULY 2012



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

YDC ADMISSIONS,⁷ 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 YDCs include court admissions (for new offenses), technical probation revocation admissions, and technical post-release supervision revocation admissions. From FY

⁶ As intended by the Juvenile Justice Reform Act of 1998, the YDC population has declined since its enactment. Much of the initial decrease can be attributed to the fact that juveniles adjudicated delinquent for a Class 1, Class 2, or Class 3 misdemeanor (a minor offense), except under certain rare conditions, cannot be committed to a YDC. Pre-reform juveniles adjudicated delinquent with a misdemeanor accounted for 50% of the annual admissions to YDCs. By FY 2012, juveniles adjudicated of a minor offense who were admitted to a YDC accounted for 4% of annual admissions.

⁷ As previously mentioned, the term YDC admission refers to a Level 3 disposition or YDC commitment (whether on-campus or off-campus).

2003 to FY 2012, there has been a 50% decrease in the number of YDC admissions. (See Table 6.) More recently, YDC admissions decreased 12% from FY 2011 to FY 2012, continuing the overall decreasing trend in the number of YDC admissions. In FY 2012, there was an average of 24 admissions per month.

YDC Releases

As the YDC admissions decreased from FY 2003 to FY 2012, YDC releases also decreased (48%). (See Table 6.) In general, releases exceeded admissions for most of those years. From FY 2011 to FY 2012, there was a 28% decrease in the number of YDC releases. In FY 2012, the average number of releases per month was 25.

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 given their influence on 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
2003	569	--	47	577	--	48
2004	469	-17.6	39	548	-5.0	46
2005	473	0.9	39	470	-14.2	39
2006	448	-5.3	37	479	1.9	40
2007	470	4.9	39	420	-12.3	35
2008	450	-4.3	38	499	18.8	42
2009	401	-10.9	33	422	-15.4	35
2010	395	-1.5	33	378	-10.4	32
2011	325	-17.7	27	418	10.6	35
2012	285	-12.3	24	303	-27.5	25

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 6.6%). However, 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 76% of YDC admissions in FY 2012) the average length of stay was 12.1 months, which represents a slight decrease from FY 2011. The average length of stay for juveniles adjudicated for a violent offense increased from FY 2008 (14.2 months) to FY 2011 (16.7 months), but remained stable from FY 2011 to FY 2012 (16.7 months and 16.6 months respectively). For juveniles adjudicated delinquent of a minor offense (who represented only 4% of YDC admissions in FY 2012), the average length of stay has fluctuated over the past five fiscal years. After an increase in the average length of stay in FY 2010 and FY 2011, there has been a decrease in the YDC length of stay for this group, with an average of 7.1 months in FY 2012.

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

Juveniles Adjudicated of a:	Fiscal Year					% Change	
	2008	2009	2010	2011	2012	FY 2011 to FY 2012	FY 2008 to FY 2012
Violent Offense	14.2	14.9	15.5	16.7	16.6	-0.6	16.9
Serious Offense	11.9	11.2	12.7	12.3	12.1	-1.6	1.7
Minor Offense	8.0	6.4	8.7	9.8	7.1	-27.6	-11.3
Overall	12.2	11.7	13.2	13.3	13.0	-2.3	6.6

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

PROJECTED JUVENILE DELINQUENT POPULATIONS⁸

Table 8 shows the projected Level 3 (YDC) resource needs over the five-year projection period.⁹ Level 3 resource needs are projected to remain stable over the period, with a projected need for 276 YDC beds by June 2013 and 279 YDC beds by June 2017.¹⁰ The YDC population was 295 on July 1, 2012. On November 1, 2012, the YDC population was 269.¹¹

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

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

Fiscal Year	Current Projection as of June 30
2013	276
2014	278
2015	279
2016	278
2017	279

SOURCE: NC Sentencing and Policy Advisory Commission,
FY 2012 Disposition Simulation Data

⁸ YDC population figures (projected and actual) include juveniles on-campus and off-campus (e.g., home visit, community commitment, hospitalization, escape).

⁹ Table 8 does not present available capacity for Level 3 dispositional resources.

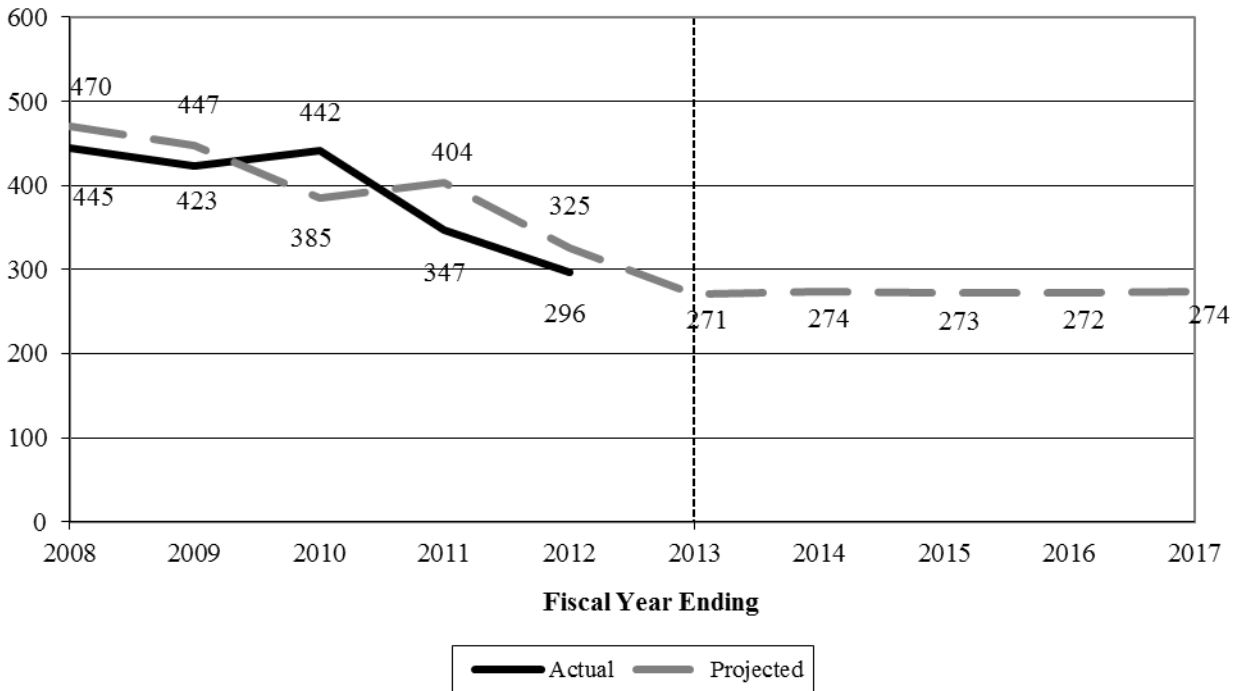
¹⁰ Of the projected YDC beds needed for each year of the five year projections, 90% are for males.

¹¹ Source: DJJ's *Committed Youth Report* (produced on November 1, 2012)

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 previous five projections. The difference between the projected Level 3 (or YDC) population and the actual YDC population ranged between 24 to 57 beds (or between 6% and 16%). 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 juveniles adjudicated delinquent with a Level 3 disposition (or YDC commitment) on June 30th of each fiscal year provided. This number includes Level 3 community-based commitments.