

NORTH CAROLINA SENTENCING AND POLICY ADVISORY COMMISSION

**JUVENILE DELINQUENT POPULATION PROJECTIONS
*FISCAL YEAR 2003/04 to FISCAL YEAR 2007/08***

**Prepared in Conjunction with
The Department of Juvenile Justice and Delinquency Prevention**

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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 following analysis is based on 6,973 CY 2003 juvenile delinquent dispositions extracted from the Department of Juvenile Justice and Delinquency Prevention's (DJJDP) Juvenile Risk Assessment database.¹

ASSUMPTIONS

- The projections assume no growth in the rate of delinquent adjudications the first year of the projection and a one-percent annual growth rate in the remaining years of the projection. This estimate is based on projections for North Carolina's youth population and several juvenile justice indicators. Population projections prepared by the State of North Carolina's Demographics unit show that while the juvenile population (age 10 – 17) in North Carolina is projected to increase, it is expected to grow at a decreasing rate over the five-year projection period.² Based on these projections, the average annual increase in the youth population over the next five-year period is 1.2%. Although the youth population has been growing and is projected to continue to grow, recent data show declining trends in juvenile crime and delinquent complaints. For example, DJJDP's juvenile justice indicators³ show a 1.8% decrease in decisions for delinquent complaints from FY 2000/01 to FY 2001/02 and a 1.7% decrease from FY 2001/02 to FY 2002/03. Looking at juvenile crime as measured by the rate of delinquent complaints and delinquent juveniles, overall there has been a slight decline in both rates since FY 1996/97. For example, in FY 1996/97 the rate of delinquent complaints per 1,000 juveniles was 54 compared to a rate of 44.4 in FY 2001/02. Similarly, in FY 1996/97, the rate of delinquent juveniles was 32.8 per 1,000 juveniles compared to a rate of 28.6 in FY 2001/02. In addition, the State Bureau of Investigation reports that from 1998 to 2002, there was a 9% drop in total index crime with a 2% drop in violent index crime

¹ There may be some degree of under-reporting in the Risk Assessment database. For example, if a juvenile is adjudicated delinquent more than once within a short period of time, the risk assessment is not re-administered. In this instance, the information about subsequent adjudications and dispositions would not be entered into the database.

² Youth population projections show a 1.4% increase in 2004; a 1.4% increase in 2005; a 1.2% increase in 2006; a 1.2% increase in 2007; and, a 1.1% increase in 2008. (Source: www.demog.state.nc.us.)

³ Source: www.juvjus.state.nc.us/statistics/statistics.htm

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committed by juveniles under the age of 16.⁴ Over the same period, there has been a drop in the rate of complaints for serious (non-divertible) offenses.⁵ In FY 1997/98, the rate of non-divertible complaints was 2.2 per 1,000 juveniles and has declined to 1.6 per 1,000 juveniles in FY 2001/02.

- 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 (63.6%, 32.9%, and 3.5%, respectively) will match the rates during CY 2003 for juveniles adjudicated delinquent.
- Youth development center (YDC) length of stay was estimated using DJJDP's Juvenile Tracking database. Average length of stay by offense level was determined by releases during CY 2003. All juveniles released in this period were adjudicated delinquent under the "new law." The average length of stay was 22.4 months for juveniles adjudicated delinquent for a violent offense, 10.1 months for juveniles adjudicated delinquent for a serious offense, and 6.4 months for juveniles adjudicated delinquent for a minor offense. The average length of stay for juveniles committed to a YDC due to a technical violation of post-release supervision was 10 months.
- Over the projection period, the proportion of admissions to YDCs resulting from technical violations of probation will match the proportion found during CY 2003 (36%).

PROJECTED JUVENILE DELINQUENT POPULATIONS

Producing the final resource projections is a two-stage process: 1) the "reality check" stage and 2) the projection stage. In the "reality check" stage, the reliability of the data (*e.g.*, commitment rates, revocation rates, length of stay, etc.) is tested using the model to produce the current admissions to YDCs. In essence, the model is used to reproduce today's reality. Once the model successfully approximates current YDC admissions, the second stage of the process begins. In the second stage, growth rates in the number of juvenile delinquent adjudications are added to the model, producing the five-year projection (*see* Table 1).⁶

Changes from Previous Projections

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. Changes in the 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

⁴ *Crime in North Carolina-2002 Annual Summary Report of Uniform Crime Reporting Data.*, NC Department of Justice, State Bureau of Investigation.

⁵ Non-divertible offenses include murder, first degree rape or sexual offense, second degree rape or sexual offense, arson, any violation of Article 5, Chapter 90 (controlled substances) of NC General Statutes that would constitute a felony if committed by an adult, first degree burglary, crime against nature, and any felony which involves the willful infliction of serious bodily injury upon another or which was committed by use of a deadly weapon.

⁶ Table 1 does not present available capacity for these dispositional resources.

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impact the accuracy of the projections. Since current data indicate that there continue to be fluctuations in these three factors, it was necessary to revise last year's projections.

The following section highlights YDC statistics from the past four years showing the year-to-year variations in several key components used in the simulation model.

- ***YDC Admissions*** – Since CY 2000, there has been a marked decrease in the number of YDC admissions. (See Figure 1.) A total of 958 juveniles were committed to YDCs in CY 2000 compared to a total of 669 committed in CY 2001. This represents a 30% decline in admissions in one year. Total admissions to YDC decreased from 669 admissions in CY 2001 to 605 admissions in CY 2002, representing an eight-percent decline. Current data indicate that admissions to YDC continued to decline in CY 2003 with a total of 479 admissions. This represents about a 27% decline from CY 2002. As intended by the Juvenile Justice Reform Act of 1998, much of the 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, can not be committed to a YDC. Pre-reform, misdemeanor offenders accounted for about 40% of annual admissions to YDCs. In FY 2001/02, misdemeanor offenders accounted for 14% of YDC admissions. In FY 2002/03, misdemeanor offenders accounted for about 9% of YDC admissions. In CY 2003, misdemeanor offenders accounted for about 7% of YDC admissions.
- ***YDC Terminations*** – Over the last three years terminations have exceeded admissions. (See Figure 2.) In CY 2000, YDCs averaged about the same number of monthly admissions as terminations. However, in CY 2001, there was an average of 73 terminations per month compared to an average of 55 admissions per month. In CY 2002 there was an average of 57 terminations per month compared to an average of 50 admissions per month. And most recently, in CY 2003 there was an average of 46 terminations per month compared to an average of 40 admissions per month. While CY 2003 data appear to show that there may be some stabilization between admissions and terminations, average terminations per month accelerated and average admissions per month decelerated in the last six months of CY 2003. There was an average of 50 terminations per month compared to an average of 37 admissions per month during this period.
- ***YDC Length of Stay*** – There has been little consistency in average length of stay in the recent past. For example, the average length of stay for juveniles adjudicated delinquent for a violent offense was 22.7 months in FY 1999/00; 26.8 months in CY 2001; 24.9 months in FY 2001/02; and, 23.3 months in FY 2002/03. For juveniles adjudicated delinquent for a serious offense, the average length of stay in FY 1999/00 was 9.1 months, increasing to 12.5 months in CY 2001, decreasing slightly to 12.1 months in FY 2001/02 and further decreasing in FY 2002/03 to 10.4 months. For juveniles adjudicated delinquent for a minor offense, average length of stay has been steadily increasing from 4.4 months in FY 1999/00 to 6.5 months in CY 2001 to 7 months in FY 2001/02 to 9.1 months in FY 2002/03. It is important to note that in previous projections, the estimated length of stay was based on YDC terminations in the preceding fiscal year. However,

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because of recent changes in YDC terminations in the last six months of CY 2003 that affected the estimated length of stay, this year's projection uses estimated length of stay based on terminations during CY 2003.

- ***YDC Resident Population*** – The resident population or “stock” is the number of juveniles residing in YDCs at the beginning of the simulation period. “Stock” population is an important component of the model as it represents the starting point of the projection. The model simulates releases for the “stock” population while simultaneously processing YDC admissions to ultimately produce the population projections. As a result of the recent trend showing terminations outpacing admissions, the resident population at the beginning of the past three projection periods has declined, resulting in significant revisions to the projections each year. For example, the YDC resident population on July 1, 2000 was 919; it was 665 on January 1, 2002; it was 601 on July 1, 2002; and, it was 579 on July 1, 2003. As of January 1, 2004, the YDC population had further declined to 506. In order to reflect the most recent YDC policies and practices, the resident population on January 1, 2004 was used to produce the updated projections.⁷ (*See Figure 3.*)

To the extent that these fluctuations will continue, the projections for each of the dispositional options will have to be revised.

DESCRIPTIVE INFORMATION

Table 2 shows the distribution of the 6,973 delinquent cases by the offense level of the most serious adjudicated offense and the delinquency history level of the juvenile adjudicated. The number of delinquent cases has been declining since FY 2001/02.⁸ While the number of delinquent cases continued to decrease in CY 2003, the percentage of cases with a low delinquency history level continued to increase from 64.2% in FY 2000/01 to 69.8% in FY 2001/02 to 71.9% in FY 2002/03 to 72.7% in CY 2003. A possible explanation for these findings is an increase in diversions that reduces the number of juveniles adjudicated delinquent and the number of delinquency history points accrued. Table 2 also shows that the majority of cases (n=3,586 or 51%) involved a juvenile with a low delinquency history level adjudicated for a minor offense (Class 1, 2, or 3 misdemeanor).

In applying the dispositional chart, the court imposed commitment to a YDC in 3.5% of the cases, ordered Level 2 (Intermediate) dispositions in 32.9% of the cases, and ordered the remaining 63.6% of the cases to Level 1 (Community) dispositions. (*See Table 3.*)

⁷ For the projections for FY 2001/02 – FY 2005/06 released in May 2002, it was also necessary to depart from the standard process of producing the projections in order to capture changes in policies and practices that occurred in the first year of the projections. Basing the projections on a YDC resident population on July 1, 2001 of 840 yielded projections that were not supported by the “reality” check. As a result, the projections were revised to use the YDC resident population on January 1, 2002 of 665.

⁸ The number of delinquent cases had been holding steady over the past few years with 8,140 cases in FY 1998/99, 8,319 cases in FY 1999/00, 7,742 cases in FY 2000/01 and 7,909 cases in FY 2001/02. The number of delinquent cases FY 1998/99 – FY 2000/01 was estimated using sample data.

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TABLE 1

JUVENILES ADJUDICATED DELINQUENT

RESOURCE PROJECTIONS BY DISPOSITION LEVEL: FY 2004 – 2008

FISCAL YEAR ENDING	LEVEL 1: COMMUNITY	LEVEL 2: INTERMEDIATE	LEVEL 3: COMMITMENT
2004	4,432	2,296	505
2005	4,476	2,319	514
2006	4,520	2,342	507
2007	4,566	2,365	518
2008	4,612	2,389	527

SOURCE: CY 2003 Juvenile Justice Simulation data

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TABLE 2

JUVENILES ADJUDICATED DELINQUENT

DISTRIBUTION OF CASES BY THE DISPOSITIONAL CHART

OFFENSE LEVEL	DELINQUENCY HISTORY LEVEL			TOTAL
	LOW 0 – 1 pt	MEDIUM 2 – 3 pts	HIGH 4+ pts	
VIOLENT	135 (70.3%)	19 (7.3%)	43 (22.4%)	192 (2.8%)
SERIOUS	1,346 (66.3%)	314 (15.5%)	370 (18.2%)	2,030 (29.1%)
MINOR	3,586 (75.5%)	661 (13.9%)	504 (10.6%)	4,751 (68.1%)
TOTAL	5,067 (72.7%)	989 (14.2%)	917 (13.1%)	6,973 (100.0%)

SOURCE: Department of Juvenile Justice and Delinquency Prevention's Risk Assessment Data CY 2003 (n=6,973).

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TABLE 3

JUVENILES ADJUDICATED DELINQUENT

DISTRIBUTION OF CASES BY OFFENSE LEVEL AND DISPOSITION LEVEL

OFFENSE LEVEL	DISPOSITION LEVEL			TOTAL
	Level 1: Community	Level 2: Intermediate	Level 3: Commitment	
VIOLENT	12 (6.2%)	120 (62.5%)	60 (31.3%)	192 (2.8%)
SERIOUS	770 (37.9%)	1,109 (54.6%)	151 (7.5%)	2,030 (29.1%)
MINOR	3,649 (76.8%)	1,067 (22.5%)	35 (0.7%)	4,751 (68.1%)
TOTAL	4,431 (63.6%)	2,296 (32.9%)	246 (3.5%)	6,973 (100.0%)

SOURCE: Department of Juvenile Justice and Delinquency Prevention's Risk Assessment Data
CY 2003 (n=6,973).