**Colorado Division of Criminal Justice** 

# Adult Prison and Parole Population Projections

# Juvenile Commitment and Parole Population Projections

# December 2005

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# Preface

The Colorado adult prison population is expected to grow over 37 percent between July 2005 and June 2012, from an actual population of 20,704 to a projected population of 28,530 offenders. The Division of Youth Corrections average daily population is expected to grow by 35 percent from 1449.7 to 1958.9.

The Colorado Division of Criminal Justice (DCJ) pursuant to 24-33.5-503 (m), C.R.S. is mandated to prepare correctional population projections for the Director of Legislative Council and the General Assembly. This report presents the Fall 2005 projections of the Colorado Department of Corrections' (DOC) incarcerated and parole populations and the commitment and parole populations for the Department of Human Services (DHS), Division of Youth Corrections (DYC). An additional discussion regarding the measurement of the detention population is included.

The first section of the report presents the adult prison and parole population projections, followed by the projections for the juvenile commitment and parole populations. The final section provides additional information about the relationship between the arrest rate and incarceration rate along with a brief overview of facts and trends in the criminal and juvenile justice systems in Colorado.

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

FALL 2005 ADULT PRISON AND PAROLE POPULATION PROJECTIONS

# Adult Prison Population and Parole Caseload Forecasts

## INTRODUCTION

The DCJ prison population projection model has undergone significant revision in the past two years. In the past, data provided by the Department of Corrections (DOC) and by the Department of Local Affairs (DOLA) solely were utilized. While the current method continues to employ these data sources, additional data from community corrections, the Judicial Department, and the Colorado Bureau of Investigation are incorporated. The presentation of the projections in this report differs from previous reports due to the use of this new methodology. Additionally, at the request of the DOC, the current report expands on the information presented in the 2005 report. In addition to the inclusion of quarterly projections, annual admission and release projections are presented, as are annual projections for domestic parole, out-of-state and absconder populations.

The model configures the prison population in terms of an "admission" cohort and an "in-prison" cohort. The admission cohort consists of those cases entering prison because of a "new" criminal sentence from court, including those cases who fail probation or community corrections and are sent to prison on a technical violation, and those cases who were on parole but are returning to prison on a revocation. The "in-prison" cohort consists of those who are currently serving a prison sentence. The model estimates a release date for the "in-prison" cohort, so this group is analyzed by crime type and, for facility planning purposes, by gender. Estimates of the numbers of admissions, along with the size and release date of the in-prison group, are combined to forecast the size of the prison population in the future.

# **DESCRIPTION OF THE PROJECTION MODEL**

DCJ estimates the adult DOC population using a mathematical model that simulates the flow of cases through the criminal justice system. This "system flow model" is based on identifying the probability of an offender advancing to the next decision point in the criminal justice system. The model starts with the state population and takes into account arrest, filing, conviction, and incarceration probabilities. It also includes revocation probabilities of probationers, community corrections offenders, and parolees, as well as the probability of early release from any of these placements.

DCJ estimates the adult DOC population using a mathematical model that simulates the flow of cases through the criminal justice system.

The flow of the Colorado criminal justice system as it relates to the DCJ prison population projection is presented in Figure 1. Case processing decisions in one part of the system affect other parts of the system. There is a certain probability that individuals in each stage of the flow, represented by the boxes in Figure 1, will move to the next one. This system can be envisioned as a funnel, starting with a large population-based group and ending with a very small group that reaches the final stage of incarceration and sentence completion, including those who recycle through the system via revocation.

#### Figure 1:

### **Colorado Adult Felony Criminal Justice System**



## **PROJECTING PRISON ADMISSIONS**

#### **State Population Projection**

The Department of Local Affairs' state population projections are the starting point for forecasting future prison populations. Each year the Demographer's Office of the Department of Local Affairs (DOLA) develops population projections for the state. Figure 2 below displays the actual and projected state population growth for years 1995 through 2015. Between 1995 and 2005, the state population grew at the average rate of 2.14 percent annually. However, the growth rate began declining in 2001 and continued this decline thru 2004. While growth has picked up in the past year, and is expected to continue to increase, it will remain substantially below 2 percent per year through the next decade. Between 2005 and 2015, an average growth rate of 1.83 percent per year has been predicted by the Demographer's Office (see Figure 3).

While the overall state growth rate is instrumental in projecting future prison populations, a basic assumption of the prison population projection model is that certain age groups are more crimeprone than others. The population found to be most strongly correlated with the increase in felony filings in district courts is the 16-34 age group. The actual and predicted growth of this population is displayed in Figure 2 along with the overall population growth. The growth rate is displayed in Figure 3. As can be seen, the growth rate for the 16-34 age group remains well below that of the general population, and is expected to remain so until 2010.



#### Figure 2:

Source: Colorado State Demographer's Office, Department of Labor and Employment.

The Demographer's Office develops population projections that incorporate the economic forecast prepared by the Center for Business and Economic Forecasting (CBEF).<sup>1</sup> The underlying assumptions for the population projections are that the level of economic activity creates a labor force demand, and that the population will expand or shrink to accommodate the labor need. The demographic forecasting model uses data on the existing population, plus births, deaths and levels of net migrations to create population projections by age, gender and region.



#### Figure 3:

Source: Colorado State Demographer's Office, Department of Labor and Employment.

By incorporating the Department of Local Affairs' population projections, the DCJ prison projections incorporate the numerous economic and demographic trends associated with those projections. By incorporating the Department of Local Affairs' population projections, the DCJ prison projections incorporate the numerous economic and demographic trends associated with those projections. Any strengths and weaknesses associated with the DOLA model will also be reflected in the DCJ prison projection model.

#### **Projecting Populations at System Decision Points**

A key component of projecting the prison population is estimating the number of individuals who will receive direct sentences to DOC. The

calculation of direct court commitments requires projections of arrests for serious offenses, new felony convictions, and sentencing outcomes of these convictions. These aspects of the DCJ projection model are described below.

P<sup>1</sup>P CBEF is a private research firm specializing in Colorado economic forecasting. For more information, see Hhttp://www.cbef-colorado.comH. 10

#### **Projecting Arrest Rates**

Arrest data were obtained from the Colorado Criminal Information Center (CCIC) maintained by the Colorado Bureau of Investigation.<sup>2</sup> Overall, arrests and arrest rates have declined significantly in the past decade. However, this trend has had little to no impact on the size of prison populations. This issue is discussed in greater detail in the final section of this report.

#### **Projecting Case Filings and New Convictions**

While arrest trends are taken into account when viewing future court and prison activities, court filing data are more useful in the current model. Information regarding the number of cases filed in district courts each year was obtained from the Colorado Judicial Department's annual statistical reports.<sup>3</sup>

The relationship between historical and projected new court commitments and felony filings is exhibited in Figure 4. As shown in Figure 4, filings increased greatly through 1998, then declined for two years. In 2001, moderate growth was seen which continued through FY2004. Data regarding FY2005 filings were not yet available at the time of publication of this report.

As stated above, the age group found to be most strongly correlated with the occurrence of felony filings is the 16 to 34 year old population. The growth projected for this population was used to estimate future felony filings.

For the purpose of the projection model, new felony convictions were defined as the total number of individuals (not cases) who were found guilty by the courts and who were not already under probation or parole supervision at the time of the new conviction. Felony conviction rates were estimated using the number of direct court commitments to prison<sup>4</sup> and the number of felony probation placements.<sup>5</sup> As can be seen in Figure 4, felony filings in district court can be used to predict this aspect of the population flow in the state's criminal justice system.

As can be seen in Figure 4, felony filings in district court can be used to predict direct court commitments to prison.

P<sup>2</sup>P Data obtained from the Colorado Crime Information Center and the Colorado Justice Analytics Support System.

P<sup>3</sup>P Colorado Judicial Branch Annual Statistical Reports, 1993 through 2004.

P<sup>4</sup>P Rosten, Kristi. Statistical Report, Fiscal Years 1997-2005, Department of Corrections.

P<sup>5</sup>P Colorado Judicial Branch Annual Statistical Reports, 1993 through 2004.

#### Figure 4:



Colorado District Court Filings and New Court Commitments to Prison

#### **Projecting Revocations**

This model assumes that direct court commitments to prison are driven by the size of the statewide population and accompanying sentencing legislation and policies, while probation and parole revocations are driven by jurisdictional policy decisions and practices. The total probation and parole failure rates are built into the projection model.

#### **Probation Revocations**

Failure rates were estimated using historical annual probation placement and revocation information.<sup>6</sup> The resulting failure rate was used to forecast the number of offenders placed on community supervision who may be revoked to prison after a certain amount of time in the community. Individuals revoked from a direct sentence to community corrections are included in this count.

#### **Parole Revocations**

The number of parole releases is a function of the size of the parole-eligible population (and the type of parole law governing their sentence) in combination with decisions of Parole Board members. Available information about the population released to and revoked from parole was incorporated into the model.<sup>7</sup> Offenders revoked from transitional community corrections placements are also included in this part of the model. A cohort propagation method<sup>8</sup> is used to project future parole populations and revocations back to prison. This method follows cohorts of

Source: Colorado Judicial Branch Annual Statistical Reports, 1993 through 2004.

P<sup>6</sup>P Colorado Judicial Branch Annual Statistical Reports, 1999 through 2004.

P<sup>7</sup>P Data from Department of Corrections, Office of Planning and Analysis, October 18, 2005.

individuals (in this case, individuals paroled each year) and calculates the rate of reduction in the size of each cohort according to certain assumptions. In this case, these assumptions include revocation rates and parole board decisions to parole offenders. These estimates are 'propagated' across years to derive annualized population estimates.

#### **Projecting Total Prison Admissions**

Total admissions are projected by combining the projection estimates of direct prison sentences from court, probation revocations to prison, and parole revocations.

# **PROJECTING PRISON RELEASES**

Information regarding the number of prisoners carried over from and released during the previous year was obtained from the Department of Corrections. This information includes the number of prisoners incarcerated, crime types, the amount of time served by this group, and the amount of time remaining on their sentence.<sup>9</sup> The release information was used to develop survival distributions by offense category to apply to the population remaining in prison, also known as the in-prison or 'stock' population, to estimate when individuals are expected to cycle out of prison. These estimates include the proportion of inmates released to mandatory parole, discretionary parole, and sentence discharges.

# **PROJECTING PRISON POPULATIONS**

The DCJ system flow model uses data from multiple decision points in the criminal justice system to project the prison population through 2012. It forecasts admissions into the prison system and releases out of the system to calculate the numbers presented in this report. This approach has the capacity to simulate the impact of potential law and policy changes targeting each of the decision points described earlier.

# ASSUMPTIONS AFFECTING THE ACCURACY OF THE DCJ PRISON POPULATION PROJECTIONS

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

- □ The Colorado General Assembly will not pass any new legislation that impacts the length of time offenders are sentenced to DOC facilities.
- □ The Colorado General Assembly will not pass any new legislation that impacts the way crimes are defined for offenders sentenced to DOC facilities.
- □ Increased capacity of DOC beds will not reduce the number of offenders placed in community supervision programs.

P<sup>9</sup>P Data from Department of Corrections, Office of Planning and Analysis, October 18, 2005.

- □ The General Assembly will not expand community supervision programs in ways that reduce prison commitments.
- □ The data provided by the Department of Corrections accurately describe the number, characteristics, and trends of offenders committed to, released from, and retained in DOC facilities during state fiscal years 1996 through 2005.
- □ Decision makers in the adult criminal justice system will not change the way they use their discretion, except in explicitly stated ways that are accounted for in the model.
- □ The data provided by the Colorado Department of Local Affairs Demographer's Office accurately describes the historical and projected trends for age and gender of Colorado's citizens between the years 1990 and 2013.
- □ Arrest data obtained from Uniform Crime Reports (UCR) are accurate.
- District court filings, probation placements and revocations are accurately reported in annual reports provided by the Judicial Department.
- □ No catastrophic event such as war or disease will occur during the projection period.

# **HISTORICAL OVERVIEW**

Prisoners in Colorado are subject to many sentencing laws dating back to 1979. Most of these laws affected the size of the prison population, particularly House Bill 1320 passed in 1985. Changes to parole laws in the 1990s have significantly affected the size of the parole population and the associated number of individuals subject to revocation decisions. These laws are outlined below.<sup>10</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

P<sup>10</sup>P Portions of this section were excerpted from: Rosten, Kristi. Statistical Report, Fiscal Year 2002, Department of Corrections, pages 4-11.

range for "crimes of violence" and crimes associated with aggravating circumstances. (An analysis of the DCJ 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).
- 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. House Bill 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. This act was retroactive and resulted in offenders discharging their parole sentences earlier with earned time credits.

- □ 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:
  - o 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.
  - o 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.
  - o If revoked during the one year of parole supervision, the offender may be reincarcerated 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:
  - o 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, C.R.S. for the level of offense committed and a maximum of the sex offender's natural life.
  - o For crimes of violence (defined in 16-11-309, C.R.S.), 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.
  - o For sex offenders eligible for sentencing as a habitual sex offender against children (pursuant to 18-3-412, C.R.S.), 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.
  - o 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.

- o 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.
- □ 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.
- Senate Bill 03-252 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.
- □ A number of bills were adopted during the 2004 legislative session dealing with the parole process and the parole board. H.B. 1395 and S.B. 191 impact the operations of the parole board, but are unlikely to influence prison or parole populations. A third bill, H.B. 1189, lengthens the amount time that must be served prior to parole eligibility for certain violent offenders.
- H.B. 04-1074 requires the DOC to administer rehabilitation and life management skills programs in the Division of Adult Parole and the Youthful Offender System for inmates prior to and after release from prison.

# **Projections: Adult Prison and Parole Populations**

## PRISON



The Colorado adult prison population is expected to grow 37.80 percent between July 2005 and June 2012, from an actual population of 20,704 to a projected population of 28,530 offenders. This growth rate is substantially higher than the 6-year projection of 23.76 percent in 2004.<sup>11</sup> The number of men in prison is expected to increase 32.91 percent between July 2005 and June 2012, from 18,631 to 24,763. The number of women in prison is expected to increase an extraordinary 81.72 percent between July 2005 and

June 2012, from 2,073 to 3,767. While the overall prison population *growth rate* is expected to eventually decline, the proportion of the total prison population represented by females is expected to continue to grow.

Figure 5 compares the historical fiscal year end adult inmate prison population and the current projections. Figure 6 displays the same for the male and female prison populations separately.



Actual and Projected Total Prison Population FY1995-FY2012

#### Figure 5:

Source: Historical data obtained from Colorado Department of Corrections Monthly Population and Capacity Reports.

P<sup>11</sup>P Division of Criminal Justice, Adult Prison and Parole Population Projections Juvenile Commitment and Parole Population Projections, December 2004.





Male and Female Actual and Projected Prison Population Growth

DCJ's 2004 projection underestimated the July 2005 population by 483 inmates. Some of the trends indicating slowing growth in 2004 have reversed, while others have continued. Growth is expected to remain relatively stable over the next few years, remaining well below that observed between 1997 and 2001.

- The Colorado population growth rate is predicted to remain even lower than that indicated by last year's forecast. Last year it was estimated that the 16-34 population of Colorado would increase by 11.85 percent between FY2006 and FY2012. This year, however, slightly slower growth at 11.71 percent is expected during the same time frame.
- After a period of decline between 1997 and 2002, growth in admissions jumped 12.23 percent the following year. Admissions slightly declined between fiscal years 2002 and 2003 (.04 percent), followed by moderate growth during FY2004 at 4.69 percent.<sup>12</sup> However, FY2005 was a period of unexpected growth, with admissions increasing by 15.31 percent.<sup>13</sup>
- □ Female admissions have followed the same pattern, though exaggerated. In 2002, this population grew 17.18 percent, followed by only 3.10 percent in 2003. In 2004, a 13.76 growth rate was observed, and in the most recent year, 26.84 percent.<sup>14</sup>

Source: Historical data obtained from Colorado Department of Corrections Monthly Population and Capacity Reports.

P<sup>12</sup>P Admission and Release Trends Statistical Bulletins for Fiscal Years 1999-2004, Department of Corrections.

P<sup>13</sup>P Admission and Release Trends Statistical Bulletin OPA 06-03, October 25, 2005, Department of Corrections. P<sup>14</sup>P Ibid, note 13.

- Releases increased at a faster rate than admissions during fiscal years 2003 and 2004, increasing by 6.45 percent and 7.55 percent respectively. Releases increased further to 9.93 percent in 2005, however, this was far below the 15.31 percent increase in admissions.<sup>15</sup>
- Discretionary parole releases increased 10.56 percent, mandatory parole releases increased 12.47 percent, and sentence discharges increased by 21.75 percent in FY2004.<sup>16</sup> In 2005, this trend reversed with discretionary parole releases *decreasing* by 31.86 percent and sentence discharges decreasing by 10.4 percent.<sup>17</sup> Mandatory parole releases still increased by 16.4 percent.
- New court commitments have been erratic. Declining 3.07 percent between FY1999 and FY2000, they then increased dramatically during the following two years, by 18.06 percent. This was followed by relatively small increases in FY2003 and 2004 (3.87 and 1.10 percent respectively).<sup>18</sup> The most recent year has increased considerably in comparison to the past, at 14.55 percent.<sup>19</sup>
- □ While the increase in the new court commitments and parole returns with a new crime have varied in the past, most of the variation in total admissions is due to fluctuations in the number of parole technical violation returns. The number of parolees returned on a technical violation increased 15.17 percent in FY2005<sup>20</sup> and by 14.91 percent in FY2004.<sup>21</sup> In FY2003, there was a 9.60 percent decline in such returns, while in FY2002 a 12.50 percent increase was recorded by DOC.<sup>22</sup>
- Colorado's prison population grew at an average annual rate of 7.47 percent between 1997 and 2002. However, this annual growth rate has slowed in the past two years, to 4.44 percent between FY2002 and FY2003 and 3.84 percent between FY2003 and FY2004. A slight increase occurred in FY2005, to 5.80 percent.<sup>23</sup>
- The prison population growth rate is expected to remain relatively stable, averaging 4.69 percent per year between FY2006 and FY2012. While the months of June, July and August of 2005 alone experienced 1.68 percent growth, more recent months have had very modest growth at 0.30, 0.27 and 0.19 percent in September, October and November, respectively.
- □ The shorter lengths of stay estimated for all FY2004 admissions and decreasing sentences for felony class 4, 5 and 6 offenders are expected to slow growth further in 2007, due to the expected releases of these offenders.
- However, the estimated length of stay for FY2005 admissions increased from the 34.91 months estimated for the FY2004 admissions to 37.29 months. The impact of this will not be realized until FY2008, approximately two years from now. This is expected to slow releases

P<sup>15</sup>P Admission and Release Trends Statistical Bulletin OPA 06-03, October 25, 2005, Department of Corrections.

P<sup>16</sup>P Admission and Release Trends Statistical Bulletins for Fiscal Years 1999-2004, Department of Corrections.

 $P_{10}^{17}P$  Ibid, note 15.

 $P_{10}^{18}P$  Ibid, note 16.

 $P^{19}P$  Ibid, note 15.

 $P^{20}P$  Ibid, note 15.  $P^{21}P$  Ibid, note 15.

P<sup>22</sup>P Ibid, note 15. P<sup>22</sup>P Dester, Kristi, Statistical Percenta, Fiscal Verra

P<sup>22</sup>P Rosten, Kristi. Statistical Reports, Fiscal Years 2002 and 2003, Department of Corrections.

P<sup>23</sup>P Historical data obtained from Colorado Department of Corrections Monthly Population and Capacity Reports.

because those expected to release at 35 months will remain in prison for an average of two and a half additional months.<sup>24</sup> The following section discusses length of stay estimates in more detail.

Table 1 displays the historical total and gender-specific growth in the prison population by fiscal year for 1995 through June 2005, and the fiscal year end population projections through June 2012.

	Total		Male		Female	
	Pri	son	Pop	ulation	Population	
<b>Fiscal Year End</b>		Percent		Percent		Percent
(FYE)	Count	Growth	Count	Growth	Count	Growth
1995*	10669	-	10000	-	669	-
1996*	11019	3.28%	10250	2.50%	769	14.95%
1997*	12590	14.26%	11681	13.96%	909	18.21%
1998*	13663	8.52%	12647	8.27%	1016	11.77%
1999*	14726	7.78%	13547	7.12%	1179	16.04%
2000*	15999	8.64%	14733	8.75%	1266	7.38%
2001*	17222	7.64%	15882	7.80%	1340	5.85%
2002*	18045	4.78%	16539	4.14%	1506	12.39%
2003*	18846	4.44%	17226	4.15%	1620	7.57%
2004*	19569	3.84%	17814	3.41%	1755	8.33%
2005*	20704	5.80%	18631	4.59%	2073	18.12%
2006	21901	5.78%	19586	5.13%	2315	11.67%
2007	22827	4.23%	20311	3.70%	2516	8.68%
2008	24000	5.14%	21254	4.64%	2746	9.14%
2009	25029	4.29%	22076	3.87%	2953	7.54%
2010	26218	4.75%	23041	4.37%	3177	7.59%
2011	27371	4.40%	23921	3.82%	3450	8.59%
2012	28530	4.23%	24763	3.52%	3767	9.19%

 Table 1: Fall 2005 Adult Prison Population Projections, Total and by Gender

\*Historical Data.

Note: All projections are rounded to the next whole number.

 $P^{24}P$  These numbers reflect an analytical cap of 480 months on length of stay.

Table 2 displays total and gender-specific projected growth in the prison population by quarter for fiscal years 2005 thru 2012.

End of			Quarterly				
	Month		Growth	Males		Females	
2005	June*	20704	1.90%	18631	1.61%	2073	4.59%
	September*	21115	1.99%	19000	1.98%	2115	2.03%
	December	21312	0.93%	19142	0.75%	2170	2.60%
2006	March	21610	1.40%	19355	1.11%	2255	3.92%
	June	21901	1.35%	19586	1.20%	2315	2.66%
	September	22068	0.76%	19724	0.70%	2344	1.25%
	December	22221	0.69%	19826	0.52%	2395	2.18%
2007	March	22506	1.28%	20051	1.14%	2455	2.51%
	June	22827	1.43%	20311	1.30%	2516	2.48%
	September	23058	1.01%	20493	0.90%	2565	1.95%
	December	23376	1.38%	20736	1.18%	2640	2.92%
2008	March	23652	1.18%	20961	1.09%	2691	1.93%
	June	24000	1.47%	21254	1.40%	2746	2.04%
	September	24201	0.84%	21404	0.71%	2797	1.86%
	December	24454	1.05%	21623	1.02%	2831	1.22%
2009	March	24731	1.13%	21832	0.97%	2899	2.40%
	June	25029	1.20%	22076	1.12%	2953	1.86%
	September	25283	1.01%	22273	0.89%	3010	1.93%
	December	25579	1.17%	22532	1.16%	3047	1.23%
2010	March	25896	1.24%	22776	1.08%	3120	2.40%
	June	26218	1.24%	23041	1.16%	3177	1.83%
	September	26448	0.88%	23209	0.73%	3239	1.95%
	December	26702	0.96%	23396	0.81%	3306	2.07%
2011	March	27043	1.28%	23665	1.15%	3378	2.18%
	June	27371	1.21%	23921	1.08%	3450	2.13%
	September	27614	0.89%	24091	0.71%	3523	2.12%
	December	27888	0.99%	24288	0.82%	3600	2.19%
2012	March	28180	1.05%	24498	0.86%	3682	2.28%
	June	28530	1.24%	24763	1.08%	3767	2.31%

Table 2: Fall 2005 Adult Quarterly Prison Population Projections, Total and by Gender

\*Historical Data.

Note: All projections are rounded to the next whole number.

At the request of the Department of Corrections, projected numbers of admissions and releases have been included, and are given in Table 3 and 4.

	Admi	Total	
	New Court	Technical	
	Commitments	Parole Violations	Admissions
FY2005*	6479	2720	9199
FY2006	6464	3040	9504
FY2007	6632	3283	9915
FY2008	6823	3489	10312
FY2009	7544	3637	11181
FY2010	7750	3800	11551
FY2011	7956	4013	11969
FY2012	8162	4265	12427

#### **Table 3: Projected Admissions by Type**

\*Based on data provided by DOC. Data is considered preliminary, and may vary from that published by DOC.

#### **Table 4: Projected Releases by Type**

-		Parole		Sentence	<b>Other</b> *	Total
	Mandatory	Discretionary	Total	Discharge		Discharges
FY2005*	4680	1597	6277	1566	384	8227
FY2006	4556	1759	6315	1511	593	8419
FY2007	5125	1501	6625	1457	642	8724
FY2008	5583	1185	6768	1359	676	8803
FY2009	6333	907	7240	1319	744	9303
FY2010	7152	593	7745	1271	818	9834
FY2011	8013	249	8261	1213	895	10369
FY2012	8481	135	8616	1219	941	10775

\*This category includes, among other things death, releases on appeal, bond release, and court ordered discharges. \*\*Based on data provided by DOC. Data is considered preliminary, and may vary from that published by DOC.

Historical and projected trends in admission types are displayed in Figure 7, and release type trends can be found in Figures 8.





Admits to Prison: Actual and Projected

Source: Historical data obtained from Colorado Department of Corrections Annual Statistical Reports and data extracts provided by DOC.





**Release Types: Actual and Projected** 

Source: Historical data obtained from Colorado Department of Corrections Monthly Population and Capacity Reports.

# **ESTIMATED LENGTH OF STAY IN PRISON**

The average lengths of stay for new commitments by males, females and totals estimated by offense category are displayed in Tables 5 through 9. The average time new commitments are expected to actually serve in prison is estimated using DOC data regarding the sentences and time served for the prior year's releases. Any changes in the decision-making process of criminal justice professionals will impact the accuracy of these estimates. Indeterminate sentences are also assumed to be forty years. Interstate compact offenders serving time in Colorado, on which no sentencing data are available, are excluded from this analysis. Additionally, as in past projected estimates, sentences as well as length of stay are capped at forty years.

The overall estimated stay of 37.29 months for FY2005 new commitments is slightly longer than the length of stay estimated for the prior year's admissions. Note that these numbers are a reflection of time actually served and do not reflect actual sentencing patterns. In fact, the current upswing is not likely to be the result of increased sentence lengths, as this figure has fallen each year, and based upon preliminary analysis of FY 2005 admissions, is expected to decline further (see Figure 10).<sup>25</sup> Further analyses of sentence length indicates average sentence lengths have declined slightly for cases in which the governing sentence was based on the commission of a class 4, 5 or 6 felony, and significantly for class 2 felonies. Sentence lengths for class 3 felonies only have remained relatively stable over the past ten years.<sup>26</sup>

 $P^{25}P$  Rosten, Kristin. Statistical Reports, FY1998-FY2004, Colorado Department of Corrections. The FY 2005 report was not available at the time of printing.

 $P^{26}P$  These conclusions were drawn based upon analysis of data provided by DOC, but which were considered preliminary. Additionally, analysis methods were likely to differ from those utilized by DOC in their annual reports. Therefore, it is likely these figures will vary from those reported by DOC.

Offense	Average Length of Stay (Months)*	Number of Commitments	Percent of all Commitments	Average Length of Stay Effect (Months)
F1	480.00	24	0.37%	1.78
F2 Ext**	251.43	66	1.02%	2.56
F2 Sex***	243.60	5	0.08%	0.19
F2 Drug***	131.62	8	0.12%	0.16
F2 Other****	118.68	10	0.15%	0.18
F3 Ext	122.67	177	2.73%	3.35
F3 Sex	104.09	78	1.20%	1.25
F3 Drug	47.33	300	4.63%	2.19
F3 Other	61.00	182	2.81%	1.71
F4 Ext	47.07	326	5.03%	2.37
F4 Sex	50.99	110	1.70%	0.87
F4 Drug	28.74	561	8.66%	2.49
F4 Other	33.36	919	14.18%	4.73
F5 Ext	15.89	211	3.26%	0.52
F5 Sex	26.60	127	1.96%	0.52
F5 Drug	20.14	185	2.86%	0.57
F5 Other	21.38	845	13.04%	2.79
F6 Ext	17.33	30	0.46%	0.08
F6 Sex	12.27	38	0.59%	0.07
F6 Drug	11.24	153	2.36%	0.27
F6 Other	13.48	444	6.85%	0.92
Total Male New				
<b>Court Commitments</b>	39.94	4799	74.07%	29.58

Table 5: Estimated Length of Stay for Male FY2005 New Commitments

\*For the purposes of calculating these estimates, length of stay is capped at 40 years.

\*\*The "EXT" category refers to violent offenses defined by statute as "extraordinary risk of harm offenses." \*\*\*Convicted sexual offenders typically serve more time, and drug offenders typically serve less time, though some crimes in each of these groups are identified separately.

\*\*\*\*" Other" includes all crimes except sex, drug, and extraordinary crimes. Examples include theft, burglary, motor vehicle theft, forgery, and fraud.

Table 6: Estimated Length of S	Stay for Male Parole	Violators with a	New Crime Returning i	n
FY2005				

Offense Category	Average Length of Stay (Months)*	Number of Commitments	Percent of all Commitments	Average Length of Stay Effect (Months)
<b>F1</b>	480.00	3	0.05%	0.22
F2 Ext**	480.00	2	0.03%	0.15
F2 Sex***	-	-	-	-
F2 Drug***	110.10	1	0.02%	0.02
F2 Other****	-	-	-	-
F3 Ext	118.55	19	0.29%	0.35
F3 Sex	-	-	-	-
F3 Drug	67.88	22	0.34%	0.23
F3 Other	59.12	19	0.29%	0.17
F4 Ext	37.65	62	0.96%	0.36
F4 Sex	42.04	4	0.06%	0.03
F4 Drug	35.20	84	1.30%	0.46
F4 Other	32.33	168	2.59%	0.84
F5 Ext	12.27	114	1.76%	0.22
F5 Sex	25.12	10	0.15%	0.04
F5 Drug	22.43	22	0.34%	0.08
F5 Other	22.63	130	2.01%	0.45
F6 Ext	9.53	3	0.05%	0.00
F6 Sex	14.85	5	0.08%	0.01
F6 Drug	14.13	39	0.60%	0.09
F6 Other	13.76	56	0.86%	0.12
Total Male				
Parole Violations				
with a New Crime	32.48	763	11.78%	3.82

Offense Category	Average Length of Stay (Months)*	Number of Commitments	Percent of all Commitments	Average Length of Stay Effect (Months)
F1	480.00	2	0.03%	0.15
F2 Ext**	178.56	4	0.06%	0.11
F2 Sex***	-	-	-	-
F2 Drug***	21.60	3	0.05%	0.01
F2 Other****	106.82	2	0.03%	0.03
F3 Ext	64.27	20	0.31%	0.20
F3 Sex	66.00	3	0.05%	0.03
F3 Drug	40.99	58	0.90%	0.37
F3 Other	48.97	31	0.48%	0.23
F4 Ext	32.28	46	0.71%	0.23
F4 Sex	32.48	3	0.05%	0.02
F4 Drug	25.51	140	2.16%	0.55
F4 Other	29.56	178	2.75%	0.81
F5 Ext	11.27	58	0.90%	0.10
F5 Sex	-	-	-	-
F5 Drug	21.42	40	0.62%	0.13
F5 Other	20.40	136	2.10%	0.43
F6 Ext	10.43	4	0.06%	0.01
F6 Sex	-	-	-	-
F6 Drug	12.10	27	0.42%	0.05
F6 Other	12.51	46	0.71%	0.09
<b>Total Female New</b>				
<b>Court Commitments</b>	28.68	801	12.36%	3.55

Table 7: Estimated Length of Stay for Female FY2005 New Commitments

\*For the purposes of calculating these estimates, length of stay is capped at 40 years.

\*\*The "EXT" category refers to violent offenses defined by statute as "extraordinary risk of harm offenses." \*\*\*Convicted sexual offenders typically serve more time, and drug offenders typically serve less time, though some crimes in each of these groups are identified separately.

\*\*\*\*" Other" includes all crimes except sex, drug, and extraordinary crimes. Examples include theft, burglary, motor vehicle theft, forgery, and fraud.

<b>Table 8: Estimated Length of Stay for Female Parol</b>	e Violators with a New	<b>Crime Returning</b>
in FY2005		

Offense Category	Average Length of Stay (Months)*	Number of Commitments	Percent of all Commitments	Average Length of Stay Effect (Months)
<b>F1</b>	-	-	-	-
F2 Ext**	-	-	-	-
F2 Sex***	-	-	-	-
F2 Drug***	-	-	-	-
F2 Other****	-	-	-	-
F3 Ext	38.68	3	0.05%	0.02
F3 Sex	-	-	-	-
F3 Drug	-	-	-	-
F3 Other	65.78	2	0.03%	0.02
F4 Ext	27.86	7	0.11%	0.03
F4 Sex	-	-	-	-
F4 Drug	23.19	12	0.19%	0.04
F4 Other	25.58	18	0.28%	0.07
F5 Ext	9.54	34	0.52%	0.05
F5 Sex	-	-	-	-
F5 Drug	24.78	11	0.17%	0.04
F5 Other	19.63	13	0.20%	0.04
F6 Ext	9.45	2	0.03%	0.00
F6 Sex	-	-	-	-
F6 Drug	11.53	6	0.09%	0.01
F6 Other	11.38	8	0.12%	0.01
Total Female				
<b>Parole Violations</b>				
with a New Crime	19.07	116	1.79%	0.34

 \*\*Tor the purposes of calculating these estimates, length of stay is capped at 40 years.

 \*\*The "EXT" category refers to violent offenses defined by statute as "extraordinary risk of harm offenses."

 \*\*\*Convicted sexual offenders typically serve more time, and drug offenders typically serve less time, though some crimes in each of these groups are considered extraordinary risk crimes. Therefore, these two groups are identified separately.

 \*\*\*\*\*\*"Other" includes all crimes except sex, drug, and extraordinary crimes. Examples include theft, burglary, motor vehicle theft, forgery, and fraud.

Table 9: Category Totals, Average Estimated Ler	igth of Stay Estimated Length of Stay for
FY2005 Prison Admissions	

	Average Length of Stay (Months)*	Number of Commitments	Percent of all Commitments	Average Length of Stay Effect (Months)
Total Males	38.91	5562	85.85%	33.41
Total Females	27.47	917	14.15%	3.89
<b>Total New Commits</b>	38.33	5600	86.43%	33.13
<b>Total Parole Violations</b>				
(New Crime)	30.71	879	13.57%	4.17
Grand Total	37.29	6479	100.00%	37.29

\*For the purposes of calculating these estimates, length of stay is capped at 40 years.

#### Figure 9:



#### **DCJ Average Length of Stay Estimates**

Note: The averages presented here differ from those given in prior DCJ population projection reports due to the application of a new methodology.

Source: Data provided by DOC, October 22, 2005.

#### Figure 10:



Average Sentence Length for New Prison Admits by Fiscal Year

# PAROLE

Between 1991 and 2003, the average length of stay (ALOS) on parole steadily increased from 13.4 months in FY1999 to 15.8 months in FY2003.<sup>27</sup> However, more recently the ALOS has declined very slightly, to 15.2 months in FY2004 and to 15.08 months in FY2005 (see Figure 11). Many legislative changes enacted in the past 20 years contributed to the increase in the average parole length of stay, but in 2003 Senate Bill 252 repealed the requirement of an additional year of parole when a parolee was revoked to prison. It is possible that this decrease reflects the early impact of this piece of legislation, which is expected to continue to contribute to a decline in length of stay on parole.

Source: Annual Statistical Reports, FY1998-FY2003, Colorado Department of Corrections.

P<sup>27</sup>P Office of Planning and Analysis, October 29, 2003, Colorado Department of Corrections.





Source: Department of Corrections Office of Planning and Analysis, October 22, 2004, November 12, 2005.

At the request of the Department of Corrections, the parole population projections have been expanded to include out-of-state and absconder populations. Table 10 displays forecasts for each of these populations at the end of fiscal years 2005 thru 2012. As shown, the domestic parole caseload is expected to increase 42.88 percent, from 5,714 in July 2005 to 8,164 in July 2012.

		Percent	Out of	Percent		Percent
	Domestic	Growth	State	Growth	Absconder	Growth
FY2005*	5714	8.96%	1506	8.11%	591	-1.66%
FY2006	6052	5.92%	1482	-1.59%	676	14.43%
FY2007	6349	4.91%	1462	-1.35%	737	8.96%
FY2008	6486	2.16%	1399	-4.31%	797	8.22%
FY2009	6938	6.97%	1395	-0.29%	858	7.60%
FY2010	7422	6.98%	1384	-0.79%	919	7.06%
FY2011	7917	6.67%	1361	-1.66%	979	6.59%
FY2012	8164	3.12%	1284	-5.66%	1040	6.19%

#### **Table 10: Parole Population Projections**

\*Historical Data.

Figure 12 displays the historical and projected domestic and out-of-state parole caseloads for fiscal years 1999 through 2012, while Figure 13 exhibits the historical and projected annual growth rates for these populations. As can be seen, the historical growth rate has significantly varied. A decline of 3.70 percent was observed in FY2002, followed by an increase of 20.34 percent the following year. The past two years have been more stable, with an increase of 7.95 percent in FY2004 and 8.96 in FY2005. The percentage of the total parole population made up of

out of state parolees has been slowly but steadily declining for the past 7 years, and is expected to continue this trend through FY2012.

#### Figure 12:



Parole Populations, Actual and Projected

Source: Historical data obtained from Colorado Department of Corrections Monthly Population and Capacity Reports.

#### Figure 13:



Parole Actual and Projected Growth Rate

Source: Historical data obtained from Colorado Department of Corrections Monthly Population and Capacity Reports.

The growth of the absconder population has varied considerably in the past six years, from a 3.65 decline in FY2000, increasing to 31.92 percent in FY2003, followed by a decline to -1.66 percent over the following two years. Historical and projected numbers of this population are displayed in Figure 14.

#### Figure 14:



#### Absconder Population, Actual and Projected

Source: Historical data obtained from Colorado Department of Corrections Monthly Population and Capacity Reports.

## **DCJ ADULT PRISON PROJECTION ACCURACY**

Last year, the DCJ adult prison population projections underestimated the population by 2.33 percent in the first year. In the last ten years, the error has averaged 1.72 percent. In the last 20 years, this error has averaged 2.04 percent. Legislation and other policy changes, including changes in discretion exercised by decision makers, often impact accuracy rates after the first year. Table 11 below shows a comparison of projected populations for the first projection year to actual populations over the last 20 years.

<b>Fiscal Year End</b>	Projected	Actual	Percent
(FYE)	Population	Population	Difference
1986	3,446	3,517	-2.02%
1987	4,603	4,702	-2.11%
1988	5,830	5,766	1.11%
1989	6,471	6,763	-4.32%
1990	7,789	7,663	1.64%
1991	8,572	8,043	6.58%
1992	8,745	8,774	-0.33%
1993	9,382	9,242	1.51%
1994	9,930	10,005	-0.75%
1995	11,003	10,669	3.13%
1996	11,171	11,577	-3.51%
1997	12,610	12,590	0.16%
1998	13,803	13,663	1.02%
1999	14,746	14,726	0.14%
2000	15,875	15,999	-0.78%
2001	16,833	17,222	-2.26%
2002	17,569	18,045	-2.64%
2003	19,295	18,846	2.38%
2004	19,961	19,569	2.00%
2005	20,221	20,704	-2.33%

 Table 11: Colorado Adult Prison Populations, Projection Compared to Actual, 1986 to

 2005

Source: DCJ Prison Population Projections, 1985-2004.

An error rate of 2.33 percent may be considered minor, or at one time was acceptable, but with almost 500 percent growth in the prison population over the last twenty years, 2 percent has come to represent a large number of inmates.

The need for more precision in projecting prison populations has become increasingly important given the current restraints on the state's budget. Additional data, which may be helpful in achieving such precision, may include:

- □ Accurate governing sentence data on the stock population. Many have longer incarceration times than sentences in the data extracts provided. For the FY2005 stock population, this occurred in 4.7% (N=943) of the cases. If time served in jail is included, this increases to 5.7% (N=1146).
- More detail regarding offenses for the stock population. Information on a single offense is provided, but offenders are often incarcerated as a result of several offenses. It is unclear if the sentence reported corresponds to the crime listed. This also applies to parole returns with a new crime.
- □ Admission dates for the stock population would be helpful in identifying those that are also in the admission data provided, as well as those entering after June 30. Since the

projection period begins on July 1 of each year, including inmates entering prison after this date complicates the projection process.

- □ Gender, offenses, age, and admission date on inmates not included in the stock data file provided, such as those sentenced to life without parole and death.
- □ Information indicating any spans of time an offender was on fugitive status.
- □ The amount of time already served or the amount of time yet to serve for technical violation returns.
- The actual date of incarceration intake and time spent on parole for releases would enable the modeling of release patterns to apply to the current and future populations. Additionally, age or date of birth for this population would be helpful.
- □ Incarceration number would enable the linking of files across years.
- Parole approval rates, as well as information regarding retention after approval would be helpful in forecasting releases and parole populations.
- Parole failure rates, or data adequate to determine a survival distribution would also be helpful. This would include parole start and release dates.
- Demographic data concerning the parole population, particularly gender and age.
- □ As projections for the fugitive and interstate parole populations have been requested, further information regarding these populations would be helpful. This includes gender, offense, age, admission dates, and dates this status was acquired.

# Juvenile Commitment and Parole Forecast

This section presents the summary of the juvenile commitment and parole forecasts. The next section summarizes the performance of fiscal year 2005 forecasts and then the section on Commitment and Parole provides greater detail on the forecast model, assumptions, and caveats.

Juvenile commitment yearly (YTD) average daily population (ADP) is expected to grow between four and seven percent annually from fiscal year end 2006 to fiscal year end 2012. Fiscal year end (FYE) monthly ADP is expected to follow the same trend through fiscal year 2012. Table 12 summarizes this forecast.

Table 12: DYC Juvenile Commitment Average Daily Population (ADP) Forecast,FYE2006-FYE2012

	Year to Date (YTD)		Fiscal Year End (FYE) Monthly	
	<b>Average Daily</b>		<b>Average Daily</b>	
<b>Fiscal Year</b>	Population	Percent	Population	Percent
(FY)	(ADP) Forecast	Growth	(ADP) Forecast	Growth
2006	1449.7	-	1486.4	-
2007	1542.8	6.4%	1588.6	6.9%
2008	1638.1	6.2%	1678.9	5.7%
2009	1724.3	5.3%	1762.2	5.0%
2010	1805.2	4.7%	1841.4	4.5%
2011	1883.0	4.3%	1918.1	4.2%
2012	1958.9	4.0%	1993.4	3.9%

Juvenile parole yearly average daily caseload (ADC) is expected to grow between two and six percent annually from fiscal year end 2006 through fiscal year end 2012. Fiscal year end (FYE) monthly ADC is expected to follow the same trend through fiscal year end 2012. Section 2.3 describes impact of historical fluctuations on this forecast. Table 13 summarizes this forecast.

Fiscal Year (FY)	Year to Date (YTD) Average Daily Caseload (ADC) Forecast	Percent Growth	Fiscal Year End (FYE) Monthly Average Daily Caseload (ADC) Forecast	Percent Growth
2006	523.8	-	528.8	-
2007	549.8	5.0%	562.3	6.3%
2008	575.5	4.7%	589.9	4.9%
2009	601.0	4.4%	617.2	4.6%
2010	626.3	4.2%	644.2	4.4%
2011	651.4	4.0%	671.1	4.2%
2012	676.3	3.8%	697.9	4.0%

Table 13: DYC Juvenile Parole Average Daily Caseload (ADC) Forecast, FYE2006-FYE2012

## **ASSESSMENT OF 2005 PROJECTION**

As Figure 15 shows, DCJ's FY2005 forecast of juvenile commitment YTD ADP underestimated total juvenile commitment ADP by 18.9 or 1.2%. DCJ's FY2005 juvenile parole YTD ADC forecast overestimated the total juvenile parole ADC by 30.4 or 6.2% as shown in Figure 16. As Figure 15 demonstrates, there has been a significant downturn in the monthly juvenile commitment ADP with a net loss of 65.5 in ADP from April 2005 to August 2005. Figure 15 also shows that DCJ's monthly forecasts are beginning to significantly overestimate actual monthly ADP.

#### Figure 15:



Source: Data provided by the Division of Youth Corrections, Department of Human Services 10/25/2005.

As Figure 16 demonstrates, the monthly juvenile parole ADC has leveled off since March 2005. Figure 16 also shows that DCJ's FY2005 monthly forecasts are beginning to significantly overestimate actual monthly ADP.

#### Figure 16:



Source: Data provided by the Division of Youth Corrections, Department of Human Services 10/25/2005.

# COMMITMENT

#### Forecasting Methodology and Model Assessment

When time series data are used in regression analysis, often the error term is not independent through time and is serially correlated (future time periods are correlated with prior time periods). If the error term is serially correlated, the efficiency of the prediction model is adversely affected and biased. Several models were explored for modeling Division of Youth Corrections (DYC) commitment monthly average daily population (ADP). A Yule-Walker<sup>28</sup> model that accounts for this serial correlation was found to best fit the historical monthly ADP data.

Figure 17 shows the FY2006 fitted model and historical ADP. This model, while it fits the data the best, is still very sensitive to shifts in policy and forecasts beyond two years should be viewed with discretion. Figure 17 also shows that there has been downturn in the monthly

P<sup>28</sup>P Box, G.E.P. and Jenkins, G.M. (1976), Time Series Analysis: Forecasting and Control, Revised Edition, San Francisco: Holden-Day.

juvenile commitment ADP with a net loss of 69.7 in ADP from May 2005 to October 2005 but the historical trend shows that this downturn is probably not sustainable.

#### Figure 17:



Source: Data provided by the Division of Youth Corrections, Department of Human Services 10/25/2005.

#### **Juvenile Commitment Average Daily Population Forecast**

Juvenile commitment yearly (YTD) average daily population (ADP) is expected to grow between four and seven percent annually from fiscal year end 2006 to fiscal year end 2012. Fiscal year end (FYE) monthly ADP is expected to follow the same trend through fiscal year 2012. Table 14 summarizes this forecast and Table 15 summarizes the forecasts by DYC Region. Figure 18 shows this growth relative to historical monthly ADP.

Fiscal Year (FY)	Year to Date (YTD) Average Daily Population (ADP) Forecast	Percent Growth	Fiscal Year End (FYE) Monthly Average Daily Population (ADP) Forecast	Percent Growth
2006	1449.7	-	1486.4	-
2007	1542.8	6.4%	1588.6	6.9%
2008	1638.1	6.2%	1678.9	5.7%
2009	1724.3	5.3%	1762.2	5.0%
2010	1805.2	4.7%	1841.4	4.5%
2011	1883.0	4.3%	1918.1	4.2%
2012	1958.9	4.0%	1993.4	3.9%

#### Table 14: 2006 Juvenile Commitment ADP Forecast, FYE2006-FYE2012

Fiscal								
Year	Southern	Percent	Western	Percent	Central	Percent	Northeast	Percent
(FY)	Forecast	Growth	Forecast	Growth	Forecast	Growth	Forecast	Growth
2005	318.8	-	177.7	-	621.7	-	343.9	-
2006	338.2	6.1%	195.4	10.0%	655.8	5.5%	373.5	8.6%
2007	358.7	6.1%	206.8	5.8%	696.1	6.1%	397.1	6.3%
2008	377.1	5.1%	217.5	5.2%	731.3	5.1%	420.6	5.9%
2009	394.1	4.5%	228.1	4.9%	764.8	4.6%	443.2	5.4%
2010	410.3	4.1%	239.2	4.8%	797.1	4.2%	464.7	4.8%
2011	429.0	4.6%	246.3	3.0%	832.4	4.4%	473.0	1.8%

Table 15: 2006 Juvenile Commitment Forecast by Region

#### Figure 18:





Source: Data provided by the Division of Youth Corrections, Department of Human Services 10/25/2005.

This forecast model has several caveats in that it assumes a stable time series and the model does not take into account future changes to laws or policies pertaining to DYC juvenile commitments that may lengthen or shorten length of stay, and severe economic or catastrophic events that might affect the United States or Colorado.

## JUVENILE PAROLE

#### **Forecasting Methodology**

In the prior section, commitment ADP appeared as a stable time series. Figure 18 shows that parole average daily caseload (ADC) does not have this quality. From June 1994 to June 1997, parole ADC was relatively stable with a slight decline occurring. The 1997 General Assembly then implemented mandatory one-year parole terms and subsequently, ADC grew at a rapid rate from July 1994 to July 2001. At that time, the mandatory parole term was lowered (SB01-77, effective July 1, 2001) to nine months, after which ADC declined rapidly between August 2001 and August 2002, after which ADC began a modest increase from August 2002 to November 2003. The 2003 General Assembly (SB03-284, effective May 1, 2003) then lowered the mandatory parole term to six months, which subsequently had the same effect as the previous reduction and ADC dropped significantly from November 2003 to May 2004 when ADC began growing again at very moderate rate. Since January 2005, ADC began to slowly decline and level off but given historical trends this trend is probably not sustainable. Figure 19 demonstrates these changes.

#### Figure 19:



**Division of Youth Corrections** 

Source: Data provided by the Division of Youth Corrections, Department of Human Services 10/25/2005.

These shifts in policy and law show that this population is very sensitive to these types of changes. This makes accurate forecasting more difficult. When time series data are used in regression analysis, often the error term is not independent through time and is serially correlated (future time periods are correlated with prior time periods). If the error term is serially correlated, the efficiency of the model is adversely affected and biased. Several models were explored for modeling monthly juvenile parole average daily caseload (ADC). A Yule-Walker model<sup>29</sup> that accounts for this serial correlation was found to best fit the historical monthly ADC data. This model, while it fits the data the best, is still very sensitive to shifts in policy and forecasts beyond two years should be viewed with discretion.

#### Juvenile Parole Average Daily Caseload Forecast

Juvenile commitment yearly average daily caseload (ADC) is expected to grow between three and six percent annually from fiscal year end 2006 through fiscal year end 2012. Fiscal year end (FYE) monthly ADC is expected to follow the same trend through fiscal year end 2012. Table 16 summarizes the total DYC forecast and Table 17 summarizes the forecasts by DYC Region. Figure 20 shows overall growth relative to historical monthly ADC.

Fiscal Year (FY)	Year to Date (YTD) Average Daily Caseload (ADC) Forecast	Percent Growth	Fiscal Year End (FYE) Monthly Average Daily Caseload (ADC) Forecast	Percent Growth
2006	523.8	-	528.8	-
2007	549.8	5.0%	562.3	6.3%
2008	575.5	4.7%	589.9	4.9%
2009	601.0	4.4%	617.2	4.6%
2010	626.3	4.2%	644.2	4.4%
2011	651.4	4.0%	671.1	4.2%
2012	676.3	3.8%	697.9	4.0%

#### Table 16: 2006 Juvenile Parole ADC forecast, FYE2006-FYE2012

Table 1'	7:2006	Juvenile	Parole	ADC	Forecast	hv R	egion.	FY200	6-FY2	2012
I abit I	. 2000	Juvenne	I al ulu	ADC I	l'ul ccasi	Dy IN	cgiun,	I I 4000	U-T. T 7	1014

Fiscal								
Year	Southern	Percent	Western	Percent	Central	Percent	Northeast	Percent
<b>(FY)</b>	Forecast	Growth	Forecast	Growth	Forecast	Growth	Forecast	Growth
2006	106.5	-	79.4	-	223.9	-	116.7	-
2007	118.1	10.9%	90.0	13.3%	239.9	7.1%	120.6	3.3%
2008	118.8	0.6%	91.6	1.8%	251.8	5.0%	126.7	5.1%
2009	129.6	9.1%	98.7	7.8%	263.3	4.6%	133.3	5.2%
2010	129.8	0.1%	99.6	0.9%	275.1	4.5%	139.7	4.8%
2011	140.9	8.6%	107.4	7.8%	286.9	4.3%	145.9	4.4%
2012	141.6	0.5%	108.1	0.7%	297.9	3.9%	147.9	1.4%

The caveats of this forecast include high sensitivity to future changes to laws and policies pertaining to DYC juvenile parolees that may lengthen or shorten parole terms and severe economic or catastrophic events that might affect the United States or Colorado. In addition, this

P<sup>29</sup>P Box, G.E.P. and Jenkins, G.M. (1976), Time Series Analysis: Forecasting and Control, Revised Edition, San Francisco: Holden-Day.

model, while it fit the data the best, is still very sensitive to shifts in policy and forecasts beyond two years should be viewed with discretion.

#### Figure 20:



Source: Data provided by the Division of Youth Corrections, Department of Human Services 10/25/2005.

# CONCLUSION

The DYC population projections presented here are based on numbers that reflect unprecedented events in the juvenile justice system in Colorado. State revenue shortfalls resulted in significant budget cuts in both the DYS and other programs that target at-risk youth and their families: Senate Bill 94 efforts to divert youth from penetration into the juvenile justice system and diversion programs have seen significant budget cuts; the number of detention beds has been capped; and juvenile parole was decreased from 12 to 6 months. With significant changes at both the front end of the juvenile justice system (diversion and detention) and at the back end (parole), the certainty of events across the system—upon which forecasting and planning depends—has nearly disappeared in the last few years.

When many broad-based modifications are implemented in a short period of time it becomes challenging to determine, at each decision point and for each modification, how case processing changes. To understand the short and long term effects of these sorts of policy and programmatic changes, it is necessary to collect and analyze information from many data points in the juvenile justice system in Colorado. Unfortunately DCJ does not have the resources to undertake such a large-scale analysis.

# Postscript to DCJ's Prison Population Projections, 2005

# BACKGROUND

In early October 2005, representatives of the Colorado Department of Corrections requested that the Division of Criminal Justice provide additional information in the current Prison Population Projection report.

The DOC representatives requested additional information in hopes that it might be useful in understanding the continually rising state prison population. DOC officials specifically asked for information that might be useful in facility planning including additional length of stay information. Also, DOC officials asked that DCJ address in the report the relationship between arrest and incarceration rates and, in general, how criminal cases flow through the system. The DOC representatives requested additional information in hopes that it might be useful in understanding the continually rising state prison population. For example, what is

happening with arrest rates (which have been decreasing since 1993), felony filings (which increase annually in number) and community corrections that might shed light on the prison population?

Limited resources preclude the Division's ability to conduct additional analyses apart from the statistical modeling required for the projections. However, many criminal justice researchers have addressed issues pertaining to increases in incarceration. To address DOC officials' concerns, several documents have been attached to this report as appendices that contain important information for policy makers and institutional administrators. These documents are summarized below.

Appendix A provides graphs presenting Colorado's crime rate. More information about the crime rate and the official processing of criminal cases can be found at DCJ's website in the report entitled *Crime and Justice in Colorado: 2004* (March, 2005), available at http://dcj.state.co.us/ors/research\_documents.htm.

In Appendix B we present a paper prepared by Dr. Steve Aos from the bi-partisan Washington State Institute for Public Policy, a nationally known economist and policy analyst. "The Costs and Benefits of Incarceration and Other Crime Control Policies provides information that might be useful to policymakers interested in giving, as Aos states, "taxpayers a better return on their crime-fighting dollars." Additional cost benefit information is available at the Institute's web site, http://www.wsipp.org.

Finally, "Two Views on Imprisonment Policies" is a report commissioned in 1996 by the National Institute of Justice, the research arm of the U.S. Department of Justice. Although a decade old, the report presents the views of two prominent scholars on the merits of sentencing

and imprisonment policies, a debate as current today as it was ten years ago. This report is included as Appendix C.

In the section below, a short discussion of crime rates and incarceration rates is included. This information is followed by a series of bullets that summarize general facts pertaining to the criminal justice system in Colorado. This summary information is intended for both officials at DOC along with other readers of this report.

## THE CRIME RATE AND THE INCARCERATION RATE

#### **Crime Rates Fluctuate**

Common sense tells us that high incarceration rates would decrease the crime rate. Nationwide, incarceration rates have increased steadily since 1972. Yet during this period, crime rates rose in the 1970s, declined from 1980 to 1984, rose again from 1984 to 1991, and have fallen since 1993.<sup>30</sup> Likewise, America's homicide rate was the same in 1995 as it was in 1970, despite the fact that over that period the prison population grew by about one million persons.<sup>31</sup> This pattern of fluctuating crime rates—which occurred while incarceration rates consistently increased over the past 33 years, lends support to almost any hypothesis about the relationship between incarceration and crime.<sup>32</sup>That is, sometimes the crime rate goes up while the incarceration rate increases (hence, supporting the idea that there is no relationship between crime and incarceration) and during other multi-year periods, crime goes down while the incarceration rate increases (supporting the idea that incarceration suppresses crime).

Further illuminating this point, the author of the paper included as Appendix B found that a 10 percent increase in the state incarceration rate results in a 2 to 4 percent reduction in the crime rate. In Colorado between 1980 and 2003, the crime rate fell by 35 percent while the incarceration rate increased by 450 percent.

"the more incarceration rates are increased, the less each additional prison cell will be able to reduce crime" (Aos, see Appendix B).

While locking up many more frequent offenders indeed precludes these offenders from committing crimes in the community, "the more incarceration rates are increased, the less each additional prison cell will be able to reduce crime" because presumably the highest risk offenders are incarcerated and, as time goes by, less serious offenders are sent to prison and averting their crimes has less impact on the crime rate (Aos, see Appendix B). Aos describes that prison as a crime control strategy follows the economic concept of diminishing marginal returns, and he states that "an increase in the incarceration rate today avoids considerably fewer crimes than it did just a decade or two ago."

P<sup>30</sup>P David Cole (2000). As Freedom Advances: The Paradox of Severity in American Criminal Justice. University of Pennsylvania Journal of Constitutional Law, Vol. 455, No. 3.

P<sup>31</sup>P Michael Tonry (1998). Crime and Punishment in America, in *The Handbook Of Crime And Punishment*, M.Tonry, Ed. P<sup>32</sup>P Tonry (1998), page 11, Oxford Press, NY.

#### **Colorado Incarceration Rates Consistently Increase**

Colorado's prison population has increased 223 percent in the past dozen years. In 1993, 9,462<sup>33</sup> inmates were in prison in Colorado compared to 21,115 on September 30, 2005.<sup>34</sup> In 1994, the incarceration rate (per 100,000 residents) was 289 compared to a rate of 438 at year end 2004.<sup>35</sup>

Like many states, Colorado's incarceration rate in 2004 of 438 per 100,000 adult residents exceeded South Africa (344), Israel (209), Mexico (191), England and Wales (145), Australia (120), China (118), Canada (116), Germany (97), France (88), Sweden (81) and Japan (60).<sup>36</sup> The U.S. incarceration rate across both the state and federal systems is 486 per 100,000 adult residents.<sup>37</sup>

#### **The Crime Funnel**

In large part, the lack of correlation between the crime rate and the incarceration rate is because only about 3 percent of crime ever leads to incarceration. Criminologists have studied the relationship between crime rates and incarceration rates and have consistently found only a small correlation between the two. In large part, the lack of correlation between the crime rate and the incarceration rate is because only about three percent of crime ever leads to incarceration.

Studies of crime victims show that only a portion of all crimes are reported to police. An important source of information is the National Crime Victimization Survey, which is conducted semi-annually by the Bureau of Justice Statistics in the U.S. Department of Justice. In 2000, about 39 percent of violent, personal and property crime was *reported* to police.

Once reported, a surprisingly small proportion of crimes result in an arrest. In 2002, according to the FBI, 49 percent of reported violent crimes resulted in arrest (64 percent for murder and non-negligent homicide, and 57 percent for aggravated assault), and 17 percent of nonviolent crimes resulted in arrest.<sup>38</sup>

#### **Prosecution and Conviction**

About 25 percent of felony *cases filed* with the court by prosecutors are for crimes of violence (usually assault, 12 percent, or robbery, 5.4 percent), and three-fourths are nonviolent crimes. The most frequently charged nonviolent offenses are drug trafficking (17.2 percent), other drug offenses (19.6 percent), theft (8.2 percent) and burglary (7.3 percent). *Conviction* rates for felony crimes vary by crime type, with the highest felony conviction rates for drug trafficking (67 percent), murder (64 percent), burglary (59 percent) and motor vehicle theft (56 percent); the

P<sup>33</sup>PThis is the number the Department of Corrections submitted to the U.S. Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, published in *Prisoners in 1994*, by Allen Beck and Darrell Gilliard, August 1995, Publication NCJ 151654. Available at http://www.ojp.usdoj.gov/bjs/pub/pdf/p04.pdf.

P<sup>34</sup>P This number was obtained from the Colorado DOC's "Monthly Population and Capacity Report" for September, 2005. P<sup>35</sup>P *Prisoners in 1994*, by Allen Beck and Darrell Gilliard, August 1995, Publication NCJ 151654, page 4. Available at http://www.ojp.usdoj.gov/bjs/.

 $P^{36}P$  From the Sentencing Project, New Incarceration Figures: Growth in Population Continues, 514 10P<sup>thP</sup> Street NW, suite 1000, Washington, D.C. Available at http://www.sentencingproject.org.

P<sup>37</sup>P Paige Harrison and Allen Beck (October 2005). Prisoners in 2004. Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, Washington, D.C. NCJ 210677.

P<sup>38</sup>P Sourcebook of Criminal Justice Statistics 2003, pages 375, 376, available at http://www.albany.edu/sourcebook/pdf/t419.pdf.

lowest conviction rates were for assault (35 percent) and fraud (33 percent).<sup>39</sup> These conviction rates are similar to those in Colorado.<sup>40</sup>

Not all convicted felons are sentenced to prison. At least half are sentenced to a period of supervision on probation. See Table 18 for a description of placements by conviction crime.

Table 10. Mult Tlacen	inclus by mu	ca er inic,	cases closed	1 2003	
	Drobation	TSD		Community	
	riovation	101	Jall	Corrections	DOC
Murder	7%	1%	8%	6%	81%
Rape	25%	20%	24%	3%	34%
Aggravated Assault	26%	3%	16%	4%	47%
Robbery	17%	6%	14%	8%	64%
Burglary	27%	3%	15%	5%	27%
Theft	40%	1%	21%	2%	7%
<b>Motor Vehicle Theft</b>	38%	3%	21%	5%	21%
Arson	35%	10%	27%	2%	25%
Drugs	38%	3%	16%	4%	16%

 Table 18: Adult Placements by Index Crime, Cases Closed 2003

Source: Sentencing data extracted from the Judicial Department's Integrated Colorado Online Network (ICON) information management system were obtained via the Colorado Integrated Criminal Justice Information System (CICJIS) Criminal Justice Analytic Support System (CJASS) and analyzed by DCJ'S Office of Research and Statistics.

#### Figure 21:

## The Crime Funnel: Aggravated Assault

- □ 100 aggravated assaults occur
- □ 39 are reported to police
- □ 22 arrests are made
- $\square$  20 crimes filed
- **6**.4
- □ 3 assaulters go to prison for every 100 aggravated assaults.

#### **Time Served and Crime Rates**

The National Research Council of the National Academy of Sciences found that tripling the time served per violent crime from 1975 to 1989 had no clear impact on violent crime. In that study, the Panel on the Understanding and Control Of Violent Behavior of the National Research Council found that while violent crime rates did decline during the early eighties, they generally rose after 1985 and this increase continued until 1993. In an analysis conducted by the U.S. Bureau of Justice Statistics, an examination of the rise of imprisonment from 1992 to 2001 concluded that the entire increase was a

The National Research Council of the National Academy of Sciences found that tripling the time served per violent crime from 1975 to 1989 had no clear impact on violent crime.

result of changes in sentencing policy and practices including mandatory minimum sentences and decisions that increased length of stay in prison.<sup>41</sup> According to Block's (1996) perspective,

 $P^{39}P$  Bureau of Justice Statistics (2000). Criminal Case Processing Statistics for the 75 largest counties, available at http://www.ojp.usdoj.gov/bjs/cases.htm.

P<sup>40</sup>P See *Crime and Justice in Colorado*, 2004. Colorado Division of Criminal Justice, Office of Research and Statistics, March 2005, available at HU<u>http://dcj.state.co.us/ors</u>UH. See Table 3.8 on page 40.

included as (Appendix C), certainty and length of time in prison *does* affect public safety, particularly when the focus is on violent crimes. Block, however, does not address cultural shifts that have made the incarceration experience a status symbol among some youth subcultures.

# INCARCERATION AND SENTENCING TRENDS IN COLORADO: JUST THE FACTS

The largest crime category for new prison commitments is drug offenses. The annual cost of incarcerating one inmate in 2004 was \$26,248. The daily cost per male inmate was \$71.46 and \$76.44 for female inmates.<sup>42</sup> In FY04, intensive supervision probation cost \$8.10 per day and ISP parole cost \$19.03 per day. Regular probation cost \$2.16 per day, and intensive supervision for sex

offenders was \$19.23 per day. Community Corrections cost \$34.70 per day and offenders pay as much as \$17.00, up from \$13.00 a few years ago.<sup>43</sup>

- □ 72 percent (5,808) of new court commitments to prison in 2004 were sentenced for a non-violent crime; 28 percent (1,616) were sentenced for violent crimes.<sup>44</sup>
- □ In FY2004, parole returns represented 28.7 percent of the group admitted to prison in Colorado.<sup>45</sup>
- □ Aos (Appendix B) notes that incarcerating serious violent and high-volume property offenders generates more benefits than costs, however since the 1990's incarcerating drug offenders has cost taxpayers more than the value of the crime avoided.
- □ The largest crime category for new prison commitments was drug offenses: 22 percent of men and 23 percent of women entering prison with a new court commitment had a drug offense as their most serious offense.
- Substance abuse treatment was needed for 87 percent of women and 82 percent of men entering prison last year.<sup>46</sup>
- In prison, drug offenses, theft and escape were the most frequent conviction crimes for women in FY04 and drug offenses, assault and burglary were the most frequent crimes for men in FY04.<sup>47</sup>
- On average, DCJ's estimated average length of stay for offenders entering prison is approximately three years for men and about 26 months for women, as stated in Section One of this report.

#### **Community Corrections**

Community corrections includes "transition" offenders who are returning to the community from prison, and "diversion" offenders who are sentenced in lieu of prison and usually serving a combination of a sentence of probation and halfway house residential programming.

P<sup>42</sup>P Kristi Rosten (2004), Colorado Department of Corrections Statistical Report, FY2004, pages 27-28.

P<sup>41</sup>P Jennifer Karberg and Allen Beck (2004), *Trends in U.S. Correctional Populations: Findings from the Bureau of Justice* Statistics, Office of Justice Programs, U.S. Department of Justice.

P<sup>43</sup>P Division of Probation Services budget planning document; DOC Statistical Report for FY03 as cited in *Crime and Justice in Colorado*, 2004. Colorado Division of Criminal Justice, Office of Research and Statistics, March 2005.

P<sup>44</sup>P Kristi Rosten (2004), Colorado Department of Corrections Statistical Report, FY2004, page 36.

 $P^{45}P$  Ibid, page 31.

P<sup>46</sup>P Ibid, page 46.

P<sup>47</sup>P Ibid, page 69.

Each year between FY00 and FY03, 63 percent of offenders successfully completed their stay in the halfway house.<sup>48</sup> In FY03, the per diem rate paid to community corrections providers was reduced by 8 percent, and the daily amount offenders were required to pay was increased by over 23 percent. In FY04 the successful completion rate dropped to 56 percent. Besides these legislative changes in costs, there is nothing to explain this increase in offender failures in FY04.<sup>49</sup>

	FY2000	FY2001	FY2002	FY2003	FY2004
Successful	(2344)	(2477)	(2514)	(2611)	(2706)
Completion	63.6%	62.3%	62.4%	63.1%	56.1%
Escape	(520)	(573)	(542)	(632)	(875)
	14.1%	14.4%	13.4%	15.3%	18.1%
New crime	(72)	(62)	(35)	(57)	(70)
	2.0%	1.6%	0.9%	1.4%	1.5%
<b>Technical Violations/</b>	(749)	(866)	(939)	(837)	(1174)
Warrant	20.3%	21.8%	23.3%	20.2%	24.3%
Total	(2344)	(2477)	(2514)	(2611)	(2706)
	63.6%	62.3%	62.4%	63.1%	56.1%

#### Table 19: Program Completion Rates and Failure Reasons for FY2000-FY2004

Source: The Office of Research and Statistics analyzed data from DCJ's Office of Community Corrections. Data obtained from offender termination forms.

The largest crime category for those in community corrections is drugs: over one-third of the men and nearly half of the women in community corrections have a drug-related crime. Theft is the secondlargest crime category: approximately 20 percent of men and women in community corrections are serving sentences for theft-related crimes.

The largest crime category for those in community corrections is drugs: over onethird of the men and nearly half of the women in community corrections have a drug-related crime.

- □ The number of Community Corrections offenders who terminated unsuccessfully because of drug problems increased from 293 in 2000 to 507 in 2004. The number who terminated specifically because of illegal involvement with amphetamines increased from 56 in 2000 to 139 in 2004.
- Between 56 and 64 percent (depending on the year studied) of Community Corrections offenders successfully terminate from the halfway house program. Offenders transitioning from prison have a success rate of 65 percent compared to 57 percent for diversion offenders sentenced by the court.<sup>50</sup>

P<sup>49</sup>P DCJ's Office of Research and Statistics conducted this analysis using data from the Office of Community Corrections.

 $P^{48}P$  Successfully complete means that the offender left the halfway house program with a positive status; the offender either completed their court sentence or were transferred to another, less restrictive and non-residential sentencing placement.

P<sup>50</sup>P Older offenders typically have better outcomes, and transition offenders are on average older than diversion offenders.

Offenders convicted of violent crimes are just as likely as those convicted of nonviolent crimes to successfully complete community corrections.

- Offenders with a GED or high school diploma are statistically significantly more likely to successfully complete their halfway house stay than those without a secondary education.
- Offenders convicted of violent crimes are just as likely as those convicted of nonviolent crimes to successfully complete community corrections.
- □ Every year community corrections offenders pay over \$1.5 million in federal and state taxes.
- □ The average length of stay in community corrections is between five and six months for both diversion and transition offenders.

#### Women, Juveniles and Drugs

Trends in juvenile crime portend trends seen in the adult criminal population. In a special study of drug crime committed by juveniles conducted by the FBI, the proportion of girls and young women arrested for drug crimes grew across all age groups between 1994 and 2003.

- Colorado's incarceration rate for women in 2004 was 83 per 100,000 adult female residents compared to the average national rate of 57 women per 100,000. Between 2003 and 2004, Colorado's incarceration rate for women increased nine percent.<sup>51</sup>
- Trends in juvenile crime portend trends seen in the adult criminal population. In a special study of drug crime committed by juveniles conducted by the FBI, nationwide the proportion of girls and young women arrested for drug crimes grew across all age groups between 1994 and 2003, as shown in Table 20.

□ Also shown in Table 21, the FBI's examination of the data for

all juveniles arrested for drug abuse violations within sex and by each age group showed that a higher proportion of female juveniles were arrested at a younger age (15 and under) than were male juveniles. This held true for each year of the 10-year period considered in this study.<sup>52</sup>

□ Young women (juveniles) with serious drug problems are likely to end up in the adult criminal justice system and often will serve time in prison. It is important to look at trends in juvenile crime and drug abuse as precursors to entry into the adult system.

 $P^{51}P$  Paige Harrison and Allen Beck (October 2005). *Prisoners in 2004*. Bureau of Justice Statistics Bulletin. Office of Justice Programs, U.S. Department of Justice, publication NCJ 210677.

 $P^{52}P$  Crime in the United States, 2004. Special Report: Arrest of Juveniles for Drug Abuse Violations from 1994 to 2003. Available at http://www.fbi.gov/ucr/cius\_04/special\_reports/arrest\_juveniles.html.

Year	Sex	Under 10	10 to 12	13 to 14	15	16	17
1994	Male	83.0	78.7	82.6	87.2	89.5	90.5
	Female	17.0	21.3	17.4	12.8	10.5	9.5
1995	Male	84.0	77.1	81.2	86.2	88.9	89.9
	Female	16.0	22.9	18.8	13.8	11.1	10.1
1996	Male	80.0	78.1	80.2	85.8	87.7	89.2
	Female	20.0	21.9	19.8	14.2	12.3	10.8
1997	Male	86.8	76.7	81.0	85.3	87.8	88.4
	Female	13.2	23.2	19.0	14.7	12.2	11.6
1998	Male	77.4	79.2	80.8	85.1	87.1	88.3
	Female	22.6	20.8	19.2	14.9	12.9	11.7
1999	Male	85.8	78.1	80.0	84.4	86.6	87.5
	Female	14.2	21.9	20.0	15.6	13.4	12.5
2000	Male	86.1	77.4	79.4	83.9	86.3	87.5
	Female	13.9	22.6	20.6	16.1	13.7	12.5
2001	Male	81.0	76.2	77.9	83.2	85.6	86.9
	Female	19.0	23.8	22.1	16.8	14.4	13.1
2002	Male	82.8	75.4	77.5	81.7	84.5	86.2
	Female	17.2	24.6	22.5	18.3	15.5	13.8
2003	Male	78.9	75.4	77.1	81.2	84.2	85.3
	Female	21.1	54.6	22.9	18.8	15.8	14.7

 Table 20: Percent Distribution of the Estimated Number of Drug Arrests of Juveniles by

 Arrestee's Sex within each Age Group (1994-2003)

\*Less than one-tenth of 1 percent.

Source: Crime in the U.S. 2004 available at http://www.fbi.gov/ucr/cius\_04/special\_reports/arrest\_juveniles.html.

Marijuana remains the drug for which youth are most frequently arrested, according to the FBI. DCJ tracked illegal drug use by those booked into the Denver Pre-Arraignment Detention Facility between 1989 and 2003 and consistently found that approximately 47 and 33 percent of adult men and women respectively. total positive for mer-

Marijuana remains the drug for which youth are most frequently arrested.

percent of adult men and women, respectively, tested positive for marijuana.

#### Figure 22: Percent Distribution of the Estimated Number of Drug Arrests of Juveniles by Drug Type, 1994-2003



Source: Crime in the U.S. 2004 available at http://www.fbi.gov/ucr/cius\_04/special\_reports/arrest\_juveniles.html.

□ For the 10-, five-, and two-year periods examined by FBI analysts for the *Crime in the United States Report (2004)*, the data reflected that the percent of change in the number of arrests of female juveniles for all drug types combined was larger than that for male juveniles, as shown in Table 21.

Table 21: Percent Change in the Number of Estimated Drug Arrests of Juveniles by DrugType and Arrestee's Sex 2-, 5-, and 10-year Comparisons

	2003/1994		2003/1999		2003/2002	
	Male	Female	Male	Female	Male	Female
All Drug Types	15.4	79.2	-0.2	22.6	5.1	10.2
<b>Opium or Cocaine</b>	-54.8	-10.7	-30.5	-8.5	-7.0	1.5
Marijuana	54.9	97.7	2.1	16.8	7.4	10.7
Synthetic Narcotics	133.6	293.6	64.9	141.3	6.7	14.7
<b>Dangerous Nonnarcotics</b>	23.0	127.9	47.4	86.3	6.3	14.4

Source: Crime in the U.S. 2004 available at http://www.fbi.gov/ucr/cius\_04/special\_reports/arrest\_juveniles.html T.

## SUMMARY

In sum, many factors affect the size of the prison population. Although the crime rate is minimally related to the incarceration rate, the number of felony filings is a strong predictor of new prison commitments in Colorado. Drug use patterns and sentencing practices also drive the size of the prison population. In addition, over 28 percent of prison admissions are offenders with parole violations. These offenders stay another four months, on average, in prison.

Policies can significantly affect the effectiveness of the criminal justice system as reflected in the recent increase in escapes and technical violations in community corrections. Successful program

completions by offenders serving community corrections sentences dropped from 63 percent to 56 percent after statutory funding changes were made in FY03. In FY04, new crimes by community corrections offenders did not increase but many more offenders further penetrated the criminal justice system.

# **Appendices**