

FALL 2003 Colorado Division of Criminal Justice

# Adult Prison and Parole Population Projections

# Juvenile Commitment and Parole Population Projections

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# Preface

The Colorado Division of Criminal Justice (DCJ) is mandated, pursuant to 24-33.5-503(m) C.R.S. to prepare population projections for the Director of Legislative Council and the General Assembly. This report presents the Fall 2003 projections of the Department of Corrections' incarcerated and parole populations and the commitment and parole populations for the Department of Human Services, Division of Youth Corrections.

We are grateful for the invaluable assistance provided by Kristi Rosten at the Colorado Department of Corrections (CDOC) and Edward Wensuc at the Division of Youth Corrections (DYC). The population projections would not be possible without the hard work of these professionals.

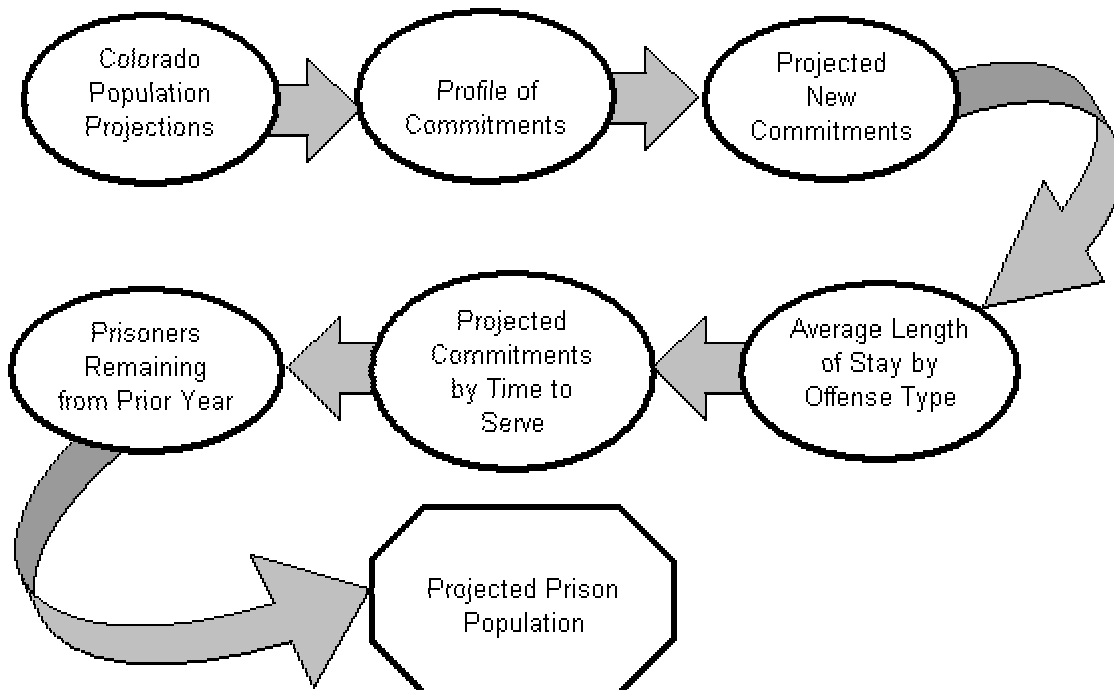


# Adult Projection Model

The Division of Criminal Justice prison population projection (PPP) model uses several data sources to develop projections. Essential data elements in the model come from the Department of Corrections (DOC), the Department of Local Affairs (DOLA) and the Criminal Justice Database (collected, compiled and analyzed by the Division of Criminal Justice's [DCJ] Office of Research and Statistics [ORS]).

The general premise of the DCJ projection model is that state population and aged-based prison incarceration rates are the primary determinants of new prison commitments. Further, when new commitments are combined with estimates of average length of stay (ALOS) in prison, this calculation produces a reliable forecast of the future prison population. Figure 1 below provides a simplified graphic representation of the prison population model. The fundamental components of the model are described in greater detail below.

Figure 1. Prison Population Model

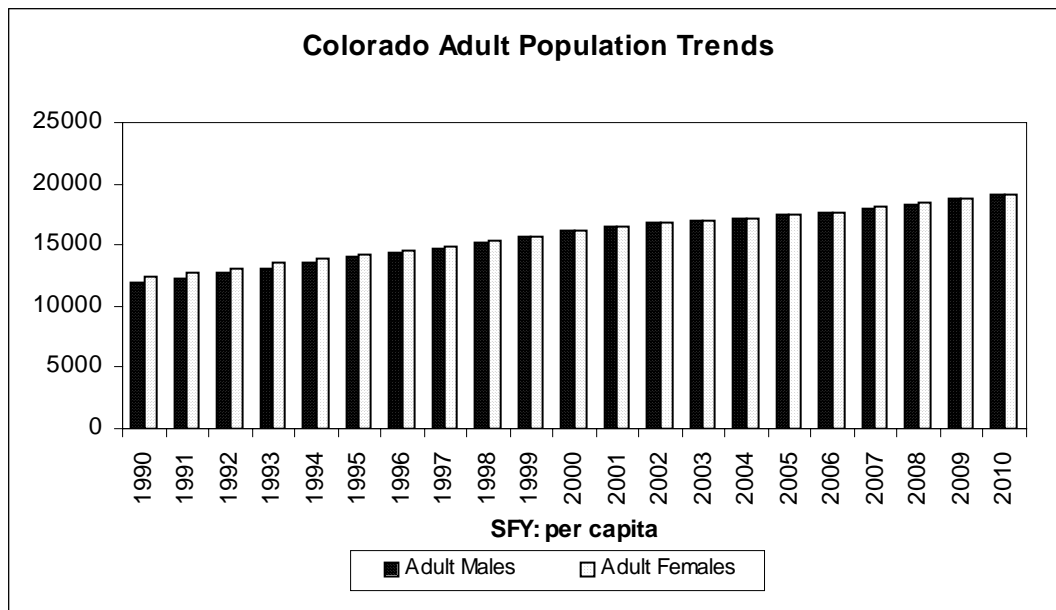


## PROJECTING NEW PRISON COMMITMENTS

### State Population Projections

The Division of Criminal Justice uses the Department of Local Affairs’s state population projections as the starting point for determining the prison population. Each year the Department of Local Affairs, through the Demographer’s Office in the Division of Local Government, estimates population projections for the state. Figure 2 below displays the actual and projected state population growth for years from 1990 to 2010. Between 1990 and 2000, the state male population grew at the average rate of 3.08 percent annually, while the female population grew at an average rate of 2.62 percent. **However, between 2001 and 2010, these rates are expected to decline substantially.** The male population is projected to grow at 1.70 percent annually, while the projected rate of growth for the female population is 1.75 percent (see Figure 3).

Figure 2. Colorado State Population Projections



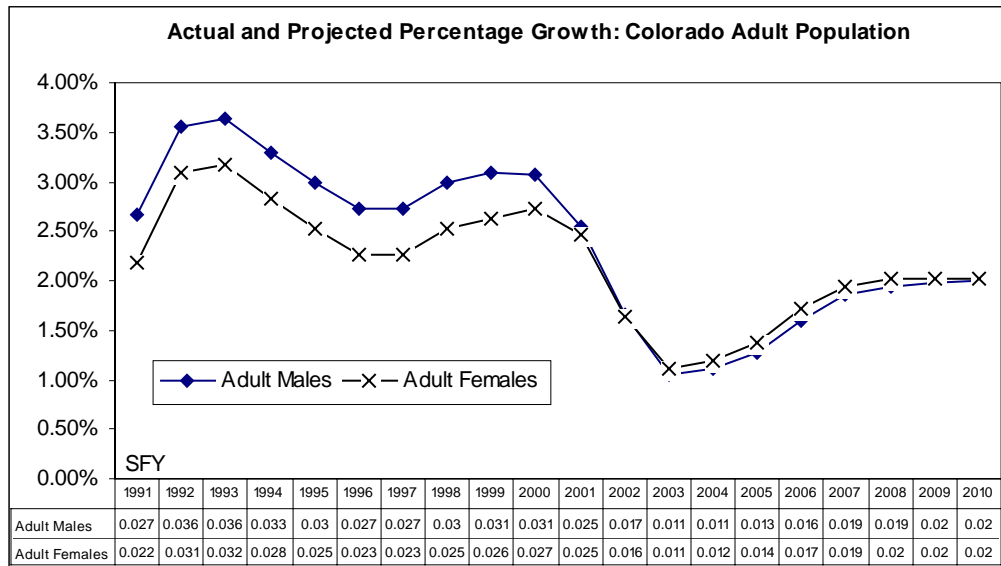
The Demographer’s Office produces these projections by utilizing an economic-demographic system that models the intra- and interrelations of demographic and economic change at the county, region and state level.<sup>1</sup> The Demographer’s Office describes the statewide population projections as a three-step process.

<sup>1</sup> Source Internet: [www.dlg.oem2.state.co.us/demog/projprog.htm](http://www.dlg.oem2.state.co.us/demog/projprog.htm).



- Step 1:** An economic forecast is developed using the Center for Business and Economic Development (CBED) Model.<sup>2</sup> The underlying assumption is that the level of economic activity creates a labor force demand. If the labor force demand exceeds the existing population, then there will be a “positive” net migration. Likewise, if the labor force demand is lower than the existing population, then there will be a “negative” net migration. The theory is that the population will expand or shrink to accommodate the labor need.
- Step 2:** The levels of net migrations (as calculated in Step 1) are used in the demographic model to create a *population forecast*. The demographic model is built upon the simple premise that **Population = Current Population + Births – Deaths + Net Migration**. These population forecasts are then broken down by sex and age and are compared to labor force participation rates to produce an initial forecast of the labor force (supply).
- Step 3:** This demographically produced labor force supply (Step 2) is compared with the labor force demand generated by the economic model (Step 1). It is assumed that the demographic model accurately forecasts labor supply. In the event that there are discrepancies between the two models, the economic model is adjusted to bring the labor force demand closer to labor force supply.

Figure 3. Colorado State Population Actual and Projected Growth



<sup>2</sup> CBED is affiliated with Regis University.

By incorporating the Department of Local Affairs' population forecasts, DCJ's prison projections also include the numerous economic and demographic trends associated with those forecasts. Therefore, any weakness associated with the DOLA model is also reflected in DCJ's prison projection model.

### **Age and Offense Profile of Prison Commitments**

The Department of Corrections collects a number of demographic and conviction crime variables on inmates who are sentenced and committed to prison. Age, gender and offense are three of the variables of particular interest in prison population projections. When combined annual state population data, these two variables determine the **incarceration rate** for each **conviction crime category** by age.<sup>3</sup>

### **Projected Prison Commitments by Conviction Offense Type**

This aspect of the model is a calculation using the previously discussed components of the prison projection model (i.e., state population projections and age and crime profile of commitments). Based on current incarceration rates and the projected state population, the model predicts the number of new commitments by crime type and age for the forecasted period.

This is an important component of the model because it incorporates demographic shifts that can have a significant impact on prison population. For example, historically incarceration rates for adults between the ages of 18 and 26 have been higher than other adult age categories. If the population of this age group is anticipated to increase, then the number of offenders committed to prison from this age group will likely increase.<sup>4</sup>

### **Average Length of Stay (ALOS) by Offense**

The Colorado Department of Corrections (DOC) also collects information about prisoners released from DOC during the previous year. Using this information, it is possible to calculate the average time an inmate is likely to actually serve in prison, based on conviction crime categories. Also, this component of the model incorporates historical changes or trends in the decision-making processes that impact inmates' lengths of stay. Decisions by criminal justice professionals can either increase or decrease the time an offender spends in prison. For example, if the parole board decides not to grant early releases to offenders convicted of a certain crime type, or if judges increase sentence

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<sup>3</sup> Incarceration rates are not to be confused with crime rates. Incarceration rates refer to the percentage of the population that is committed to a DOC facility. Crime rates refer to the percentage of the population that commits a particular offense per 100,000 individuals. It is possible to experience a situation where crime rates are declining yet incarceration rates are increasing

<sup>4</sup> However, there are exceptions to this assumption. For example, during the past five years, the number of teenagers committing homicide has decreased while the size of the adolescent population has increased.

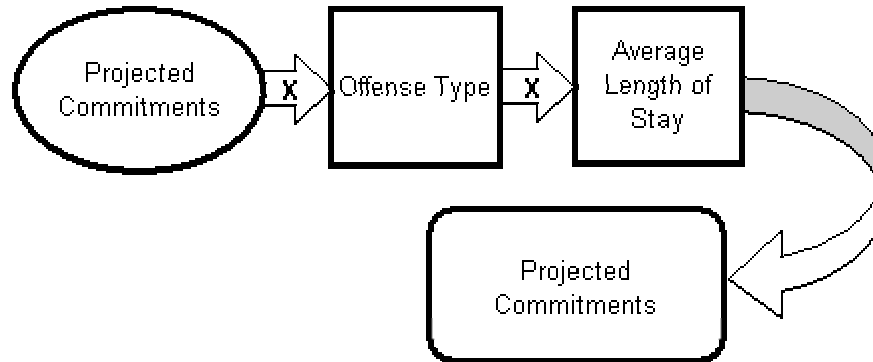
lengths, the average length of stay (ALOS) would reflect these decisions as evidenced by longer periods of incarceration.

It is important to note the difficulty in predicting how long inmates will remain incarcerated. Numerous variables influence the amount of time an individual will remain in prison: sentence length, offender behavior in prison, parole board decisions, sentencing legislation, prison policies, probation and parole revocation policies, and so on. Despite these limitations, ALOS estimates by conviction crime have historically been a key component of the DCJ's PPP model.<sup>5</sup>

### Projected Commitments by Time to Serve

The number of projected commitments by time to serve is computed by combining projected commitments with conviction crime and with average length of stay for that type of crime. This method, outlined in Figure 4, estimates the ALOS for the projected new commitment categories and calculates how long these new commitments will remain in prison. As the ALOS tables presented later in this report evidence, some new commitments will remain in prison for longer periods (e.g., homicides), while others will cycle through DOC relatively quickly (e.g., technical parole returns).

Figure 4. Projected Commitments By Time To Serve Calculation



<sup>5</sup> Averages by conviction crime types are more predictive than aggregating categories (i.e., one large category) because errors in multiple categories tend to counter-balance one another (assuming a normal distribution of data).

## **PROJECTING THE RELEASE OF REMAINING PRISONERS**

### **Prisoners Remaining from Previous Year**

The Department of Corrections also provides DCJ information regarding the number of prisoners remaining from the previous year. This information includes the number of prisoners incarcerated, the crime type under which these prisoners were committed, and the amount of time served and remaining time on their sentence. From this information, the model calculates when the current inmate population (also known as the 'stock population') is expected to cycle out of prison.

Once the expected termination dates for the existing population are determined, the remaining prisoners are added to the model. This final calculation results in the expected prison population at a given point in time. If new commitments increase at a rate higher than releases, then the prison population will grow. Likewise, if releases exceed new commitments, then prison populations will decrease.

## **SCENARIO BUILDING**

The ability to incorporate scenarios is an important component of the PPP model. Scenario building enables the model to respond to the changing environment of the criminal justice system. The following is a list of examples of actions that potentially impact the PPP model:

- New legislation
- Court decisions
- Changed prison-bed capacity
- Bureaucratic mandates
- Department policy directives and mandates
- Community initiatives

While DCJ attempts to take this information into account, many variables cannot be anticipated. Natural disasters, war on our soil, and broad-based policy decisions made after the projections are published will decrease the accuracy of the forecast.

## ASSUMPTIONS

The prison population projection figures are based on several assumptions. The more significant assumptions are outlined below.

- The data provided by the Department of Corrections accurately describe the number, characteristics, and trends of offenders committed to DOC facilities for state fiscal year 2003.
- Incarceration rates are predictable and stable over the projection period.
- The data provided by the Colorado Department of Local Affairs Demographer's Office accurately describe the current and projected trends for age and gender of Colorado's citizens between the years 2003 and 2010.
- Decision-makers in the adult criminal justice system will not change the way they use their discretion, except in explicitly stated ways that can be incorporated into future iterations of the model.
- The Colorado General Assembly will not pass any legislation during the projection period that impacts the way adults are processed or defined for commitment into DOC facilities.
- Average length of stay (ALOS) in a DOC facility will remain constant throughout the projection period.
- Increased capacity of DOC beds will increase the number of new commitments by reducing the number of offenders placed in community supervision programs.
- The General Assembly will not allocate additional resources to community supervision corrections programs. Increased funding to these programs will likely reduce commitments
- No catastrophic event such as war or disease will occur during the projection period.

## HISTORICAL OVERVIEW<sup>6</sup>

- In 1979, H.B. 1589 changed sentences from indeterminate to determinate terms and made parole mandatory at one-half (the mid-point) the sentence served.
- In 1981, H.B. 1156 required that the courts sentence offenders above the maximum of the presumptive range for “crimes of violence” as well as those crimes committed with aggravating circumstances.
- In 1985, H.B. 1320 doubled the maximum penalties of the presumptive ranges for all felony classes and mandated that parole be granted at the discretion of the Parole Board. (As a result of this legislation, the average length of stay projected for new commitments nearly tripled from 20 months in 1980 to 57 months in 1989 and the inmate population more than doubled between 1985 and 1990.)
- In 1988, S.B. 148 changed the previous requirement of the courts to sentence above the maximum of the presumptive range to sentencing at least the mid-point of the presumptive range for “crimes of violence” and crime associated with aggravating circumstances. (An analysis of DCJ’s Criminal Justice Database indicated that judges continued to sentence well above the mid-point of the range for these crimes).
- In 1989 several class five felonies were lowered to a newly created felony class six with a presumptive penalty range of one to two years.
- In 1990, H.B. 1327 doubled the maximum amount of earned time that an offender is allowed to earn while in prison from five to ten days per month. In addition, parolees were allowed “earned time” awards that reduced time spent on parole. This legislation also applied earned time to the sentence discharge date as well as the parole eligibility date. (The effect of this law was that it shortened the length of stay for those offenders who did not parole but rather discharged their sentences from prison).

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<sup>6</sup> Source: Rosten, Kristi. Statistical Report, Fiscal Year 2002, Department of Corrections, pages 4-11.

- In 1990, S.B. 117 modified life sentences for first-degree felony convictions to “life without parole.” The previous parole eligibility occurred after 40 calendar years were served. A court decision later clarified the effective date of the life without parole sentences to be September 20, 1991.
- In 1993, H.B. 1302 reduced the presumptive ranges for certain felony class three through class six non-violent crimes. This legislation also added a split sentence, mandating a period of parole for all crimes following a prison sentence. This legislation also eliminated earned time awards while on parole. Sentencing for habitual offenders was also changed in 1993. H.B. 1302 revised the sentence for offenders who are convicted of a felony class 1, 2, 3, 4, or 5 and have been twice previously convicted of a felony to a term of three times the maximum of the presumptive range of the felony conviction. Habitual offenders who have been three times previously convicted of any felony will be sentenced to four times the maximum of the presumptive range of the felony conviction.
- In 1993, S.B. 9 established the Youthful Offender System (YOS) with 96 beds within the Department of Corrections. The legislation created a new adult sentencing provision for offenders between the ages of 14 and 18 years.
- In 1993, the Legislature appropriated a new 300-bed facility in Pueblo. Subsequently, an additional 180 beds were approved.
- In 1994, S.B. 196 created a new provision for offenders with a current conviction of any class one or two felony (or any class three felony that is defined as a crime of violence) and who were convicted of these same offenses twice earlier. This “three strikes” legislation requires these offenders be sentenced to a term of life imprisonment with parole eligibility in forty years.
- In 1994, the Legislature approved the construction of nearly 1,200 adult prison beds and 300 Youthful Offender System beds. Contract authority for 386 private pre-parole beds was authorized in addition to contracts or construction of minimum-security beds.
- In 1995, H.B. 1087 allowed “earned time” for certain non-violent offenders. (This legislation was enacted in part as a response to the projected parole population growth as part of H.B. 93-1302.)

- In 1996, H.B. 1005 broadened the criminal charges eligible for direct filings of juveniles as adults and possible sentencing to the Youthful Offender System.
- In 1996, the Legislature appropriated funding for 480 beds at the Trinidad Correctional Facility and the reconstruction and expansion of two existing facilities.
- House Bill 98-1160 applied to offenses occurring on or after July 1, 1998, mandating that every offender must complete a period of parole supervision after incarceration. A summary of the major provisions that apply to mandatory parole follows:
  - Offenders committing class 2, 3, 4 or 5 felonies or second or subsequent class 6 felonies, and who are revoked during the period of their mandatory parole, may serve a period up to the end of the mandatory parole period incarcerated. In such a case, one year of parole supervision must follow.
  - If revoked during the last six months of mandatory parole, intermediate sanctions including community corrections, home detention, community service or restitution programs are permitted, as is a re-incarceration period of up to twelve months.
  - If revoked during the one year of parole supervision, the offender may be re-incarcerated for a period not to exceed one year.
- House Bill 98-1156 concerns the lifetime supervision of certain sex offenders. A number of provisions in the bill address sentencing, parole terms, and conditions. Some of these provisions are summarized below:
  - For certain crimes (except those in the following two bullets), a sex offender shall receive an indeterminate term of at least the minimum of the presumptive range specified in 18-1-105 for the level of offense committed and a maximum of the sex offender's natural life.
  - For crimes of violence (defined in 16-11-309), a sex offender shall receive an indeterminate term of at least the midpoint in the presumptive range for the level of offense committed and a maximum of the sex offender's natural life.



- For sex offenders eligible for sentencing as a habitual sex offender against children (pursuant to 18-3-412), the sex offender shall receive an indeterminate term of at least the upper limit of the presumptive range for the level of offense committed and a maximum of the sex offender's natural life.
- The period of parole for any sex offender convicted of a class 4 felony shall be an indeterminate term of at least 10 years and a maximum of the remainder of the sex offender's natural life.
- The period of parole for any sex offender convicted of a class 2 or 3 felony shall be an indeterminate term of at least 20 years and a maximum of the sex offender's natural life.
- House Bill 1302 reduced the presumptive range for non-extraordinary risk crimes in felony classes three through six, which reduces the estimated sentence length for new commitments after 1994.
- Three bills specifically related to methamphetamine activity were passed during the 2003 legislative session. House Bills 03-1004 and 03-1169 are intended to protect children subjected to exposure to the manufacture of controlled substances by adding the charge of child abuse to existing drug charges. House Bill 03-1317 made it a crime to sell or distribute chemicals or supplies to individuals who wish to use them to manufacture a controlled substance.
- S.B. 252, passed in 2003, now allows the Parole Board to revoke an individual who was on parole for a nonviolent class 5 or class 6 felony, except in cases of menacing and unlawful sexual behavior, to a community corrections program or to a pre-parole release and revocation center for up to 180 days. This bill also allows CDOC to contract with community corrections programs for the placement of such parolees. Additionally, the bill limits the time a parolee can be revoked to the DOC to 180 days for a technical revocation, provided that the parolee was serving parole for a nonviolent offense. Finally, this bill repeals parts of Section 17-22.5-403 (9), C.R.S., requiring an additional year of parole if a parolee is revoked to prison for the remainder of the parole period.
- Senate Bill 03-318 reduces from a felony 3, 4 and 5 to a class 6 felony for offenders convicted of drug possession crimes involving one gram or less. The legislation is set for review and revocation in 2005.



# Findings: Adult Prison Population Projections

- **Colorado’s prison population rate increased 4.4 percent between FY02 and FY03, from 18,045 to 18,846.** This increase is 2.8 percent lower than last year’s growth of 7.2 percent. Recent data from the Department of Corrections indicate that the prison population has grown 2.4 percent since June 30, 2003 to 19,293 as of October 30, 2003.<sup>7</sup> Overall, DCJ projects a slower growth rate through FY09.
- **The Colorado adult prison population is expected to grow 30.9 percent between July 2003 and July 2009 – from 18,846 to 24,663 offenders.** This growth rate is approximately 3 percent lower than DCJ’s 2002 population projection. Figure 5 on the following page displays actual and predicted adult inmate prison populations.
- **Releases have now begun to outpace admissions in Colorado.** The growth in new admissions between FY2001 and FY2002 was 12.6 percent, seven times higher than the prior year (1.7). The growth in admissions between FY2002 and FY2003 was again smaller—at (.001 percent<sup>8</sup>) from 7,802 admissions in FY02 to 7,806 admissions in FY03. New court commitments increased 4.3 percent while parole returns decreased 6.1 percent. Meanwhile, releases increased 6.5 percent in 2003 from 6,554 in FY02 to 6,977 in FY03. Parole releases increased 19 percent and total discharges from incarceration decreased 22.3 percent.<sup>9</sup>
- **The number of new criminal cases filed between FY02 and FY03 increased 5.4 percent.** This is a lower rate of increase compared to the 6.2 percent growth last year.<sup>10</sup> Likewise, criminal filings were 4.7 percent lower in FY2001 compared to FY2000. Because of the lag time between filing and sentencing, this lower increase in filings in the last few years may result in fewer admissions to prison.
- **Technical parole violations declined 9.8 percent from 2,181 in FY 2002 to 1,986 in FY 2003.** New felony parole returns went from 410 in FY02 to 447 in FY03, an increase of 9.0 percent.

<sup>7</sup> Colorado Department of Corrections Adult Inmate Jurisdictional Population by Gender and Status Type, as documented November 30, 2003, for the Office of Planning and Analysis, November 6, 2003.

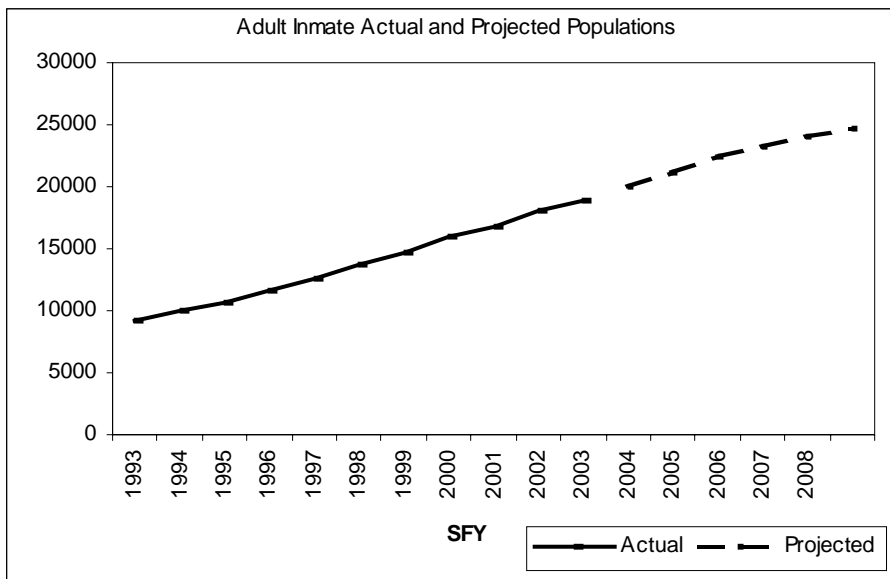
<sup>8</sup> Colorado Department of Corrections, Statistical Bulletin OPA 04-03, November 1, 2003, page 2.

<sup>9</sup> Colorado Department of Corrections, Statistical Bulletin OPA 04-03, November 1, 2003, page 2.

<sup>10</sup> [www.courts.state.co.us](http://www.courts.state.co.us), Colorado Judicial Branch, FY2003 Annual Statistical Report.

- **Estimated average length of stay in prison is lower than prior DCJ estimates. The estimate for offenders sentenced in FY 2002** was 43.2 months, compared to the estimated 41.2 months for those sentenced in FY 2003.<sup>11</sup>
  
- **The number of men in prison is expected to increase 30.1 percent between July 2003 and July 2009** – from 17,227 to 22,406. This is lower compared to last year’s projected increase of 34.8 percent.
  
- **The number of women in prison is expected to increase 39.5 percent between July 2003 and January 2009**—from 1,619 to 2,258. This is a significantly lower growth rate compared to an estimated increase of 47.4 percent reported by DCJ in 2002.

Figure 5. Inmate Actual and Projected Populations



<sup>12</sup>These numbers reflect an analytical cap of 480 months on length of stay.

Table 1 displays the projected total and gender-specific growth in the prison population for the period July 2003 to July 2009. Table 2 describes commitments by gender and type of commitment (regular, parole violation and parole violation for a new crime).

Table 1. Fall 2003 Adult Prison Population Projections By Gender

Year	Date	Men	Women	Total Prison Population
2003	<b>July*</b>	<b>17,227</b>	<b>1,619</b>	<b>18,846</b>
	October	17,503	1,696	19,199
2004	January	17,662	1,724	19,386
	April	17,927	1,747	19,674
	<b>July</b>	<b>18,172</b>	<b>1,789</b>	<b>19,961</b>
	October	18,421	1,829	20,250
2005	January	18,670	1,871	20,542
	April	18,919	1,911	20,830
	<b>July</b>	<b>19,168</b>	<b>1,963</b>	<b>21,131</b>
	October	19,448	1,989	21,437
2006	January	19,729	2,017	21,746
	April	20,009	2,043	22,052
	<b>July</b>	<b>20,289</b>	<b>2,077</b>	<b>22,366</b>
	October	20,481	2,089	22,570
2007	January	20,673	2,102	22,774
	April	20,865	2,113	22,978
	<b>July</b>	<b>21,057</b>	<b>2,129</b>	<b>23,185</b>
	October	21,236	2,142	23,378
2008	January	21,415	2,156	23,571
	April	21,594	2,169	23,764
	<b>July</b>	<b>21,774</b>	<b>2,187</b>	<b>23,960</b>
	October	21,932	2,203	24,135
2009	January	22,090	2,220	24,310
	April	22,248	2,237	24,484
	<b>July</b>	<b>22,406</b>	<b>2,258</b>	<b>24,663</b>

\* Actual Data

Table 2. Fall 2003 Prison Population Projections: Adult Incarcerated Population By Type And Gender

Date		Regular Commits		Parole Violators/ New Crime		Technical Violators		Combined		
SFY	Month	Male	Female	Male	Female	Male	Female	Male	Female	Total
2003	<b>July*</b>	<b>13,249</b>	<b>1,243</b>	<b>1,552</b>	<b>132</b>	<b>2,426</b>	<b>244</b>	<b>17,227</b>	<b>1,619</b>	<b>18,846</b>
	Oct*	13,428	1,301	1,569	130	2,506	265	17,503	1,696	19,199
2004	Jan	13,532	1,329	1,569	130	2,561	265	17,662	1,724	19,386
	April	13,673	1,341	1,595	135	2,659	270	17,927	1,747	19,674
	<b>July</b>	<b>13,814</b>	<b>1,374</b>	<b>1,622</b>	<b>141</b>	<b>2,736</b>	<b>274</b>	<b>18,172</b>	<b>1,789</b>	<b>19,961</b>
	Oct	13,960	1,405	1,626	141	2,835	283	18,421	1,829	20,250
2005	Jan	14,106	1,438	1,631	141	2,933	293	18,670	1,871	20,542
	April	14,252	1,468	1,635	141	3,032	302	18,919	1,911	20,830
	<b>July</b>	<b>14,398</b>	<b>1,508</b>	<b>1,640</b>	<b>141</b>	<b>3,131</b>	<b>313</b>	<b>19,168</b>	<b>1,963</b>	<b>21,131</b>
	Oct	14,613	1,526	1,643	142	3,193	321	19,448	1,989	21,437
2006	Jan	14,828	1,545	1,645	142	3,256	330	19,729	2,017	21,746
	April	15,043	1,563	1,648	142	3,318	338	20,009	2,043	22,052
	<b>July</b>	<b>15,258</b>	<b>1,586</b>	<b>1,650</b>	<b>142</b>	<b>3,381</b>	<b>349</b>	<b>20,289</b>	<b>2,077</b>	<b>22,366</b>
	Oct	15,417	1,594	1,663	144	3,401	350	20,481	2,089	22,570
2007	Jan	15,576	1,603	1,676	146	3,421	352	20,673	2,102	22,774
	April	15,735	1,611	1,688	148	3,441	354	20,865	2,113	22,978
	<b>July</b>	<b>15,895</b>	<b>1,621</b>	<b>1,701</b>	<b>151</b>	<b>3,461</b>	<b>357</b>	<b>21,057</b>	<b>2,129</b>	<b>23,185</b>
	Oct	15,998	1,631	1,714	153	3,523	358	21,236	2,142	23,378
2008	Jan	16,102	1,642	1,727	155	3,586	360	21,415	2,156	23,571
	April	16,205	1,652	1,741	157	3,649	361	21,594	2,169	23,764
	<b>July</b>	<b>16,309</b>	<b>1,664</b>	<b>1,754</b>	<b>160</b>	<b>3,711</b>	<b>363</b>	<b>21,774</b>	<b>2,187</b>	<b>23,960</b>
	Oct	16,426	1,679	1,762	160	3,744	364	22,032	2,203	24,135
2009	Jan	16,543	1,695	1,770	161	3,776	365	22,090	2,220	24,310
	April	16,661	1,710	1,778	162	3,808	365	22,248	2,237	24,484
	<b>July</b>	<b>16,778</b>	<b>1,729</b>	<b>1,787</b>	<b>162</b>	<b>3,841</b>	<b>366</b>	<b>22,406</b>	<b>2,258</b>	<b>24,663</b>

\* Actual Data

Note: All projections are rounded to the next whole number. Calculations may appear slightly off.

## ESTIMATED AVERAGE LENGTH OF STAY

The estimated average lengths of stay for new commitments, parole violators, males, females and totals by offense category are displayed in Tables 3 through 7. The overall estimated stay of 41.18 months for admissions in FY 2003 is approximately two months shorter than that observed in both FY 2001 and FY 2002 (43.20 and 43.26, respectively). Note that these numbers do not reflect actual sentencing patterns since, for the purposes of calculating these estimates, ALOS is capped at 40 years for the purposes of these projections.

Table 3. Projected Average Length of Stay for Male New Commitments

<b>Offense Category</b>	<b>Average Length of Stay (Months)</b>	<b>Number of Commitments</b>	<b>Percent of Commitments</b>	<b>ALOS Effect (months)*</b>
F1	460.65	31	0.56%	2.56
F2 EXT**	249.39	61	1.10%	2.73
F2 SEX	277.20	5	0.09%	0.25
F2 DRUG	64.81	14	0.25%	0.16
F2 OTHER	132.14	7	0.13%	0.17
F3 EXT**	129.79	183	3.29%	4.27
F3 SEX	137.76	95	1.71%	2.35
F3 DRUG	42.97	322	5.78%	2.48
F3 OTHER	57.99	170	3.05%	1.77
F4 EXT**	48.68	329	5.91%	2.88
F4 SEX	55.93	149	2.68%	1.50
F4 DRUG	24.86	574	10.31%	2.56
F4 OTHER	34.50	864	15.52%	5.35
F5 EXT**	22.88	145	2.60%	0.60
F5 SEX	29.45	135	2.42%	0.71
F5 DRUG	15.99	198	3.56%	0.57
F5 OTHER	19.61	752	13.51%	2.65
F6 EXT**	14.25	24	0.43%	0.06
F6 SEX	7.52	23	0.41%	0.03
F6 DRUG	11.23	30	0.54%	0.06
F6 OTHER	10.62	418	7.51%	0.80

Table 4. Projected Average Length of Stay for Female New Commitments

<b>Offense Category</b>	<b>Average Length of Stay (Months)</b>	<b>Number of Commitments</b>	<b>Percent of Commitments</b>	<b>ALOS Effect (months)</b>
F1	--	0	0.00%	0.00
F2 EXT**	177.28	4	0.07%	0.13
F2 SEX	--	0	0.00%	0.00
F2 DRUG	56.20	2	0.04%	0.02
F2 OTHER	77.72	5	0.09%	0.07
F3 EXT**	63.08	16	0.29%	0.18
F3 SEX	50.83	1	0.02%	0.01
F3 DRUG	35.75	50	0.90%	0.32
F3 OTHER	44.23	25	0.45%	0.20
F4 EXT**	33.65	41	0.74%	0.25
F4 SEX	22.50	4	0.07%	0.02
F4 DRUG	24.00	129	2.32%	0.56
F4 OTHER	28.71	120	2.16%	0.62
F5 EXT**	19.60	24	0.43%	0.08
F5 SEX	19.35	2	0.04%	0.01
F5 DRUG	17.19	37	0.66%	0.11
F5 OTHER	16.89	94	1.69%	0.29
F6 EXT**	14.53	2	0.04%	0.01
F6 SEX	--	0	0.00%	0.00
F6 DRUG	10.30	4	0.07%	0.01
F6 OTHER	11.87	32	0.57%	0.07



Table 5. Projected Average Length of Stay for Male Parole Violators with a New Crime

<b>Offense Category</b>	<b>Average Length of Stay (Months)</b>	<b>Number of Commitments</b>	<b>Percent of Commitments</b>	<b>ALOS Effect (months)</b>
F1	480.00*	2	0.04%	0.17
F2 EXT**	474.68	3	0.05%	0.26
F2 SEX	--	0	0.00%	0.00
F2 DRUG	--	0	0.00%	0.00
F2 OTHER	--	0	0.00%	0.00
F3 EXT**	101.36	18	0.32%	0.33
F3 SEX	127.47	1	0.02%	0.02
F3 DRUG	97.73	9	0.16%	0.16
F3 OTHER	41.72	9	0.16%	0.07
F4 EXT**	99.93	16	0.29%	0.29
F4 SEX	54.00	1	0.02%	0.01
F4 DRUG	48.01	57	1.02%	0.49
F4 OTHER	40.54	66	1.19%	0.48
F5 EXT**	31.41	60	1.08%	0.34
F5 SEX	60.37	1	0.02%	0.01
F5 DRUG	28.19	26	0.47%	0.13
F5 OTHER	37.17	61	1.10%	0.41
F6 EXT**	75.18	2	0.04%	0.03
F6 SEX	17.47	1	0.02%	0.00
F6 DRUG	17.52	17	0.31%	0.05
F6 OTHER	26.53	54	0.97%	0.26

Table 6. Projected Average Length of Stay for Female Parole Violators with a New Crime

<b>Offense Category</b>	<b>Average Length of Stay (Months)</b>	<b>Number of Commitments</b>	<b>Percent of Commitments</b>	<b>ALOS Effect (months)</b>
F1	--	0	0.00%	0.00
F2 EXT**	--	0	0.00%	0.00
F2 SEX	--	0	0.00%	0.00
F2 DRUG	--	0	0.00%	0.00
F2 OTHER	--	0	0.00%	0.00
F3 EXT**	--	0	0.00%	0.00
F3 SEX	--	0	0.00%	0.00
F3 DRUG	--	0	0.00%	0.00
F3 OTHER	--	0	0.00%	0.00
F4 EXT**	50.85	2	0.04%	0.02
F4 SEX	--	0	0.00%	0.00
F4 DRUG	40.25	8	0.14%	0.06
F4 OTHER	39.48	2	0.04%	0.01
F5 EXT**	26.36	7	0.13%	0.03
F5 SEX	--	0	0.00%	0.00
F5 DRUG	25.54	7	0.13%	0.03
F5 OTHER	26.58	11	0.20%	0.05
F6 EXT**	22.47	1	0.02%	0.00
F6 SEX	--	0	0.00%	0.00
F6 DRUG	--	0	0.00%	0.00
F6 OTHER	18.69	5	0.09%	0.02

Table 7. Projected Average Length of Stay, Category Totals

<b>Offense Category</b>	<b>Average Length of Stay (Months)</b>	<b>Number of Commitments</b>	<b>Percent of Commitments</b>	<b>ALOS Effect (months)</b>
Total Male NCC	42.43	4529	81.34%	34.51
Total Male PV/NC	48.27	404	7.26%	3.50
Total Males	42.91	4933	88.60%	38.02
Total Female NCC	27.63	592	10.63%	2.94
Total Female PV/NC	29.63	43	0.77%	0.23
Total Females	27.76	635	11.40%	3.17
Total NCC	40.72	5121	91.97%	37.45
Total PV/NC	46.48	447	8.03%	3.73
Overall Total	41.18	5568	100.00%	41.18

\*For purposes of these projections, ALOS is capped at 480 months.

## PAROLE

Since 1991, the average length of stay on parole has steadily increased. The length of stay in the past five years has gone from 13.4 months in FY 1998-99 to 15.8 months in 2003.<sup>12</sup> There have been numerous legislative changes that have contributed to the increase in the average parole length of stay.

- In 1981 and 1985, House Bills 1156 and 1320, respectively, combined to double the average length of stay in prison. Average length of stay would have increased further if not for legislation passed by the General Assembly in the last decade that has significantly impacted parole-eligible inmates.
- SB90-1327 doubled the amount of time an offender could earn while in prison awaiting parole or discharge (from 5 to 10 days).
- HB93-1302 reduced sentencing ranges for certain Class 3 through 6 non-violent crimes and mandated a period of parole for all crimes following a prison sentence on their first release from prison.
- HB93-1302 also eliminated earned time awards for offenders who committed their offenses on or after July 1, 1993, thus maximizing parole lengths.
- HB95-1087 reinstated earned time privileges for offenders convicted of certain nonviolent offenses due, in part, to concerns about the projected growth in the parole population. This legislation was retroactive and resulted in offenders discharging their parole sentences earlier with earned time credits.
- In 1998, HB 1160 mandated an additional 12 months of parole for all offenders who were revoked during the period of mandatory parole, further extending the length of time some offenders spent on parole.
- SB03-252 repeals the requirement of an additional year of parole if a parolee is revoked to prison for the remainder of the parole period.

Table 8 displays the projected numbers of offenders on parole by supervision type. As shown, the total number of offenders on parole is expected to increase from 6,764 in July 2003 to 9,352 in July 2009--an increase of 38.7 percent. This increase compares to a 47.0 percent increase estimated last year by DCJ.

Table 8. Fall 2003 Adult Parole Population Projections By Supervision Type

Date		Domestic Parole Population				Additional Parole			Total
SFY	Month	Regular	ISP	Inter-state In	Total	Inter-state Out	Abscond	Total	
2003	<b>July*</b>	<b>3,681</b>	<b>879</b>	<b>298</b>	<b>4,858</b>	<b>1,377</b>	<b>529</b>	<b>1,906</b>	<b>6,764</b>
	Oct*	3,578	758	296	4,632	1,360	528	1,888	6,520
2004	Jan	3,695	792	293	4,780	1,350	528	1,878	6,658
	April	3,812	792	293	4,897	1,390	528	1,918	6,815
	<b>July</b>	<b>3,915</b>	<b>792</b>	<b>293</b>	<b>5,000</b>	<b>1,545</b>	<b>528</b>	<b>2,073</b>	<b>7,073</b>
	Oct	3,983	792	293	5,068	1,576	528	2,104	7,172
2005	Jan	4,058	792	294	5,144	1,610	528	2,138	7,282
	April	4,130	792	294	5,216	1,642	528	2,170	7,386
	<b>July</b>	<b>4,203</b>	<b>792</b>	<b>294</b>	<b>5,289</b>	<b>1,675</b>	<b>528</b>	<b>2,203</b>	<b>7,492</b>
	Oct	4,267	792	294	5,353	1,703	528	2,231	7,584
2006	Jan	4,337	792	295	5,424	1,735	528	2,263	7,687
	April	4,405	792	295	5,492	1,766	528	2,294	7,786
	<b>July</b>	<b>4,474</b>	<b>792</b>	<b>295</b>	<b>5,561</b>	<b>1,796</b>	<b>528</b>	<b>2,324</b>	<b>7,885</b>
	Oct	4,552	792	295	5,639	1,831	528	2,359	7,998
2007	Jan	4,637	792	295	5,724	1,870	528	2,398	8,122
	April	4,720	792	295	5,807	1,907	528	2,435	8,242
	<b>July</b>	<b>4,803</b>	<b>792</b>	<b>295</b>	<b>5,890</b>	<b>1,944</b>	<b>528</b>	<b>2,472</b>	<b>8,363</b>
	Oct	4,887	792	295	5,974	1,982	528	2,510	8,483
2008	Jan	4,978	792	295	6,065	2,023	528	2,551	8,616
	April	5,067	792	295	6,154	2,063	528	2,591	8,744
	<b>July</b>	<b>5,144</b>	<b>792</b>	<b>295</b>	<b>6,242</b>	<b>2,103</b>	<b>528</b>	<b>2,631</b>	<b>8,873</b>
	Oct	5,233	792	295	6,320	2,138	528	2,666	8,986
2009	Jan	5,319	792	295	6,406	2,176	528	2,704	9,111
	April	5,403	792	295	6,490	2,214	528	2,742	9,231
	<b>July</b>	<b>5,486</b>	<b>792</b>	<b>293</b>	<b>6,573</b>	<b>2,251</b>	<b>528</b>	<b>2,779</b>	<b>9,352</b>

\* Actual Data

Figure 6 displays the actual and projected *annual* growth in adult parole caseloads for regular, ISP and in-state interstate parole, also described as the domestic parole population. The actual growth rate has significantly varied, even decreasing in 2000 and 2002. Domestic parole grew 13.7 percent in FY 2002 and grew 20.3 percent in the past fiscal year (FY 2003). Figure 7 compares the projected parole caseloads for the domestic and the out-of-state interstate and absconder populations from 2003 to 2009.

<sup>12</sup> Office of Planning and Analysis, October 29, 2003, Colorado Department of Corrections.

Figure 6. Actual and Projected Parole Growth Rate

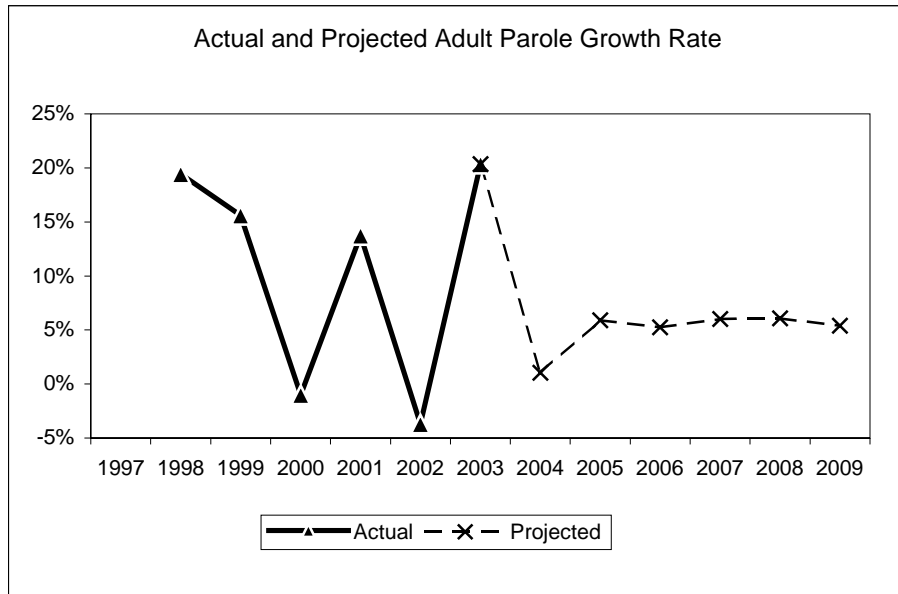
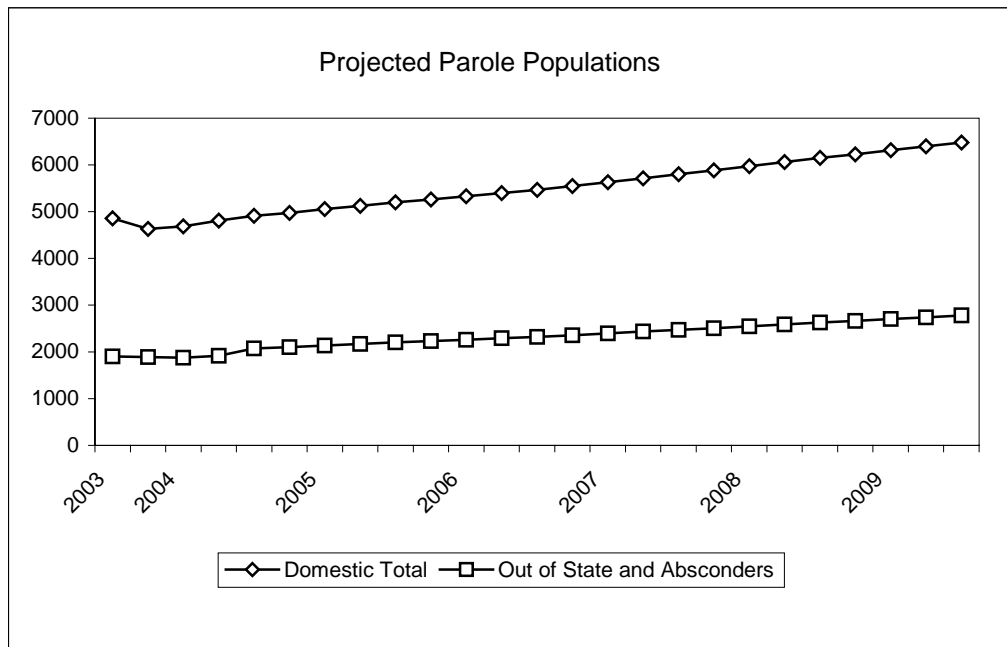


Figure 7. Adult Parole Population Projections



## ADULT PROJECTION ACCURACY

Last year, the DCJ projections were in error by 2.6 percent. In the last five years, the error has averaged 1.64 percent. Legislation and other policy changes, including changes in discretion exercised by decision-makers often impact accuracy rates after year one. Table 9 below shows a comparison of projected to actual populations over the last 20 years.

Table 9. Colorado Adult Prison Populations,  
Predicted Compared To Actual, 1981 To 2003

SFY	Projected Population	Actual Population	Percent Difference
1984	3445	3587	-4.0
1985	3488	3410	+2.3
1986	3446	3517	-2.0
1987	4603	4702	-2.1
1988	5830	5766	+1.1
1989	6471	6763	-4.3
1990	7789	7663	+1.6
1991	8572	8043	+6.6
1992	8745	8774	-0.3
1993	9382	9242	+1.5
1994	9930	10005	-0.7
1995	11003	10669	+3.1
1996	11171	11577	-3.5
1997	12610	12590	+0.2
1998	13803	13663	+1.0
1999	14746	14726	+0.1
2000	15875	15999	-0.8
2001	16833	17222	+2.3
2002	17569	18045	-2.6
2003	19295	18846	+2.4

# Juvenile Projection Model

The following section presents the projections for two DYC population groups – commitment and parole – for the seven-year period between FY04 and FY09. Detention populations have been included in these projections in the past. However, with the implementation of Senate Bill 03-286 mandating the capitation of detention beds, these figures are fixed, eliminating the need for projections.

The juvenile projection model differs from the adult model in that it forecasts the average daily population for a given fiscal year rather than projecting a population figure for a specific point in time. The Division of Youth Corrections (DYC) uses ADP to measure and describe its populations because viewing the population at a single point in time during a particular year may be misleading. Under- or over-representation may occur because clients may be held in a facility for very short periods of time (a few hours or even minutes).

The juvenile projection model uses the Colorado population estimates from the State Demographer's Office described earlier in this report. From these projections, the statewide juvenile population is expected to grow but at a rate that slows throughout the projection period. Further, examining the juvenile population growth rate in Figure 8, it can be seen that this rate fluctuates a great deal and it varies by region. Of even greater significance are the fluctuations in the growth rates within individual DYC catchment areas for the 15- to 17-year old population. As demonstrated in Figure 9, the growth of this population is expected to decline substantially, particularly in the Southern region of the state where we see less than zero population growth expected during and after SFY 2007.

Figure 8. Juvenile Population Growth Rate

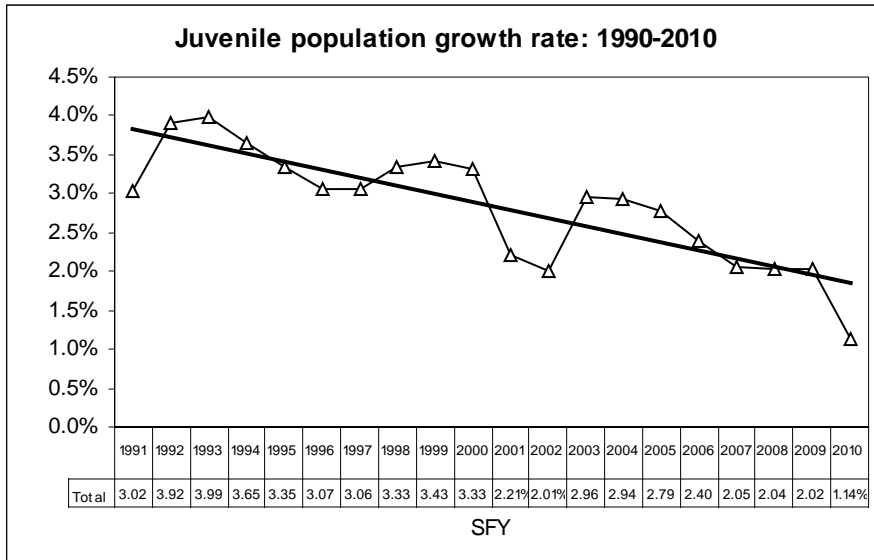
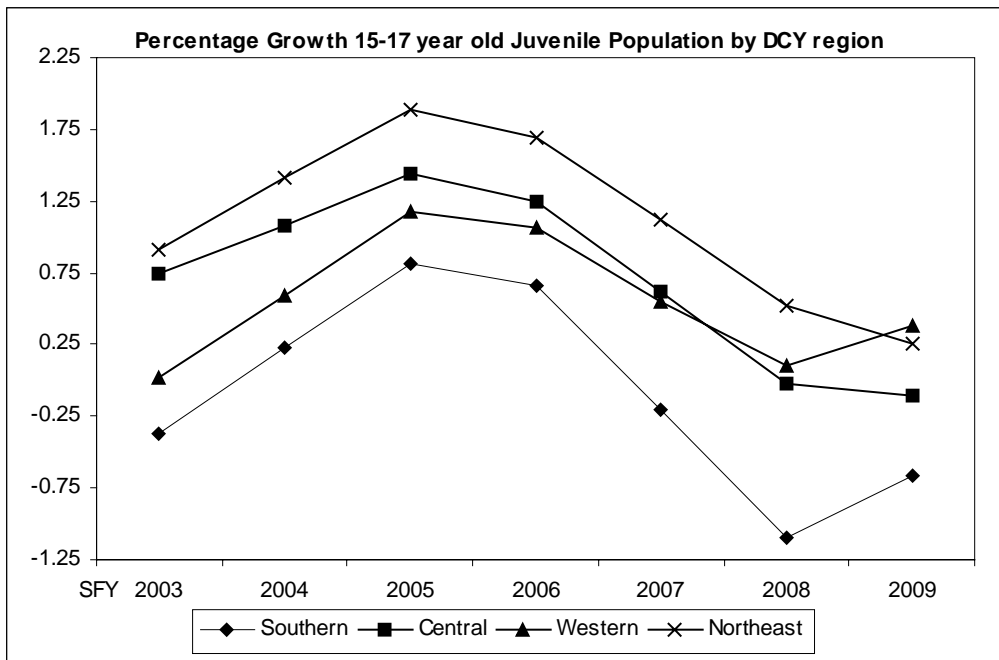


Figure 9. Juvenile Population Growth by DCY Management Region





## **RECENT LEGISLATION AFFECTING JUVENILE COMMITMENT AND PAROLE POPULATIONS**

House Bill 01-1357, effective May 31, 2001, established the Community Accountability Program to provide a sentencing option for adjudicated youth ages 14 to 17. The program consists of a residential component and a community reintegration component. The Bill specified that the residential component will last 60 days and may be extended by court order for 15 days. Additionally, the Bill specified that the second component shall not exceed 120 days.

Senate Bill 01-077, effective July 1, 2001, changed the mandatory period of juvenile parole from one year to 9 months. This allowed the Juvenile Parole Hearing Panel to extend the period of parole for 90 days if it is in the best interest of the juvenile and the public to do so, and up to 15 months for juveniles convicted of serious offenses or if special circumstances warrant such an extension. Mandatory parole was further reduced with the passage of Senate Bill 03-284, which decreases the parole period to 6 months. This bill was effective on May 1, 2003.

Senate Bill 03-286 limited the number of juvenile detention beds available in the state to 479. A working group was also established to allocate the number of beds among the DYC catchment areas, and to develop guidelines for judicial districts to 'loan' beds as well as for the emergency release and placement of juveniles. This legislation eliminates the utility of detention projections but it may have bearing on sentencing trends, commitment rates and other areas of the juvenile system in unforeseen ways.

# Findings: Juvenile Population Projections

## COMMITMENT

The DYC statewide juvenile commitment ADP is expected to grow from 1,328 in FY2003 to 1,427 by FY2009, an increase of 7.5 percent, as shown in Table 10 and Figure 10. Overall, juvenile commitment ADP projections are higher this year compared to DCJ's 2002 projection. This year's higher figures are primarily the result of two factors:

- Whereas FY 2002 demonstrated a commitment growth rate of only 1.1 percent, the growth rate for FY 2003 increased to 4.8 percent. This year's model is calibrated to reflect the most recent fiscal year information and, because of this, the growth is greater across the projection period compared to DCJ's 2002 projection. Table 10 displays the DYC commitment ADP statewide and demonstrates how this year's projections more closely align with FY2003 actual data.
- As previously discussed, growth in the 15- to 17-year old population is expected through FY 2005. Approximately 82 percent of committed juveniles are in this age group.<sup>13</sup> However, this growth is expected to slow dramatically beginning in FY 2006, eventually dropping below zero population growth in the Southern and Central regions of the state. Therefore, the projected commitment populations in these regions levels off (see Table 11).

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<sup>13</sup> [http://www.cdhs.state.co.us/dvc/pop\\_comdata99.htm](http://www.cdhs.state.co.us/dvc/pop_comdata99.htm), retrieved 11/21/2003.

Table 10. Juvenile Commitment ADP with Percent Yearly Increase, Actual And Projected

SFY	ADP	Percent Annual Change
<b>Actual</b>		
1997	762	n/a
1998	928	21.90%
1999	1112	19.70%
2000	1198	7.80%
2001	1253	4.60%
2002	1267	1.10%
2003	1328	4.80%
<b>Projected</b>		
2004	1364	2.70%
2005	1393	2.10%
2006	1405	0.90%
2007	1419	1.00%
2008	1427	0.60%
2009	1427	0.00%

Figure 10. Juvenile Commitment ADP Actual and Projected Growth

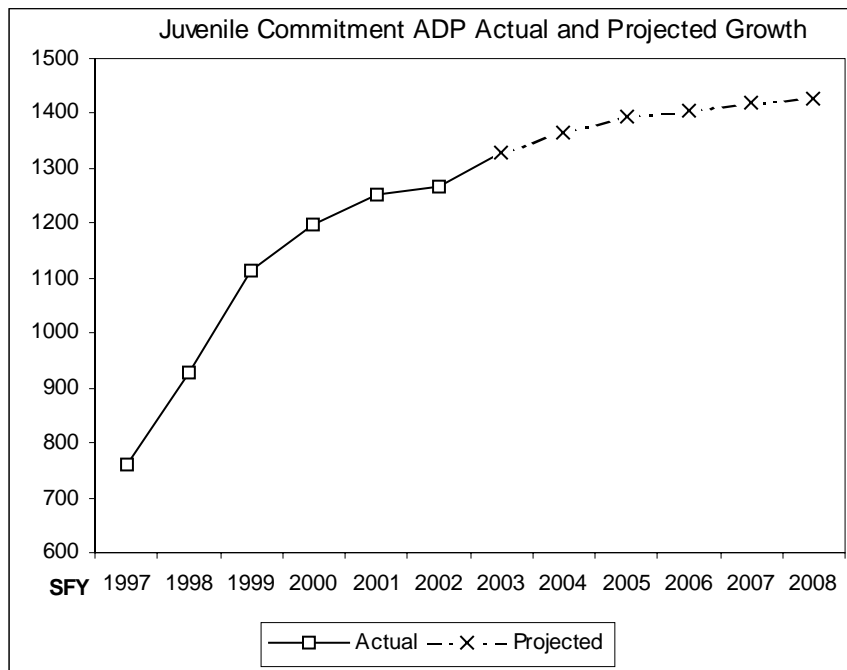


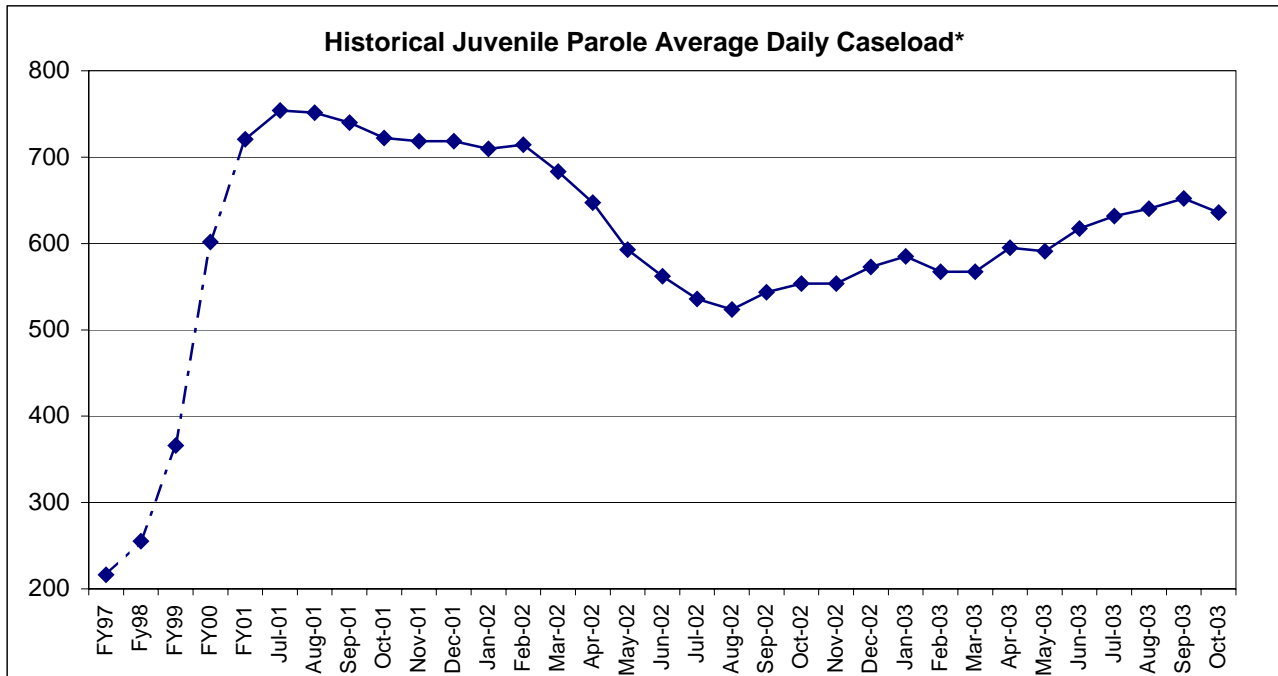
Table 11. 2003 Juvenile Commitment Average Daily Population (ADP) Projections

	2004	2005	2006	2007	2008	2009
<i>Southern Region</i>	297.88	301.40	302.58	303.63	302.82	300.02
<i>Western Region</i>	167.19	170.76	172.11	173.74	175.02	175.63
<i>Central Region</i>	577.39	594.10	599.80	605.28	609.40	609.85
<i>Northeast Region</i>	321.08	326.41	330.50	336.09	340.07	341.24
<i>Total</i>	1,363.54	1,392.67	1,404.98	1,418.74	1,427.31	1,426.74

## PAROLE

Due to legislative changes, a different approach was utilized to project the juvenile parole population. As can be seen in Figure 11 and Table 12, the juvenile parole population recorded significant growth between the periods of 1996 to 2000, and then began to decline in FY 2001. The reduction of the mandatory parole period from 12 months to 9 months following the implementation of Senate Bill 2001-77 corresponds with this decrease. The ADC continued to decline until August 2002, then once again began a steady increase. Senate Bill 2003-284 was effective on May 1, 2003, and is expected to begin impacting the parole population in November 2003.

Figure 11. Historical Juvenile Parole ADC



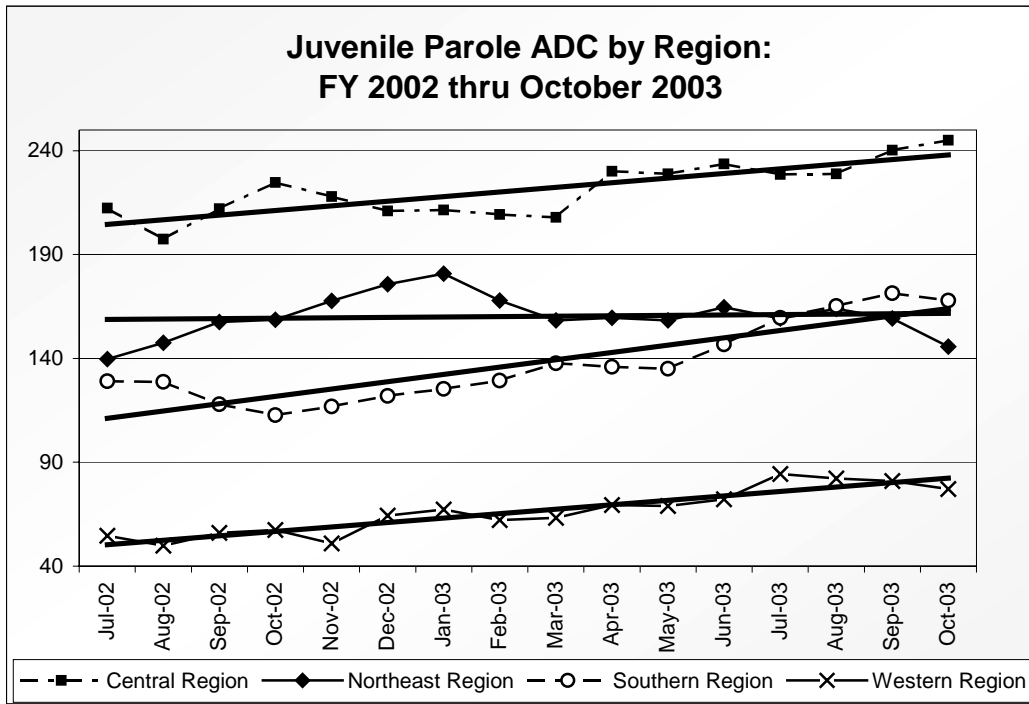
\* Data sources:  
 Years FY97 – FY98: <http://www.cdhs.state.co.us/dyc/stats.htm#state> 11/29/2003.  
 Years FY99 – FY00: Colorado Dept. of Human Services, Division of Youth Corrections; Supplemental Data Report Fiscal Year 2001-2002, December 2002.  
 Monthly Data FY02 thru Aug 2003: Provided by Division of Youth Corrections, Research and Evaluation Unit.  
 September, October 2003: Colorado Dept. of Human Services, Division of Youth Corrections; Monthly Population Reports.

Table 12. Actual And Projected Juvenile Average Daily Caseload

SFY	Average Daily Caseload (ADC)	Percent Yearly Change
<i>Actual</i>		
1997	216.3	n/a
1998	255.1	17.94%
1999	366.1	43.51%
2000	601.7	64.35%
2001	720.7	19.78%
2002	692.9	-3.86%
2003	567.3	-18.13%
<i>Projected</i>		
2004	566.2	-0.19%
2005	554.2	-2.12%
2006	624.7	12.72%
2007	631.7	1.12%
2008	634.7	0.47%
2009	633.3	-0.22%

The parole projections are based upon the regional trends observed since July 2002. These trends are displayed in Figure 12.

Figure 12. Actual Juvenile Parole ADC by Region



The terminal impact of SB 03-284 was estimated based on a series of assumptions regarding the parole decision-making process. These assumptions are as follows:

- Approximately 68 percent of committed juveniles are placed on discretionary parole at a hearing prior to the end of their commitment term. These juveniles receive discretionary parole based on their behavior during their commitment. Such youth will typically receive the mandatory parole time defined in statute, currently six months.
- The remaining 32 percent of committed juveniles will have their parole term determined at a post-commitment hearing. Two-thirds of these juveniles will receive the minimum mandatory parole term.
- One-third of the youth in attendance of a post-commitment hearing will be considered to have aggravating circumstances warranting an extended period of community supervision. Half will be extended to a full year, and the other half will be extended to 21 months or until their 21<sup>st</sup> birthday, whichever comes first.

In addition to the growth in the parole population observed in the past and the estimated impact of legislation, the parole projections were adjusted for the expected growth rate of the committed population and the projected census populations by region.

The juvenile parole ADC is expected to grow 11.6 percent between FY 2003 and FY 2009. However, it is expected to decline by 2.31 percent between FY 2003 and FY 2005. Then the population is expected to increase rapidly in FY 2006 when the impact of SB 03-284 is completely realized. Table 12 displays the projected and actual statewide ADC observed since FY 1997.

The forecasted increases and reductions vary greatly by DYC management region. The regional and total juvenile parole forecasts by fiscal year are displayed in Table 13. Figure 12 illustrates the projected growth patterns by management region, and Figure 13 shows the growth pattern projected statewide.

Table 13. Regional and Statewide Projections

	FY03*	FY04**	FY05	FY06	FY07	FY08	FY09
Central Region	216.44	206.90	196.29	215.74	218.43	219.79	219.73
Northeast Region	161.36	136.61	119.54	121.28	123.34	124.72	125.37
Southern Region	128.12	148.20	156.12	186.79	188.02	187.64	185.59
Western Region	61.38	74.52	82.27	100.87	101.94	102.50	102.60
Total Parole ADC	567.30	566.23	554.22	624.68	631.74	634.65	633.29

\* Actual Data

\*\* Based on 4 months of actual data

Figure 13. Projected Juvenile Parole ADP by DYC Management Region

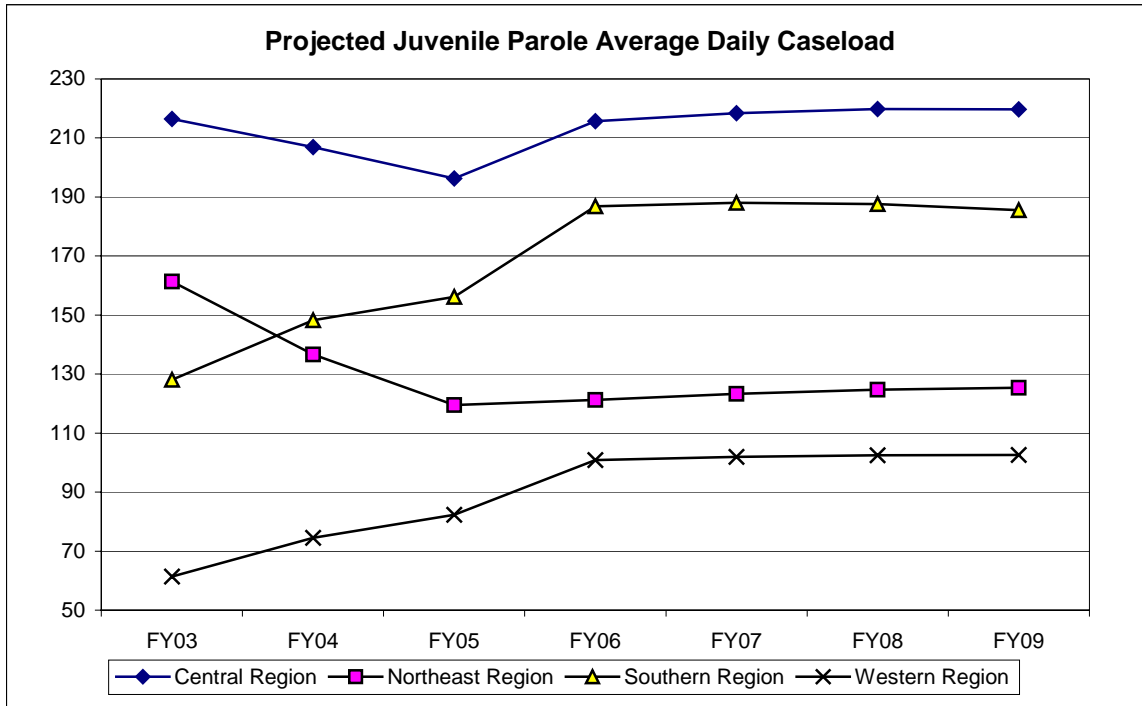
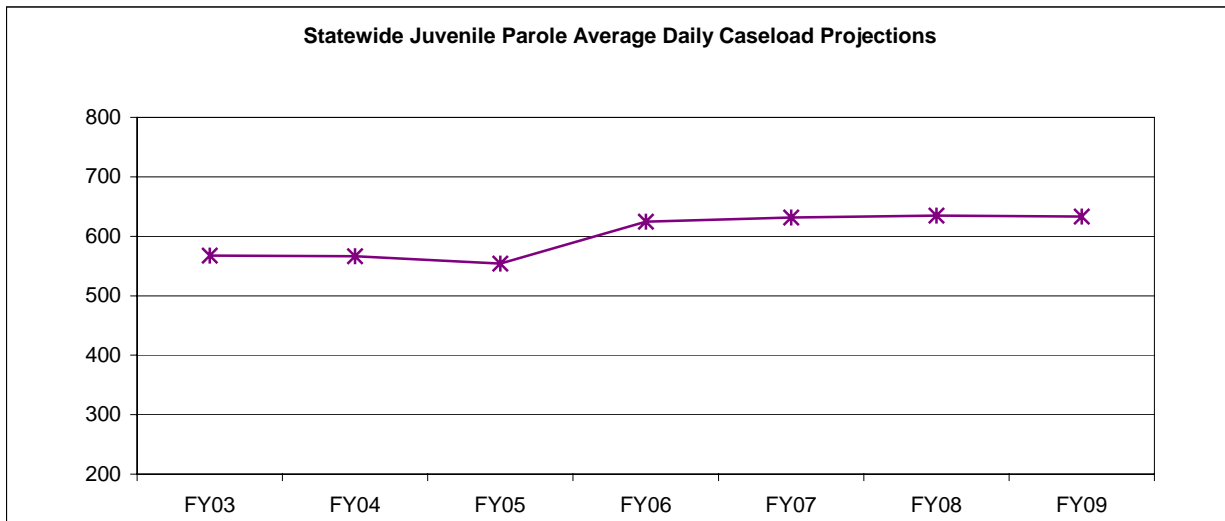


Figure 14. Statewide Projected Juvenile Parole ADP



The statewide ADC will decline somewhat through FY 2005, and then is expected to significantly increase when the impact of SB 03-284 is completely operationalized by the end of FY 2005 and following the trend observed after the full impact of SB 01-077 was realized in approximately August 2002 (see Figure 11).

As a final note, it is important to emphasize that quantitative parole data available from NYC is quite limited at this time. Data for Figure 11 was obtained from multiple sources, for example. Additional historical case-level data regarding length of stay, supervision levels, age and other demographic information, release patterns and revocation rates would increase DCJ's confidence in these parole projections.

\* \* \*