Chapter 9 — Prison Population Projections

This chapter presents the Legislative Council Staff's December 2000 Department of Corrections (DOC) population forecast. Following are highlights from this chapter:

- the total Department of Corrections (DOC) population is projected to increase 49.8 percent — from 15,999 inmates on June 30, 2000, to 23,966 inmates on June 30, 2006. This corresponds to an average annual growth rate of 7.0 percent. Over this time frame, the male population will increase from 14,733 to 22,098 inmates, a 50.0 percent increase and an average growth rate of 7.0 percent per year. The female population will increase from 1,266 inmates to 1,868 inmates, a 47.6 percent increase and an average growth rate of 6.7 percent per year; and

- by June 30, 2006, the projected shortfall in beds for male inmates is 1,288 beds, while there is a projected surplus for female inmates of 214 beds. These figures incorporate facilities from the DOC Bed Implementation Plan as of September 2000. Several projects have been planned but have not yet been funded or approved by the General Assembly.

ADULT PRISON PROJECTION OVERVIEW

The following sections discuss legislative impacts on the prison population and provide a summary of the projected prison population.

Legislative impact upon the prison population. Table 9.1 illustrates the historical and projected prison population and growth. The strong growth between FY 1984-85 and FY 1989-90 was due to H.B. 85-1320, which doubled the maximum of the presumptive sentencing range for all felony classes. This effectively expanded the sentence length of stay for new commitments, from an average of 20 months to almost 60 months. Of all legislation passed by the General Assembly, H.B. 85-1320 had the most significant impact upon the prison population.

In the next few years, modifications made to the criminal code by the General Assembly mitigated the effects of H.B. 85-1320. Senate Bill 88-148 lowered the sentencing range for violent crimes and S.B. 89-246 created a new class 6 felony with a presumptive sentencing range of one to two years in prison. As a result, S.B. 89-246 changed several class 5 crimes to class 6 crimes and some class 4 felonies to class 5 felonies.

The most dramatic legislation curbing prison population growth was H.B. 90-1327. This bill reduced length of stay with two changes. First, it provided for parole eligibility for those inmates convicted of certain nonviolent crimes who served at least 50 percent of their sentence (those convicted of certain violent crimes could be paroled after serving at least 75 percent of their sentence). House Bill 90-1327 also doubled the amount of earned time inmates could accrue while serving their sentence (from five days to ten days per month), reducing their governing sentence (by up to 25 percent of the sentence) as well as the time to their earliest parole eligibility. After the passage of this bill, the prison population growth decreased significantly, averaging 6.4 percent in the next three fiscal years (FY 1990-91 to FY 1992-93).

In the 1993 legislative session, the General Assembly passed H.B. 93-1302, restructuring the criminal penalty presumptive ranges to shorten the maximum sentence, except for certain crimes that present "an extraordinary risk of harm to society." House Bill 93-1302 also provided for a mandatory period of parole for all inmates sentenced after July 1, 1993.

Prison forecast and recent trends. Between FY 1999-00 and FY 2005-06, the prison population will increase by an annual average rate of 7.0 percent, a slower rate relative to the previous six-year period. Prison population growth is expected to slow because admissions are expected to increase less than had been previously projected. Overall admissions (including supervision returns) grew an estimated 2.9 percent in FY 1999-00, compared with 6.6 percent growth in FY 1998-99 and 7.4 percent growth in FY 1997-98. However, recent estimates reveal that releases (including releases to parole and sentence discharges) also decreased in FY 1999-00, meaning more inmates remained incarcerated. Releases from prison increased an estimated 0.2 percent in FY 1999-00, compared with 8.5 percent growth in FY 1998-99 and 7.9 percent growth in FY 1997-98.

Table 9.1
Historical and Forecasted DOC Population at Fiscal Year End

Fiscal Year	Male Population	Percentage Change	Female Population	Percentage Change	DOC Population	Percentage Change
FY 1984-85	NA		NA		3,637	
FY 1985-86	NA		NA		4,088	12.4%
FY 1986-87	NA		NA		4,746	16.1%
FY 1987-88	NA		NA		5,756	21.3%
FY 1988-89	6,579		392		6,971	21.1%
FY 1989-90	7,215	9.7%	451	15.1%	7,666	10.0%
FY 1990-91	7,598	5.3%	445	-1.3%	8,043	4.9%
FY 1991-92	8,269	8.8%	505	13.5%	8,774	9.1%
FY 1992-93	8,712	5.4%	530	5.0%	9,242	5.3%
FY 1993-94	9,382	7.7%	623	17.5%	10,005	8.3%
FY 1994-95	10,000	6.6%	669	7.4%	10,669	6.6%
FY 1995-96	10,808	8.1%	769	14.9%	11,577	8.5%
FY 1996-97	11,681	8.1%	909	18.2%	12,590	8.8%
FY 1997-98	12,647	8.3%	1,016	11.8%	13,663	8.5%
FY 1998-99	13,547	7.1%	1,179	16.0%	14,726	7.8%
FY 1999-00	14,733	8.8%	1,266	7.4%	15,999	8.6%
6 year average growth rate (FY1993-94 to FY 1999-00)		**7.8%**		**12.5%**		**8.1%**
FORECAST						
FY 2000-01	15,775	7.1%	1,350	6.6%	17,125	7.0%
FY 2001-02	16,915	7.2%	1,432	6.1%	18,347	7.1%
FY 2002-03	18,121	7.1%	1,543	7.8%	19,664	7.2%
FY 2003-04	19,388	7.0%	1,661	7.6%	21,049	7.0%
FY 2004-05	20,709	6.8%	1,763	6.1%	22,472	6.8%
FY 2005-06	22,098	6.7%	1,868	6.0%	23,966	6.6%
6 year average growth rate (FY1999-00 to FY 2005-06)		**7.0%**		**6.7%**		**7.0%**

Source: Department of Corrections and Legislative Council Staff

PROJECTIONS BY GENDER AND ADMISSION TYPE AND THE PROJECTED BED SHORTFALL

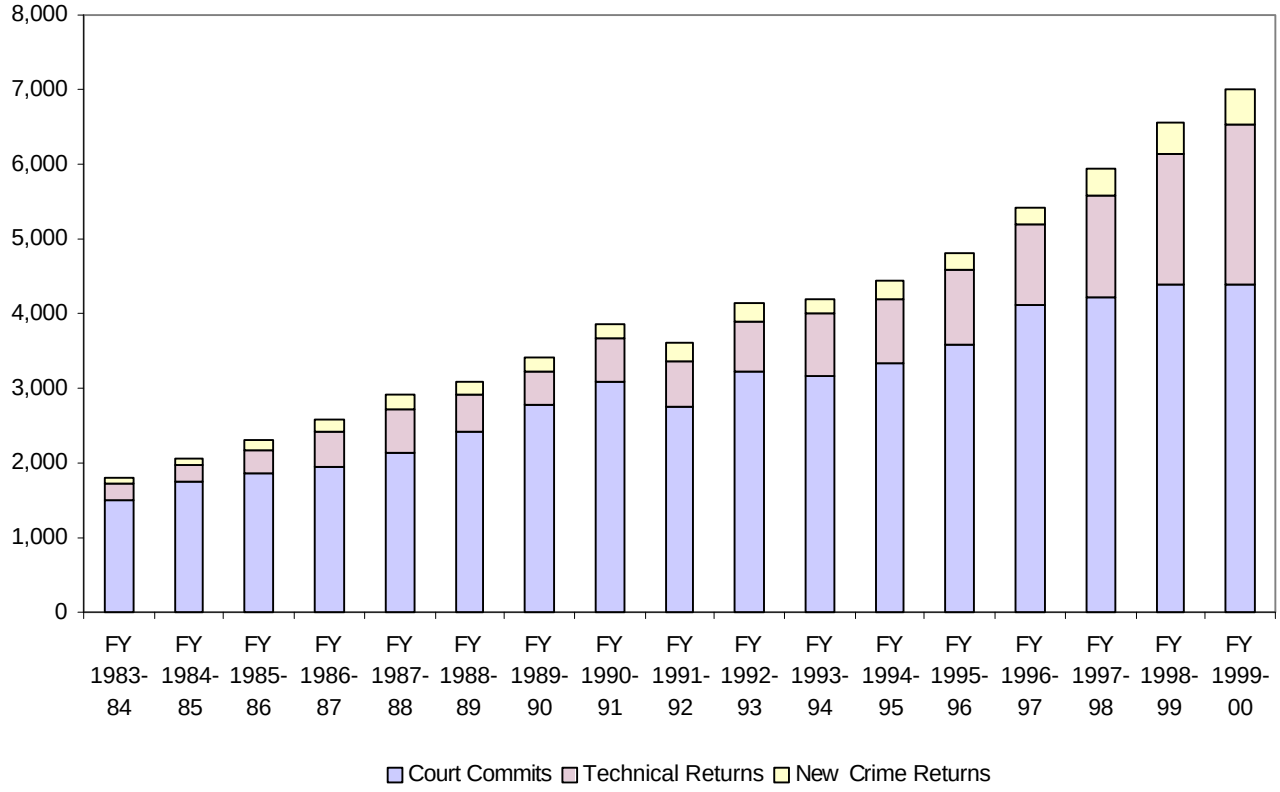
This section discusses the population projections by gender, the comparison of Colorado's prison growth to national trends of incarceration by gender, the growth of parole revocations as a result of an increasing population, and the projected prison bed shortfall over the next six years.

Jurisdictional population by gender. Between June 1994 and June 2000, the male prison population grew at an average rate of 7.8 percent per year. During that same six-year period, the female population grew at an average rate of 12.5 percent per year. We expect that the male population will increase from 14,733 inmates in June 2000 to 22,098 inmates by the end of June 2006, an annual average increase of 7.0 percent. We predict that the female population will grow from 1,266 in June 2000 to 1,868 by June 2006, an annual average increase of 6.7 percent. One reason behind the slowing growth rate for the female population, relative to the past six years, is that the level of criminal filings and convictions has slowed relative to the past. Between FY 1993-94 and FY 1999-00, female convictions rose 73.9 percent. In the next six years, we project female convictions will increase 37.0 percent.

National trends of incarceration by gender. The Colorado prison population increased at a faster rate than the rest of the country from December 1994 to December 1999. The Department of Justice Bureau of Justice Statistics (BJS) reported that male incarceration in all state and federal prisons increased at an average rate of 5.2 percent per year, while Colorado male incarceration increased at an annual average rate of 7.2 percent over that five-year period. The number of females in Colorado prisons also increased at a faster rate than the rest of the country. The Department of Justice BJS reported that over the last five calendar years, the number of female prisoners rose by an average of 7.1 percent per year nationwide compared with 12.3 percent in Colorado. Although most of the nation's growth in the past five years was attributable to western states, incarceration in Colorado increased at an average rate of 7.9 percent between 1994 to 1999. Meanwhile, incarcerations in the southwestern states of Arizona, Nevada, New Mexico, Utah, and Colorado grew at an average rate of 6.9 percent over that five-year period.

Inmate population by admission type. As the prison population and inmate releases increase, parole revocations also increase as a result of a larger parole population, particularly since the implementation of mandatory parole pursuant to House Bill 93-1302. Graph 9.1 below illustrates the growth of admissions, supervision technical returns as a share of admissions, and releases. Supervision technical returns (including parole and probation revocations) have increased between 22.4 percent and 28.7 percent in the last three fiscal years compared with increases ranging from 5.9 percent to 12.4 percent between FY 1994-95 and FY 1996-97. We expect to see an increasing trend in the number of inmates returning to prison for technical returns and for new crimes committed while under supervision. This will increase the overall prison population despite the fact that the average length of stay for returns to prison, particularly technical returns, is much lower than the average length of stay for new commitments. Between June 2000 to June 2006, we expect the number of prisoners with technical returns to increase from 2,289 to 3,487, an average increase of 7.3 percent per year. For parole violators with new crimes, we forecast a similar trend, though not as significant. Supervision returns with new crimes will increase from 1,518 in June 2000 to 2,221 in June 2006, an average annual increase of 6.5 percent.

Graph 9.1: Prison Admissions by Type
New Court Commitments, Technical Returns, and New Crime Returns



Projected prison bed surplus/(shortfall) by gender. Table 9.2 illustrates the Legislative Council Staff prison population projections by gender and admission type. The last columns in Table 9.2 present the projected surplus or shortfall in prison beds by gender throughout the forecast period. The projected shortfall is based on the DOC's Bed Implementation Plan (FY 2000-01 to FY 2005-06). This includes facilities that have been planned but have not yet been approved for funding by the General Assembly. Projected capacity includes the funded DOC prison expansions (Denver Women's Correctional Facility — 436 beds in 2001; and Trinidad — 480 beds in 2001), several unfunded expansions (Fort Lyon — 500 beds in 2001; Denver Reception and Diagnostic Center — 100 beds in 2002; San Carlos — 250 beds in 2003; 1,152 new high custody beds; the use of 180 Youthful Offender System surplus beds), and increased use of private prison facilities (an estimated 2,730 beds between FY 2000-01 and FY 2005-06, including 1,305 available beds and 1,425 new private beds to be built) . This bed estimate adjusts population to reflect 3.5 percent of the inmate population as off-grounds or moving between facilities and a 10 percent share of inmate population in community corrections placements.

With the current DOC facility construction plan assumed to be approved, funded, and built, there will be a male prison bed shortage of 1,288 beds by June 2006. This shortage represents 5.4 percent of the male prison population. Meanwhile, with the build-out of the Denver Women's Correctional Facility in FY 2000-01, there will be a female prison bed surplus of 214 by June 2006.

Table 9.2
Legislative Council Staff December 2000 Prison Population Projections by Commitment Type and Gender with Projected Prison Bed Surplus/(Shortfall)

Fiscal Year Ending	Population of Original Crime Commitments			Population of Supervision Violators with New Crimes /a			Population of Technical Violators /a			Total DOC Population			Projected DOC Bed Surplus/ (Shortage) /c	
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
June 2000 /b	11,260	932	12,192	1,424	94	1,518	2,049	240	2,289	14,733	1,266	15,999		
FORECAST														
June 2001	12,114	996	13,110	1,484	103	1,587	2,177	251	2,428	15,775	1,350	17,125	(257)	326
June 2002	12,977	1,057	14,034	1,591	109	1,700	2,347	266	2,613	16,915	1,432	18,347	(409)	239
June 2003	13,888	1,137	15,025	1,705	118	1,823	2,528	288	2,816	18,121	1,543	19,664	(514)	153
June 2004	14,844	1,223	16,067	1,824	126	1,950	2,720	312	3,032	19,388	1,661	21,049	(609)	399
June 2005	15,839	1,297	17,136	1,949	134	2,083	2,921	332	3,253	20,709	1,763	22,472	(669)	316
June 2006	16,885	1,373	18,258	2,079	142	2,221	3,134	353	3,487	22,098	1,868	23,966	(1,288)	214
6 Year Average Growth Rate (FY1999-00 to FY 2005-06)	7.0%	6.7%	7.0%	6.5%	7.1%	6.5%	7.3%	6.6%	7.3%	7.0%	6.7%	7.0%		

/a This includes returns to prison from probation, community diversion programs, or other placements.
/b Estimated from actual June 2000 monthly population report. At this time DOC does not provide interim reports of population by admission type.
/c Some projects have not been approved or funded by the General Assembly. DOC jurisdictional population adjusted to account for 2.5% of male population off-grounds, 1.0% of all beds are vacant due to the natural movement of offenders through the system, and 10.0% of population in community corrections placements.
Sources: DOC Bed Implementation Plan (FY 2000-01 to FY 2005-06) and Legislative Council Staff.

PRISON ADMISSIONS

Table 9.3 illustrates the projected growth for prison admissions for new crime commitments, the largest group of overall prison admissions. In FY 1999-00, new crime commitments accounted for 66.1 percent of all admissions. However, there has been a recent trend towards slowing admissions. This is due in part to a healthy economy and strong wage growth. The number of people convicted and admitted to prison is influenced by arrests and crime trends, but also by the discretion of district attorneys and judges. While the decreasing level of arrests has pulled down the number of felony filings, convictions remained flat over the last two years, suggesting that fewer arrests have not led to fewer felony convictions.

Over the forecast period, original crime commitments are expected to grow at an average annual rate of 3.8 percent. Female admissions are expected to increase at a faster rate than male admissions over the six-year period. We expect female admissions to increase at an average annual rate of 5.2 percent, while male admissions are expected to increase at an average annual rate of 3.6 percent. The rationale behind a greater growth rate for females than for males is related to the current increasing trend in female incarceration admissions. An increasing number of women are being arrested and incarcerated for drug crimes, theft, and forgery. In FY 1999-00, however, there was a 10.7 percent drop in the number of female admissions. For this reason, the forecast for female admissions was reduced from last year's 6.7 percent annual average growth rate to a 5.2 percent growth rate. Male admissions also decreased for the second straight year. For this reason, the male admissions forecast was lowered from the 5.4 percent annual average growth rate in last year's forecast to a 3.6 percent annual average.

Table 9.3
Admissions from Court Commitments by Gender

Fiscal Year Ending	Male Admissions	Annual Growth	Female Admissions	Annual Growth	Total Admissions	Annual Growth
June 1997	3,870		418		4,288	
June 1998	3,939	1.8%	457	9.3%	4,396	2.5%
June 1999	3,860	-2.0%	475	3.9%	4,335	-1.4%
June 2000*	3,753	-2.8%	424	-10.7%	4,177	-3.6%
FORECAST						
June 2001	3,946	5.1%	450	6.1%	4,396	5.2%
June 2002	4,093	3.7%	471	4.7%	4,564	3.8%
June 2003	4,238	3.5%	493	4.7%	4,731	3.7%
June 2004	4,381	3.4%	525	6.5%	4,906	3.7%
June 2005	4,519	3.2%	552	5.1%	5,071	3.4%
June 2006	4,653	3.0%	576	4.3%	5,229	3.1%
6-year average growth rate (FY 1999-00 to FY 2005-06)		3.6%		5.2%		3.8%

Source: Department of Corrections and Legislative Council Staff

FACTORS IN PRISON COMMITMENTS

Males and females were further broken down into admissions by felony class and projected independently using several methodologies. There were several explanatory variables considered in modeling prison admissions. Most of these factors can be classified into three groups: state economic variables, state population variables, and state justice and public safety variables. Although there is some expected correlation between these variable types (e.g., it is likely that economic growth affects population growth and population growth affects public safety spending), the admissions model avoided using strongly correlated variables. The following paragraphs describe some of the factors that have influenced prison commitments.

Population. All other things being equal, a larger population results in a greater total number of criminal offenses, arrests, criminal felony filings, and prison commitments. Colorado's population grew at a 2.7 percent annual average growth rate between June 1990 and June 2000. Over this same period, the average annual rate of growth in the prison population was 7.7 percent. As Colorado's population is projected to continue to grow, we expect this to contribute to an increase in the total number of new admissions to prison. State population growth is projected to taper off during the forecast period. Slower population growth is one reason for the decline of prison population growth in rates expected during the last few years of the forecast period.

Reported crime rates. The Colorado Bureau of Investigation's (CBI) crime index, based upon reported incidents, has decreased for several years. Because offenses are correlated to prison commitments, this suggests that prison commitments should be decreasing. However, one should note that the CBI's crime index measures a minority of the crimes committed in the state, primarily violent crimes (murder, rape, robbery, burglary, and auto theft). One of the strongest growth categories for Colorado prison admissions, drug crimes, is excluded from CBI's crime index. Moreover, there is a lag period between slowing crime rates and slowing admissions. It may take over three years for an offense to lead to incarceration. For this reason, the forecast focused on variables that were more proximate to admission to prison, such as filings and convictions.

Felony filings and felony convictions. Two important factors affecting prison admissions are felony filings and convictions. These variables are further along the criminal justice time frame than offenses and arrests and more accurately reflect those defendants that may be sentenced to prison. Felony filings increased 10.6 percent in FY 1996-97 and 14.6 percent in FY 1997-98. However, total felony filings decreased 3.3 percent in FY 1998-99 and an estimated 2.1 percent in FY 1999-00. Typically, a rise in felony filings increases prison admissions with a six- to twelve-month lag for court proceedings (arraignments, trials, dispositions, sentence hearings). In the past, an increase in felony filings has led to increases in felony convictions and prison commitments. Over the past two fiscal years, FY 1998-99 and FY 1999-00, convictions have remained relatively flat while filings decreased, suggesting an increase in the rate of convictions relative to filings.

Mandatory parole. House Bill 93-1302 created mandatory parole with longer parole terms for all inmates that committed offenses after June 30, 1993. With a larger parole population and increased lengths of stay on parole, we expect an increase in the number of admissions for new crimes and technical violations committed while under supervision.

RELEASES AND LENGTH OF STAY

Average length of stay is critical to the prison population forecast because this variable is responsible for determining the release of existing prisoners based on prisoner characteristics such as gender, felony class, and crime type. Table 9.4 illustrates the December 1999 and December 2000 forecast for the average length of stay for new admissions by felony class and crime type. The projected average length of stay increased due to three reasons: trends in commitment sentences, the impact of mandatory parole on estimated length of stay for new prison commitments, and a change in the methodology used to estimate length of stay.

Table 9.4
Average Length of Stay in Months for New Admissions by Class and Crime Type

Felony Class and Crime Type	December 1999 Forecast	December 2000 Forecast
Class 1	LIFE	LIFE
Class 2 sex crimes	104.8	130.7
Class 2 drug crimes	70.2	107.0
Class 2 other crimes	98.7	112.3
Class 3 sex crimes	76.9	76.8
Class 3 drug crimes	46.7	47.1
Class 3 other	64.5	66.9
Class 4 sex crimes	58.4	50.4
Class 4 drug crimes	36.7	35.0
Class 4 other	38.4	40.5
Class 5 sex crimes	32.2	32.5
Class 5 drug crimes	21.0	22.5
Class 5 other	25.2	24.1
Class 6 sex crimes	NA	NA
Class 6 drug crimes	10.9	12.0
Class 6 other	13.2	10.9
Length of Stay by Gender		
Males	36.8	42.0
Females	29.6	36.2

Source: Legislative Council Staff