Minnesota Prison Population Projections

Fiscal Year 2006 Report

TABLE OF CONTENTS

TABLES AND FIGURES

EXECUTIVE SUMMARY

Since the early 1980s, the Minnesota Department of Corrections (DOC) and Minnesota Sentencing Guidelines Commission (SGC) have collaborated to produce an annual prison population forecast. This year's projection report examines recent trends in Minnesota's prison population, analyzes accuracy of projections since 2000, and presents the prison population forecast over the next nine years.

Recent Trends in the Prison Population

- Minnesota's prison population more than quadrupled over the last 25 years. Since 1989, it has grown by 189 percent, which exceeds the 134 percent growth in the state and federal prison population nationally. The surge has been fueled largely by a dramatic increase in the number of drug offenders, who have accounted for 36 percent of Minnesota's growth since 1989. Sex offenders have also contributed significantly to the population expansion, adding 897 inmates from 1989 to 2005.

- Over the last five years, the prison population has grown even more sharply. Methamphetamine offenders have accounted for a disproportionate share of the increase. The size of the methamphetamine offender population has expanded by nearly 900 offenders since July 2001, accounting for 39 percent of inmate growth.

- Enactment of the state's felony driving while impaired (DWI) law has further contributed to the recent increase, adding nearly 400 offenders to the prison population since 2002. Combined, DWI and methamphetamine offenders were responsible for 63 percent of the prison population increase from July 2002-July 2005.

Fiscal Year (FY) 2005 Trends in the Prison Population

- After several years of fairly rapid growth, the prison population is still increasing but at a slower rate. From FY 2002-2004, the prison population grew by an average of 635 offenders per year. During FY 2005, however, the size of the population grew by 375 offenders.

- The receding growth in the prison population, particularly for male methamphetamine offenders, is due to the fact that although the total number of admissions increased during FY 2005, offenders stayed, on average, for shorter periods of time. Shorter lengths of stay are due to a slight decrease in new commitment admissions (i.e., generally longer sentences with longer lengths of stay), coupled with a growing influx of offenders admitted as probation and supervised release violators (i.e., generally shorter lengths of stay).

Actual Prison Population vs. Projections since 2000

- Projections have underestimated the actual prison population over the last 72 months (2000-2005) by an average of less than one percent.

FY 2006 Prison Population Forecast

- The prison population is projected to increase by 403 inmates (4.7%) during FY 2006 to a total of 2,291 (27%) by FY 2014. Roughly half (1,148 offenders) of the long-term increase is projected to occur by the end of FY 2009.

- The number of male inmates is expected to grow by 4.3 percent (343) during FY 2006, compared to 12.5 percent (60) for females. By the end of FY 2014, the projected growth rate is 25 percent for males (2,027) and 55 percent for females (264).

- New commitments are expected to account for 67 percent of the FY 2006 increase and 72 percent of the growth over the next nine years. Offenders violating their conditions of probation or supervised release are estimated to account for the remaining short- and long-term growth.

- Methamphetamine offenders have figured prominently in the recent increase. Projections indicate they will continue to drive up population levels, especially for females. Methamphetamine offenders are projected to account for 65 percent of the overall increase for females in FY 2006 and 42 percent of the growth over the entire forecast period. For the male inmate population, methamphetamine offenders are estimated to be responsible for 16 percent of the FY 2006 increase and 33 percent of the growth from FY 2006-2014.

- The forecast suggests that sex offenders will have the largest numerical increase (105) for males in FY 2006, whereas person offenders will have the greatest numerical increase over the next nine years (514).

- DWI offenders are projected to have the highest growth rate for males during FY 2006 (19%) as well as for the entire forecast period (53%). In contrast, DWI offenders are estimated to have the lowest short- and long-term growth rates for female inmates. Similarly, the forecast indicates that other drug offenders will have the slowest growth rates for male inmates in FY 2006 and beyond.

HISTORICAL BACKGROUND

Prior to the 1980s, the State of Minnesota embraced an indeterminate sentencing philosophy in which judges sentenced offenders to prison and the parole board determined whether inmates were rehabilitated and ready to return to society. During the late 1970s, however, the state began considering a shift away from an indeterminate toward a determinate system. Grounded in the "just desserts" philosophy, determinate systems emphasize fixed, uniform sentences that are proportionate not only to the crime committed, but also to the offender's criminal history. Sentencing guidelines are central to determinate systems in that they provide structure for determining and maintaining sentencing policy.

To better understand the potential impact that a sentencing guidelines system would have on the State of Minnesota, a microsimulation model, the Structured Sentencing Simulation (SSS) program, was developed for the SGC in 1979. The following year, Minnesota implemented a sentencing guidelines system based on a grid structure in which an offender's recommended sentence is predicated on the severity of the offense and his/her criminal history.

The SSS program was also created to forecast the state's prison population. The DOC and SGC have employed SSS to generate monthly and annual prison population projections, which have been used for both budgetary and operational purposes. The SSS program was updated in 1988 to make it usable in a PC environment, and again in 1998 for a Windows environment and expanding the projection period from five to ten years. Most recently, the SSS model was enhanced in 2005 so that projections could be disaggregated by admission and offense type.

This year's projection report presents the prison population forecast over the next nine years. In the following section, prison admission, release, and population trends in Minnesota over the last several decades are examined to place the current projections within a broader context. Next, a comparison is made between the actual and projected prison populations since 2000 to examine how well the SSS model has recently forecast population. Projections are then presented for FY 2006 as well as for the entire forecast period. A more detailed portrait of the prison population forecast is also provided by disaggregating the projections by offender sex, admission type, and offense type. This report concludes by also presenting a forecast of the short-term offender population.

RECENT TRENDS IN MINNESOTA'S PRISON POPULATION

Minnesota has long had, and continues to have, one of the lowest incarceration rates (per 100,000 residents) in the country. In 2004, for example, Minnesota's incarceration rate was 171, which was well below the national average of 486 and second only to Maine's rate of 148 (Harrison and Beck, 2005). Despite relatively low incarceration rates, however, the prison population in Minnesota has expanded dramatically over the last several decades, particularly within the last 15 years.

A number of factors have coalesced to produce the recent prison population boom. First, the criminal code has been augmented considerably since the 1980s through the creation of new crime categories and reclassification of others into higher legal categories requiring more severe penalties. Since 1989, the legislature has enacted more than 85 major criminal sentencing enhancements. Some of the more notable enhancements include a substantial increase in rec-ommended sentence lengths for all serous and controlled substance crimes (1989), tougher penalties for repeat sex offenders (1992), increases in presumptive sentences for first-degree (2000) and some second-degree sex offenders (2002), and creation of the felony DWI law (2002).

Second, offenders have been receiving longer prison sentences due to the deluge of criminal sentencing enhancements since the late 1980s. SGC data indicate that from 1981-1988, the average prison sentence in Minnesota was 37 months. Since that time, the average sentence has been nearly a year longer at 48 months.

Finally, the number of offenders entering prison has increased significantly over the last several decades. From 1989-2004, the annual number of prison admissions grew by more than 150 percent. Given that admissions have almost always been greater than releases since 1989, the prison population steadily increased during this time, growing at an average annual rate of 6.9 percent. Overall, Minnesota's prison population swelled by 189 percent from 2,930 on January 1, 1989, to 8,482 on January 1, 2005, which exceeds the 134 percent growth in the state and federal prison population nationally over the same time period (Bureau of Justice Statistics, 2005).

The sharp increase in Minnesota's prison population over the last few decades is part of a larger expansion in the nation's prison population. In 1980, the number of incarcerated offenders in state and federal correctional facilities stood at a little less than 320,000. In 2004, this number was more than 1.4 million, a 345 percent increase. Moreover, the incarceration rate (per 100,000 residents) for state and federal inmates, which is perhaps a more accurate measure since it accounts for growth in the general population, grew by more than 240 percent from 1980-2004 (Bureau of Justice Statistics, 2005).

In Minnesota, however, the rise in the prison population has been particularly steep over the last few years, especially compared to the rest of the country. From 1995-2004, the national average annual percentage increase in state prison populations was 3.1 percent, while in Minnesota it was more than twice that at 6.8 percent (Harrison and Beck, 2005). Moreover, recent data suggest that Minnesota's prison population growth rate has continued to climb. During calendar year 2004, Minnesota had the nation's highest percentage increase at 11.4 percent, eclipsing Idaho's rate of 11.1 percent (Harrison and Beck, 2005).

The burgeoning prison population is the result of an across-the-board surge among offense types, with a few offenses responsible for a disproportionate share of the increase. Drug offenders, in particular, have accounted for much of the growth, representing 4.0 percent of the total inmate population on January 1, 1989, and 24.6 percent 16 years later.

The sharp rise in drug offenders over the last five years has been due primarily to methamphetamine inmates, who have accounted for 39 percent of the population growth from July 2001-July 2005. Moreover, the number of methamphetamine offenders has grown by nearly 400 percent since July 2001, has doubled within the last two and half years, and now exceeds 1,100 – over half of all drug offenders in state correctional facilities (see Table 1).

Table 1. Methamphetamine Offender Percentage of Drug Offender and Total Prison Population, 2001-2005

Date	Number of Meth Offenders*	Number of Drug Offenders	Meth % of Drug Population	Total Prison Population	Meth % of Total Population	Drug % of Total Population
7/01/2001	230	1,151	20.0	6,428	3.6	17.9
1/01/2002	287	1,169	24.6	6,583	4.4	17.8
7/01/2002	417	1,337	31.2	6,946	6.0	19.2
1/01/2003	517	1,483	34.9	7,073	7.3	21.0
7/01/2003	724	1,730	41.8	7,568	9.6	22.9
1/01/2004	869	1,859	46.7	7,795	11.1	23.8
7/01/2004	1,012	2,047	49.4	8,333	12.1	24.6
1/01/2005	1,087	2,090	52.0	8,482	12.8	24.6
7/01/2005	1,127	2,178	51.7	8,708	12.9	25.0

* Does not include amphetamine

When drug offenders are excluded, the population growth rate from 1989-2005 is still substantial at 126 percent. A significant share of the increase among non-drug offenders belongs to sex offenders, who grew by 175 percent from 1989-2005. Expansion of this population has been due not only to longer sentences but also to a marked increase in admissions for supervised release violators.

The number of felony DWI offenders entering prison has increased steadily since enactment of the law on August 1, 2002. The average number of DWI admissions per month grew from five in FY 2003 to 19 in FY 2005, with 398 offenders committed to prison on July 1, 2005 – 35 months after the law went into effect. Combined, DWI and methamphetamine offenders accounted for 63 percent of prison population growth from July 2002-July 2005.

FY 2005 Trends in the Prison Population: Receding Population Growth

After several years of fairly rapid growth, the prison population is still increasing, albeit at a slower rate. As illustrated in Table 2, the total prison population grew by 375 offenders during FY 2005, an increase of 4.5 percent. This increase, however, is the lowest since FY 2001, when the population grew by 2.4 percent.

Table 2. Numerical and Percent Change by Offense Type, FY 2001-2005

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Total Prison Population					
Numerical change	152	518	622	765	375
Percent change	2.4	8.1	9.0	10.1	4.5
Methamphetamine Offenders*					
Numerical change	160	187	307	288	115
Percent change	228.6	81.3	73.6	40.0	11.4
Other Drug Offenders					
Numerical change	-41	-1	86	29	16
Percent change	-4.3	-0.1	9.3	2.9	1.5
Person Offenders					
Numerical change	10	77	68	308	-157
Percent change	0.4	3.2	2.7	12.0	-6.1
Sex Offenders					
Numerical change	79	5	5	118	119
Percent change	6.8	0.4	0.4	9.5	8.7
Property Offenders					
Numerical change	-49	63	113	-243	158
Percent change	-4.5	6.1	10.3	-20.1	16.3
DWI Offenders					
Numerical change	N/A	N/A	N/A	150	188
Percent change	N/A	N/A	N/A	250.0	89.5
Other Offenders					
Numerical change	-7	111	59	115	-64
Percent change	-1.2	18.7	8.4	15.1	-7.2

* Does not include amphetamine

The decreasing population growth is due largely to two factors. First, although the total number of admissions increased during FY 2005, there was a change in the type of offenders being admitted to prison. After several years of consistent increase, the number of new commitment

admissions dropped slightly in FY 2005 (see Table 3). Conversely, the number of probation and supervised release violators admitted to prison increased once again during FY 2005.

Table 3. Admission, Sentence Length, and Length of Stay Trends by Admission Type, FY 2002-2005

Fiscal Year	New Commitments			Probation Violators			Supervised Release Violators			Total		
	Number	*Avg. Sentence Length*	*Avg. LOS*	*Number*	*Avg. Sentence Length*	*Avg. LOS*	*Number*	*Avg. Sentence Length*	*Avg. LOS*	*Number*	*Avg. Sentence Length*	*Avg. LOS*
2002	1,862	58.7	38.9	901	29.5	19.0	1,459	N/A	4.0	4,222	49.2	22.6
2003	2,239	57.0	38.0	1,010	29.2	18.3	1,568	N/A	4.4	4,817	48.3	22.9
2004	2,446	60.2	40.5	1,042	23.5	14.2	1,836	N/A	5.3	5,324	49.3	23.2
2005	2,422	58.9	37.7	1,068	24.2	14.3	2,079	N/A	5.4	5,569	48.3	21.2
Total	8,969	58.7	38.8	4,021	26.5	16.3	6,942	N/A	4.9	19,932	48.8	22.4

Notes: Excluded from the calculations are short-term offenders from FY 2004 and 2005, and new commitments and probation violators from FY 2002 and 2003 who had lengths of stay less than six months.

Second, the decrease in new commitments, coupled with the increase in probation and supervised release violators, means that more offenders with shorter sentences and shorter lengths of stay (LOS) are being admitted to prison, resulting in diminished population growth. Compared to new commitments, who have had an average LOS of 39 months since 2002, the average LOS has been roughly two years less for probation violators (16 months) and nearly three years less for supervised released violators (5 months). Accordingly, the average LOS for all offenders admitted during FY 2005 dropped by two months.

The methamphetamine offender population provides what is perhaps a more vivid illustration of the effect of changing admission patterns and declining lengths of stay on prison population levels. In fact, just as the size of the methamphetamine offender population has ebbed and flowed over the last few years, so has the overall prison population. As shown earlier in Table 2, the number of methamphetamine offenders grew by an average of 236 inmates per year from FY 2001-2004, reaching a peak of 307 during FY 2003. During FY 2005, however, the size of the growth (115 offenders) was 60 percent less than it was during the previous fiscal year.

As shown in Table 4, although annual admission totals have continued to increase for methamphetamine offenders in general, the population growth has leveled off because many offenders

Table 4. Methamphetamine Admission, Sentence Length, and Length of Stay Trends by Admission Type, FY 2002-2005

Fiscal Year	Meth New Commitments			Meth Probation Violators			Meth Supervised Release Violators			Total		
	Number	*Avg. Sentence Length*	*Avg. LOS*	*Number*	*Avg. Sentence Length*	*Avg. LOS*	*Number*	*Avg. Sentence Length*	*Avg. LOS*	*Number*	*Avg. Sentence Length*	*Avg. LOS*
2002	214	58.7	38.2	99	29.5	18.1	27	N/A	4.8	340	49.5	29.7
2003	368	60.4	38.9	138	28.6	17.6	39	N/A	9.6	545	51.8	31.4
2004	413	59.4	38.1	219	21.6	12.8	95	N/A	7.1	727	46.3	26.4
2005	375	52.7	33.5	275	20.4	11.7	121	N/A	4.1	771	39.0	21.1
Total	1,370	57.7	37.1	731	23.5	14.0	282	N/A	5.9	2,383	45.8	26.3

Notes: Excluded from the calculations are short-term offenders from FY 2004 and 2005, and new commitments and probation violators from FY 2002 and 2003 who had lengths of stay less than six months.

being admitted to prison are staying for shorter time periods. The average LOS for metham-phetamine offenders has dropped by almost nine months since FY 2002. The shorter LOSs for methamphetamine offenders are due not only to a growing influx of probation and supervised release violators, but also to a reduction in sentence lengths. For example, since FY 2002, the average sentence length decreased by six months for new commitments and more than nine months for probation violators. Overall, the average sentence length has declined by a little more than ten months since FY 2002.

ACTUAL & PROJECTED POPULATION COMPARISON, 2000-2005

The extent to which projections differ from the actual prison population (i.e., the error rate) can be quantified in a number of ways but is generally measured in terms of the percent difference between the two. Although using the relative values of the percent difference is helpful in determining whether projections have over- or underestimated the actual prison population, they can artificially lower the error rate. For example, if population projections overestimate the actual population by two percent one month and then underestimate it by two percent the follow-ing month, the average percent difference would be zero when using their relative values, erroneously implying that projections have perfectly forecast the actual prison population. If absolute values of the percent difference for the two months are used, then the average error rate would be two percent. Although the absolute error rate provides a more accurate measure of the extent to which projections have differed from the actual prison population, the relative error rate is also included to illustrate the direction in which projections have been off the mark.

Previous projections have, with the exception of 2001 and 2005, generally underestimated the actual prison population since 2000. Findings indicate that projections have overestimated by as much as 5.2 percent (November 2005) and underestimated by as much as 5.5 percent (December 2002).   Table 5 shows the average monthly error rate for each year since 2000. These numbers indicate that projections for 2000 had, on average, the smallest error rate, whereas the 2005 projections had the largest error rate. Overall, projections have underestimated the actual prison population by an average of 0.14 percent per month since 2000. In absolute terms, projections have differed from the actual prison population by an average of 2.25 percent per month.

Table 5. Average Annual Percentage Error Rate between Actual and Projected Prison Populations, 2000-2005

Year	Relative Percentage Error Rate	Absolute Percentage Error Rate
2000	-0.49	0.91
2001	2.30	2.30
2002	-3.11	3.11
2003	-1.20	1.20
2004	-2.16	2.16
2005	3.83	3.83
Total	-0.14	2.25

These figures compare favorably with error rates for other projection models, especially when considering that Minnesota has a relatively small prison population and error rates tend to get smaller as the size of the population gets larger. In a 1996 review of forecasting models used within the field of corrections, the General Accounting Office (GAO) reported that the average error rate for the projection model used by the Federal Bureau of Prisons from 1991-1995 was 1.4 percent.[1] Moreover, the National Council on Crime and Delinquency (NCCD), which had at that time reportedly prepared prison population forecasts and provided technical assistance for more than 20 states, indicated that its projections were off by an average of two percent between 1991 and 1994 (GAO, 1996).[2]

Negative error rates for projections, particularly from 2002-2004, are largely attributable to the sharp and unexpected recent rise in the volume of prison admissions and, more precisely, the number of new commitments. Because more offenders with longer sentences were being admitted to prison, especially for methamphetamine offenses, projections underestimated the sizable growth in the prison population during this three-year period (see Figure 1).
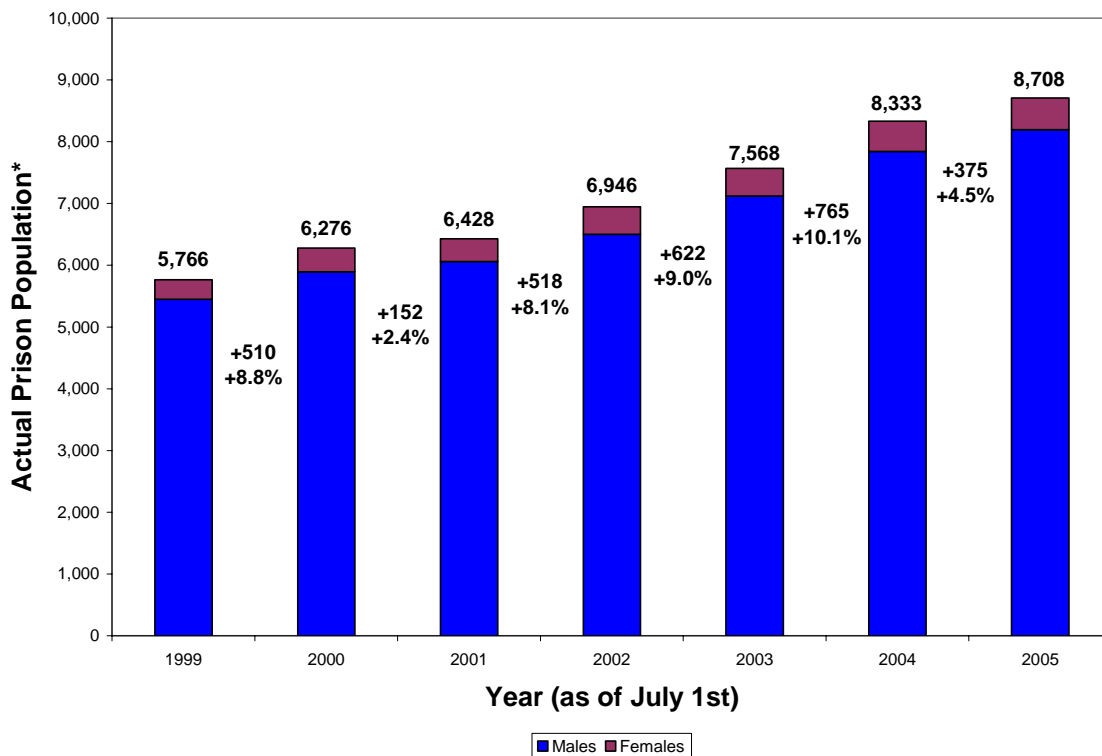

Figure 1. Growth in the Prison Population, FY 1999-2005

*Includes those housed in a DOC facility or contracted to be housed in a local jail or private facility

The 2005 projections were based in part on the assumption that the increase in new commitment admissions would continue. However, the volume tapered off in 2005. Accordingly, last year's projections have generally overestimated the actual prison population. This year's projections, however, have taken into account the slowed growth in new commitment admissions, especially for male offenders.

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[1] To forecast the federal prison population, the Bureau of Prisons and the U.S. Sentencing Commission developed the Federal Sentencing Simulation Model (FEDSIM) in 1987, and revised it eight years later in 1995 (FEDSIM-2) (GAO, 1996).
[2] The model used by the NCCD was Prophet, originally developed by the California Department of Corrections in 1976 (GAO, 1996).

FY 2006 PRISON POPULATION PROJECTIONS

The forecast presented below was prepared during the fall of 2005 and is based on current laws, trends, and practices. As noted earlier, the SSS model was used to generate projections. In previous years, the forecast was disaggregated by offender gender. For this year's forecast, however, projections have for the first time also been disaggregated by admission and offense type.

Because short-term offenders (STO) do not occupy a bed space in a Minnesota Correctional Facility (MCF), they have been excluded from the overall projections. A separate STO forecast, disaggregated by offender gender, is presented later in this report.

A more detailed discussion of the data, methodology, and assumptions used to develop the current projections can be found in the appendix to this report.

The forecast suggests that the total prison population will increase by 403 inmates (4.7%) in FY 2006 (see Figure 2). Over the next nine years, the total prison population is estimated to grow by 2,291 inmates, a 27 percent increase (see Figure 3). In the following sections, a closer look is taken at the areas estimated to increase by disaggregating the forecast by gender, admission type, and offense type.
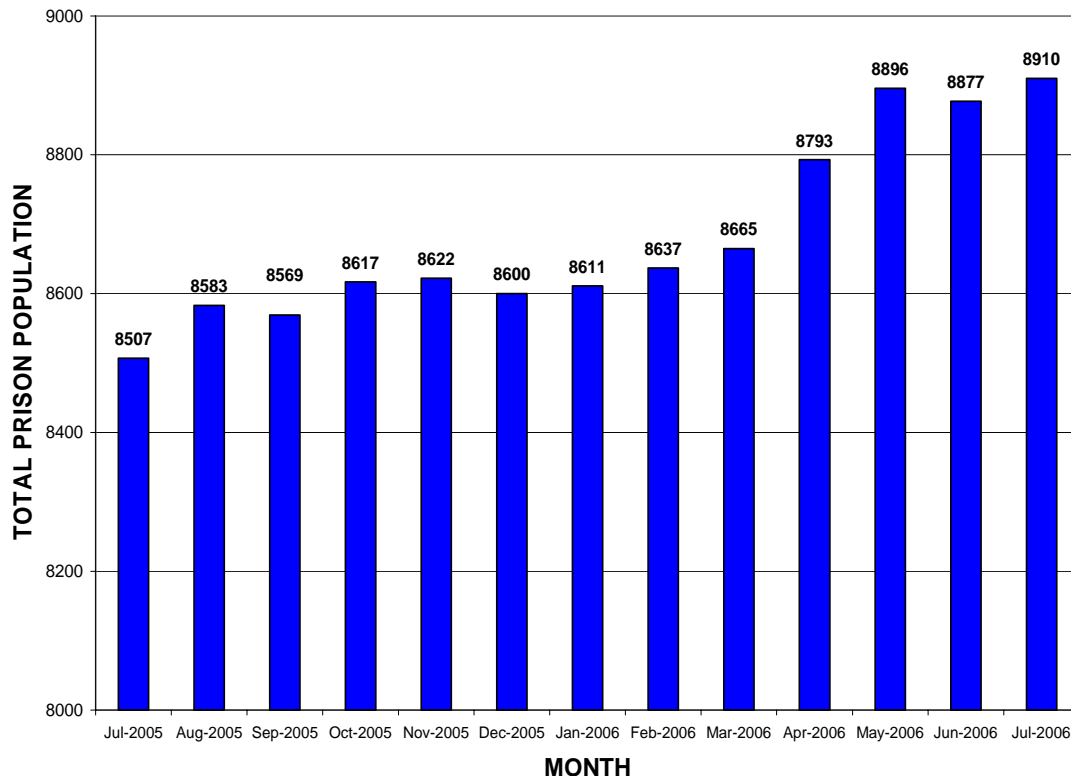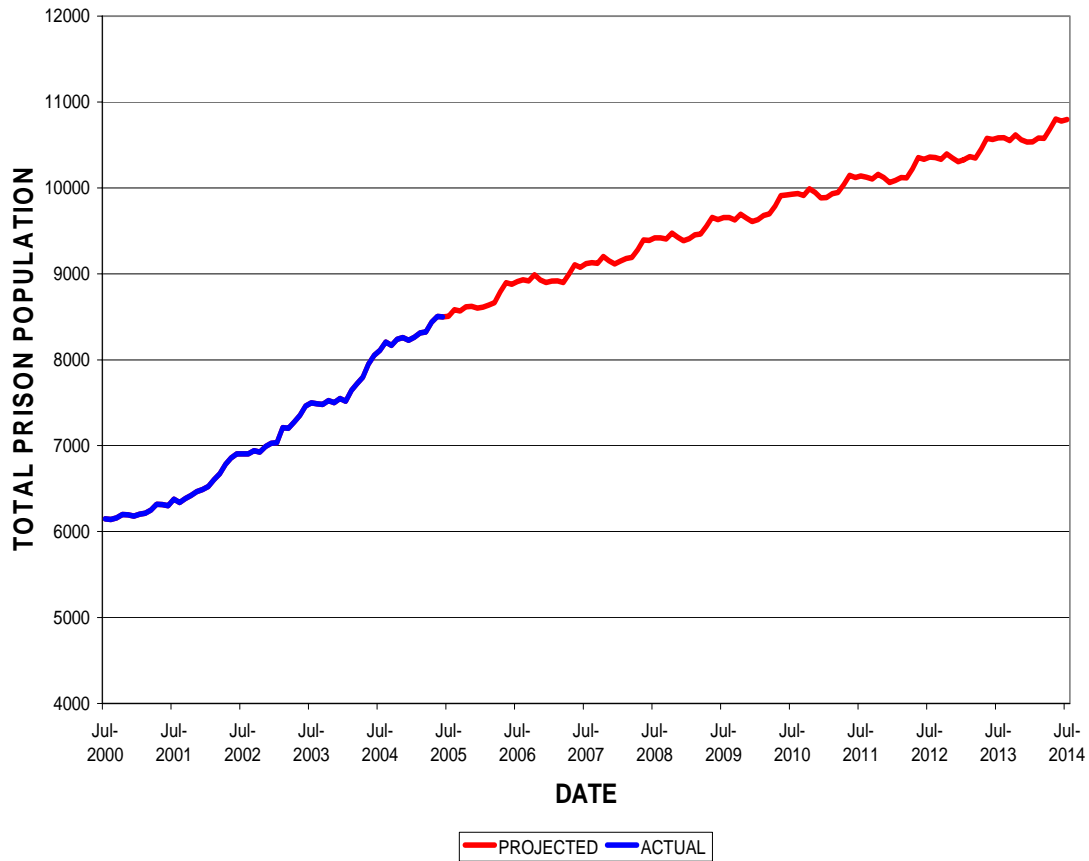

Figure 2. Projected Total Prison Population, FY 2006

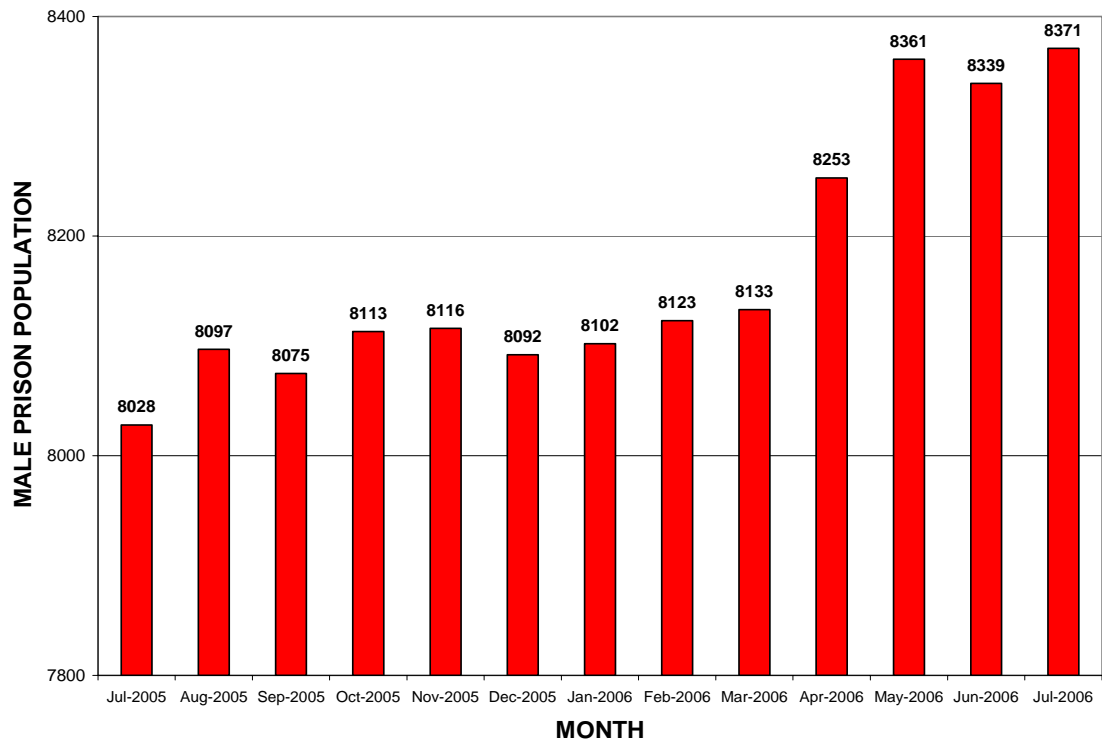**Figure 3. Actual and Projected Prison Population, FY 2001-2014**

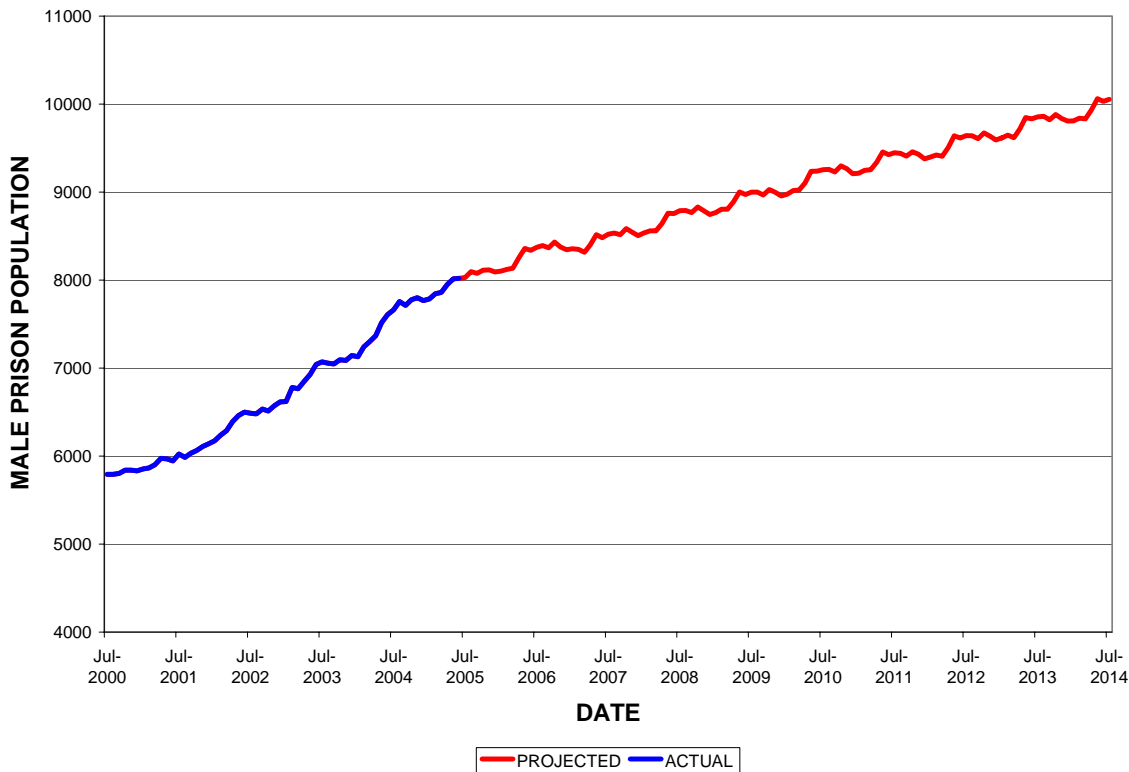**Figure 4. Projected Male Prison Population, FY 2006**

Figure 5. Actual and Projected Male Prison Population, FY 2001-2014

Male Prison Population Projections

Because male offenders constitute the vast majority of inmates, male population projections are very similar to overall projections. Results suggest that the male prison population will increase by 343 inmates (4.3%) during FY 2006 (see Figure 4). By the end of FY 2014, the size of the male population is estimated to grow by 2,027 inmates, a 25 percent increase (see Figure 5).

Male Prison Population Projections by Admission Type

The forecast suggests that new prison commitments will account for most of the increase in FY 2006 as well over the next nine years. For example, male new commitments are estimated to grow by 200 (3.3%) during FY 2006, or 58 percent of the projected increase for FY 2006 (see Figure 6). The number of male new commitments is expected to grow by 1,412 offenders by the end of FY 2014, a 23 percent increase over the nine-year period and nearly 70 percent of the overall increase in the male prison population (see Figure 7).

More modest increases are expected for male probation violators. This group is expected to grow by 119 (12%) in FY 2006 and by 435 (21%) over the full nine-year period. Supervised release violators (i.e., release returns) are projected to have a relatively small increase in FY 2006, growing by 22 offenders (4%). The forecast further indicates that the number of super-vised release violators will increase by 195 offenders (21%) from FY 2006-2014.
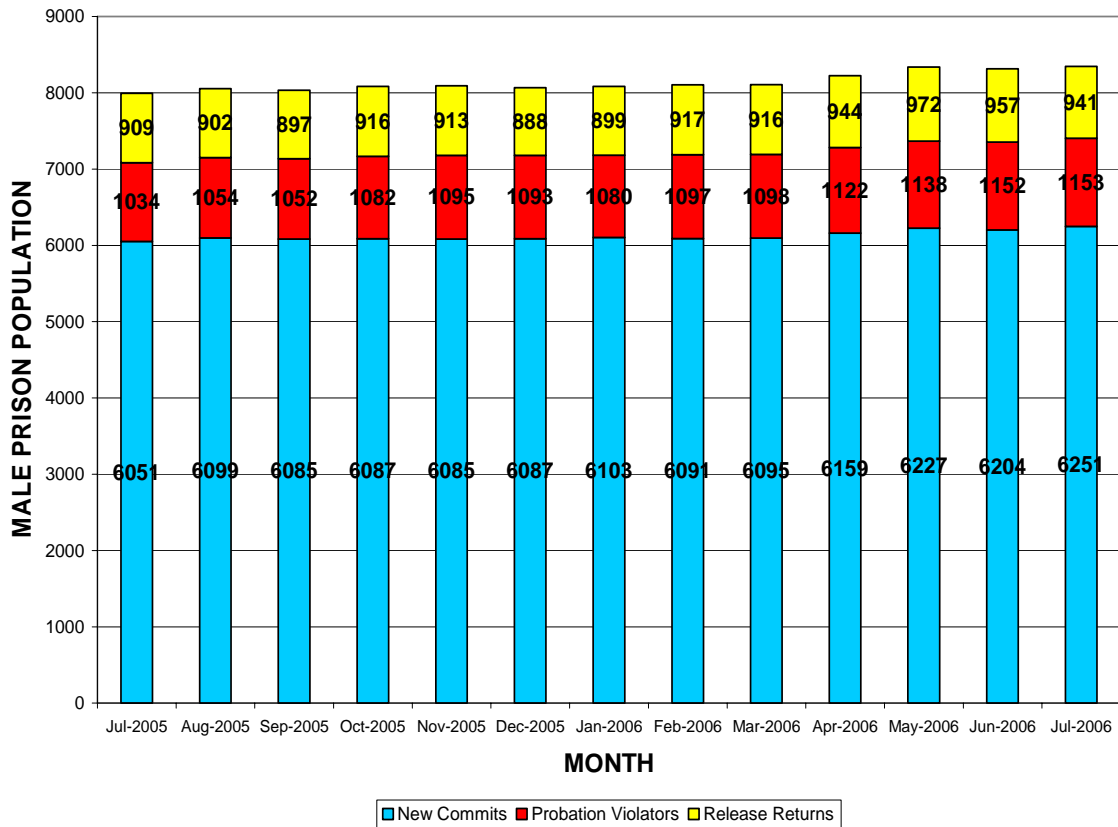
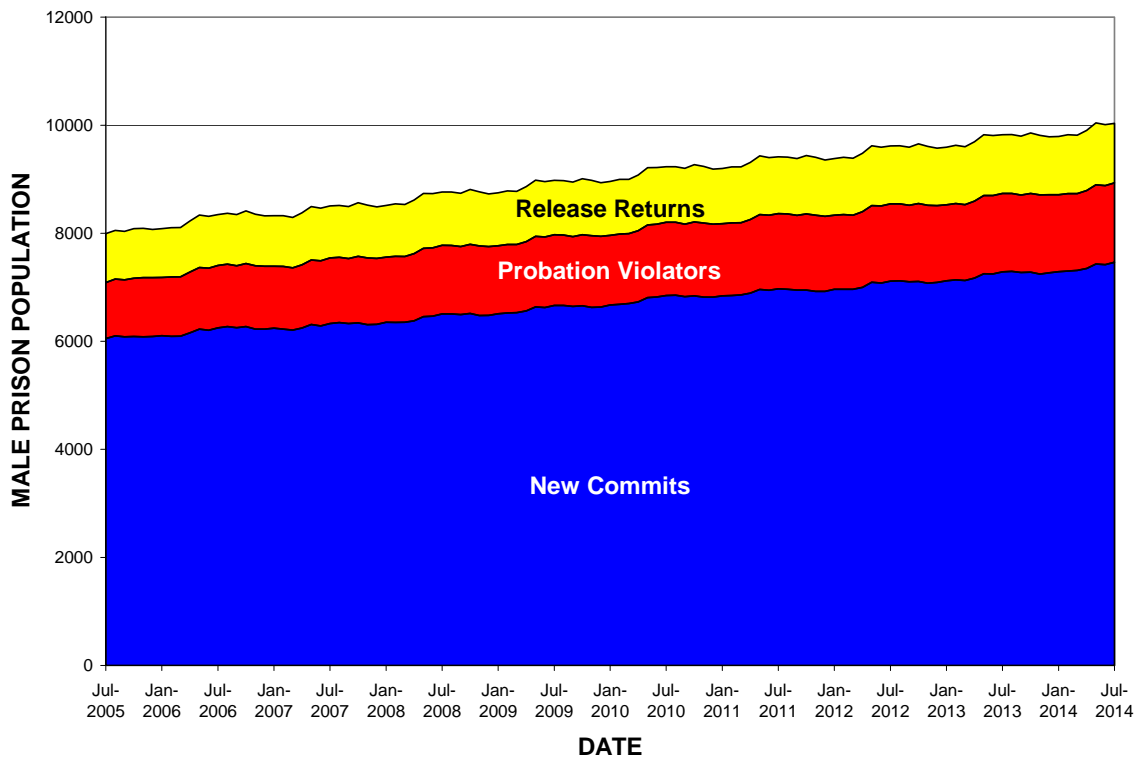**Figure 6. Projected Male Prison Population by Admission Type, FY 2006**

Figure 7. Projected Male Prison Population by Admission Type, FY 2006-2014

Male Prison Population Projections by Offense Type

The present forecast suggests that methamphetamine offenders will continue to have a significant, albeit more modest, impact on future prison population levels. Consistent with the receding growth of the methamphetamine offender population during FY 2005, the number of male methamphetamine offenders is projected to increase by 54 (5.3%) during FY 2006 (see Table 6). From FY 2006-2014, this population is expected to grow by 330, which is the second-highest percentage increase (33%) among all offense types over the forecast period (see Figure 8).

Table 6. Projected Male Prison Population by Offense Type, FY 2006-2014

Offense Type	July 2005	July 2006	July 2014	2005-2006 Numeric Difference	2005-2006 Percent Change	2005-2014 Numeric Difference	2005-2014 Percent Change
Person	2,538	2,595	3,052	57	2.2	514	20.3
Property	1,005	1,041	1,236	36	3.6	231	23.0
Drugs	938	951	1,116	13	1.4	178	19.0
Meth	1,014	1,068	1,344	54	5.3	330	32.5
Sex	1,389	1,494	1,812	105	7.6	423	30.5
DWI	332	395	508	63	19.0	176	53.0
Other	778	802	967	24	3.1	189	24.3
PSI holds	34	25	20	-9	-26.5	-14	-41.2
Total	8,028	8,371	10,005	343	4.3	2,027	24.6

Projected long-term growth for methamphetamine offenders would have been higher if not for creation of the new Conditional Release Program (CRP) and, most notably, anticipated expansion of the Challenge Incarceration Program (CIP) beginning in 2007 for male offenders. Both programs provide more offenders, especially those incarcerated for methamphetamine and other drug offenses, with an opportunity to decrease their length of stay in prison, thereby reducing prison population growth. The impact of CRP and CIP expansion on future population levels is also apparent for other drug offenders, who had the slowest rate of growth among all offense types over both the short (i.e., 1% during FY 2006) and long term (19% from FY 2006-2014).

Felony DWI offenders are projected to have the highest short- and long-term percentage increases among the seven offense types. More specifically, the male felony DWI offender population is estimated to grow by 63 (19%) during FY 2006 and 176 (53%) over the entire forecast horizon.

The forecast further suggests that sex offenders will account for the largest numerical growth (105) during FY 2006, amounting to an eight percent increase. Moreover, this group is projected to have the second-largest numerical growth (423) over the entire forecast period, trailing only person offenders (514). Although the size of the short-term increase for person offenders is relatively small (57), the projected long-term increase (514) is the largest among the seven offense types, comprising 25 percent of overall growth in the male prison population.
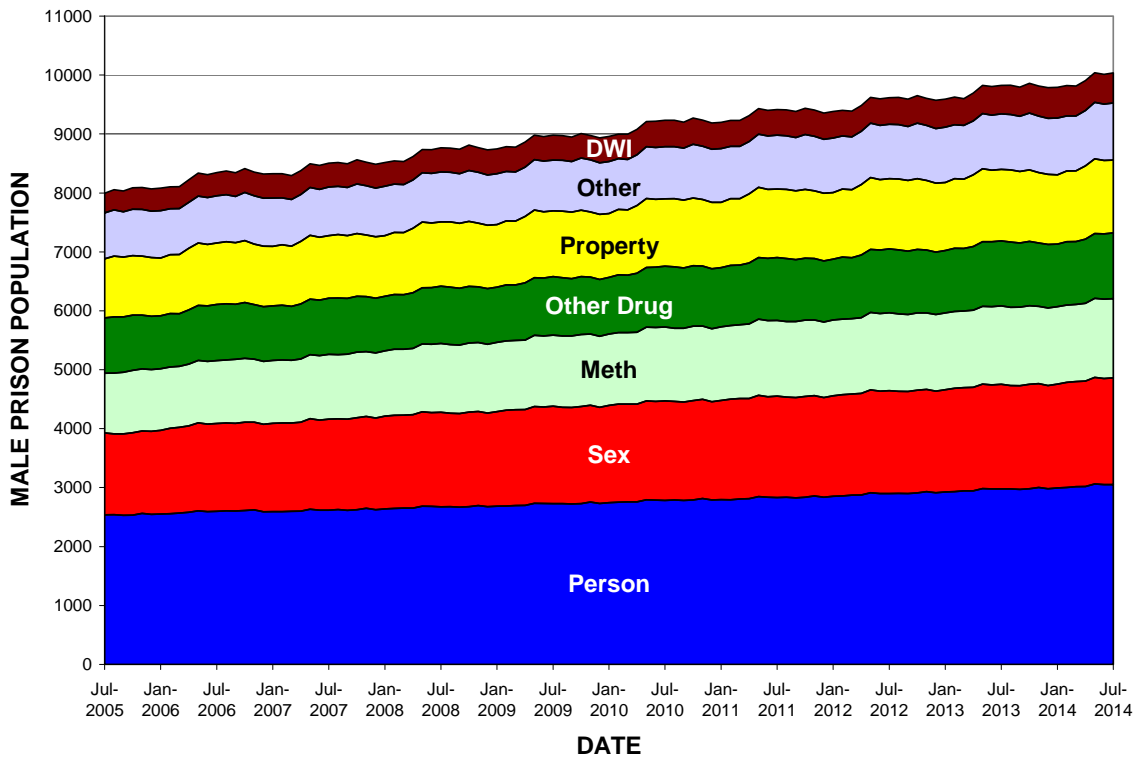
Figure 8. Projected Male Prison Population by Offense Type, FY 2006-2014

Female Prison Population Projections

The female prison population is projected to increase by 60 during FY 2006 (13%) (see Figure 9). By the end of FY 2014, the female prison population is estimated to be 743, an increase of 264 offenders at a rate of 55 percent (see Figure 10). Further, almost two-thirds of the long-term overall increase is projected to take place by the end of FY 2009.

Female Prison Population Projections by Admission Type

The bulk of the expansion in the female prison population will come from new commitments. Compared to male offenders, however, new commitments are projected to account for a greater portion of short- and long-term growth. For example, female new commitments are expected to be responsible for all of the growth during FY 2006, increasing by 70 offenders at a rate of 21 percent (see Figure 11). This group is estimated to increase by 241 offenders (73%) over the next nine years, or 91 percent of the projected growth (see Figure 12).

In contrast to new commitments, the number of female probation and supervised release violators is projected to decrease during FY 2006. Results suggest that the number of probation violators will decline by eight offenders (-7%), whereas the number of supervised release violators will drop by one (-3%). By the end of FY 2014, however, female probation violators are projected to increase by 17 percent (17 offenders) compared to a 20 percent increase for supervised release violators (7 offenders).
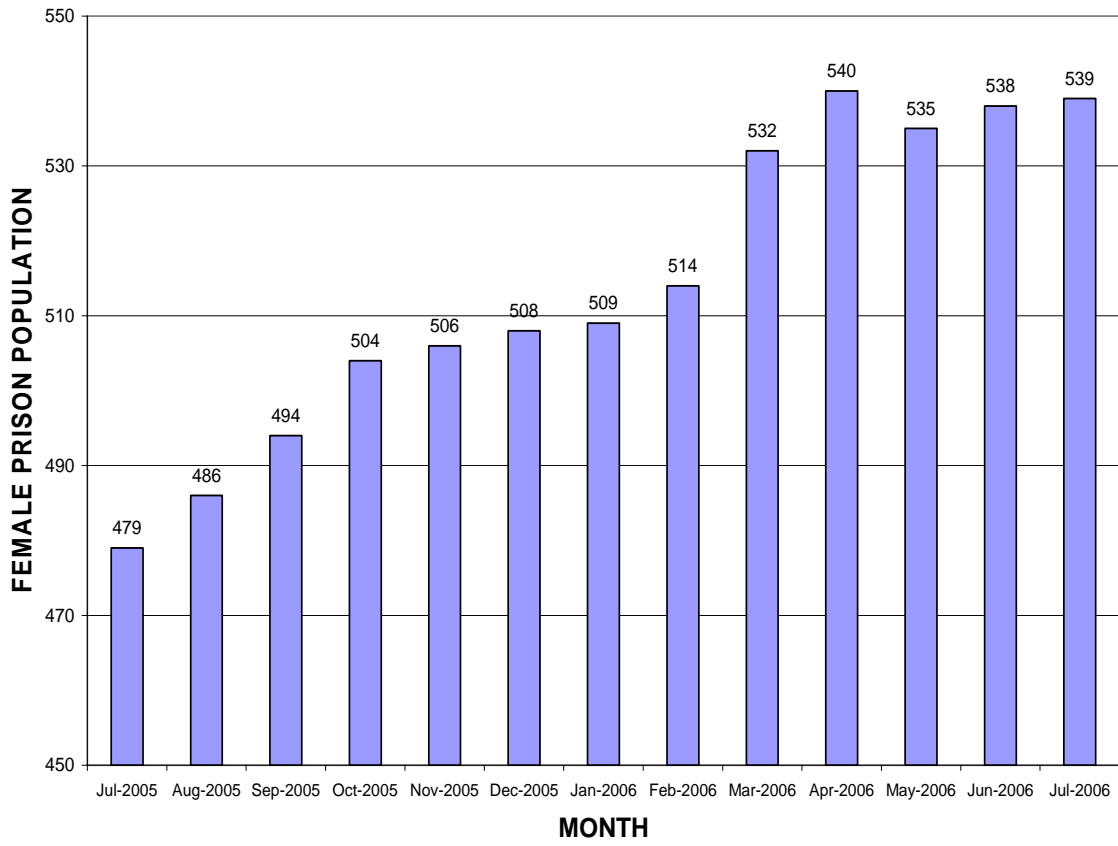
Figure 9. Projected Female Prison Population, FY 2006
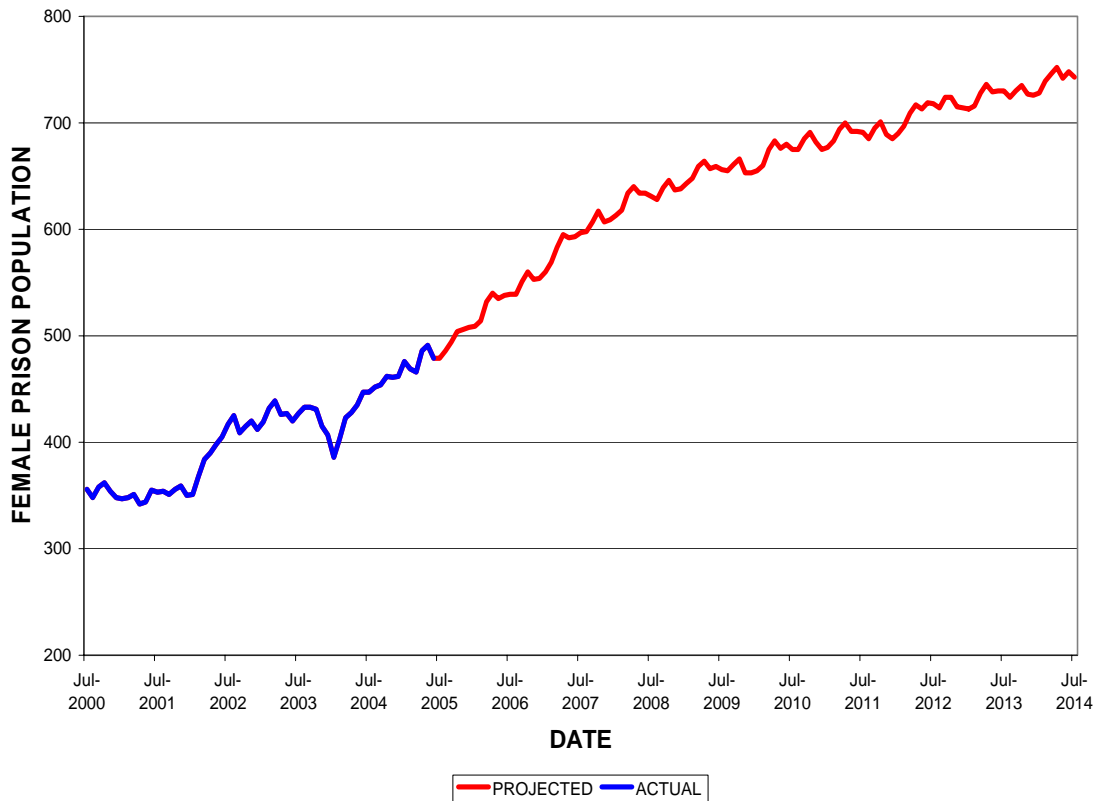

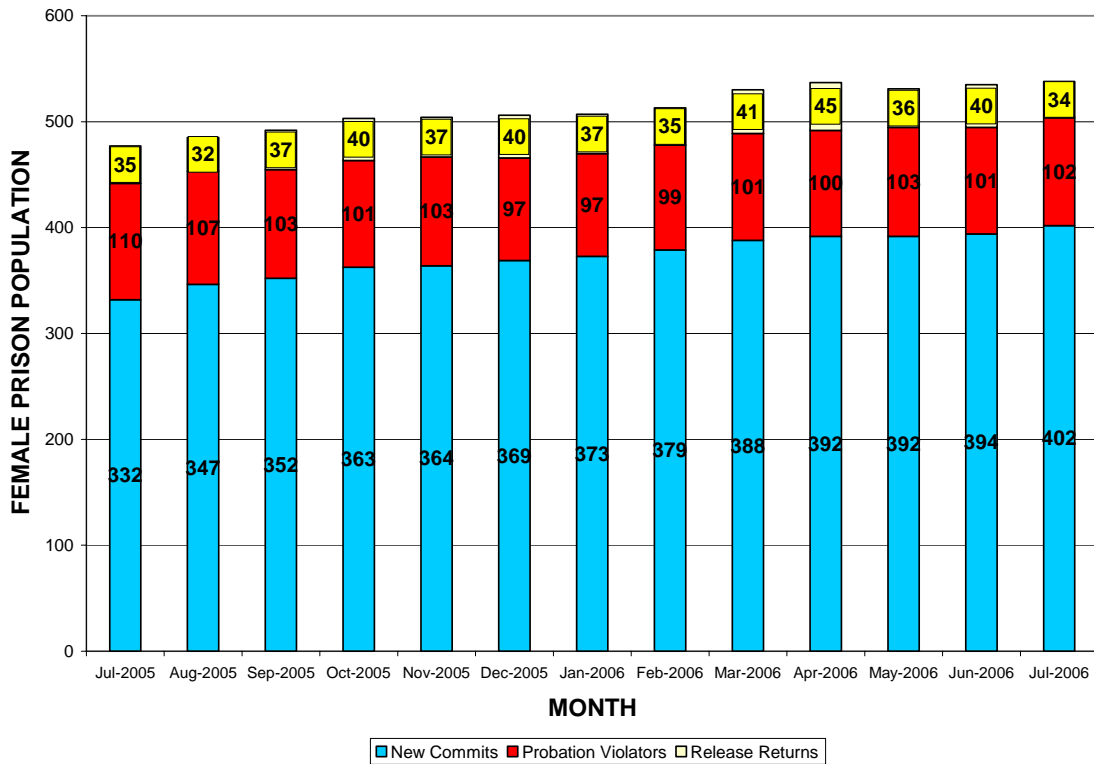**Figure 10. Actual and Projected Female Prison Population, FY 2001-2014**

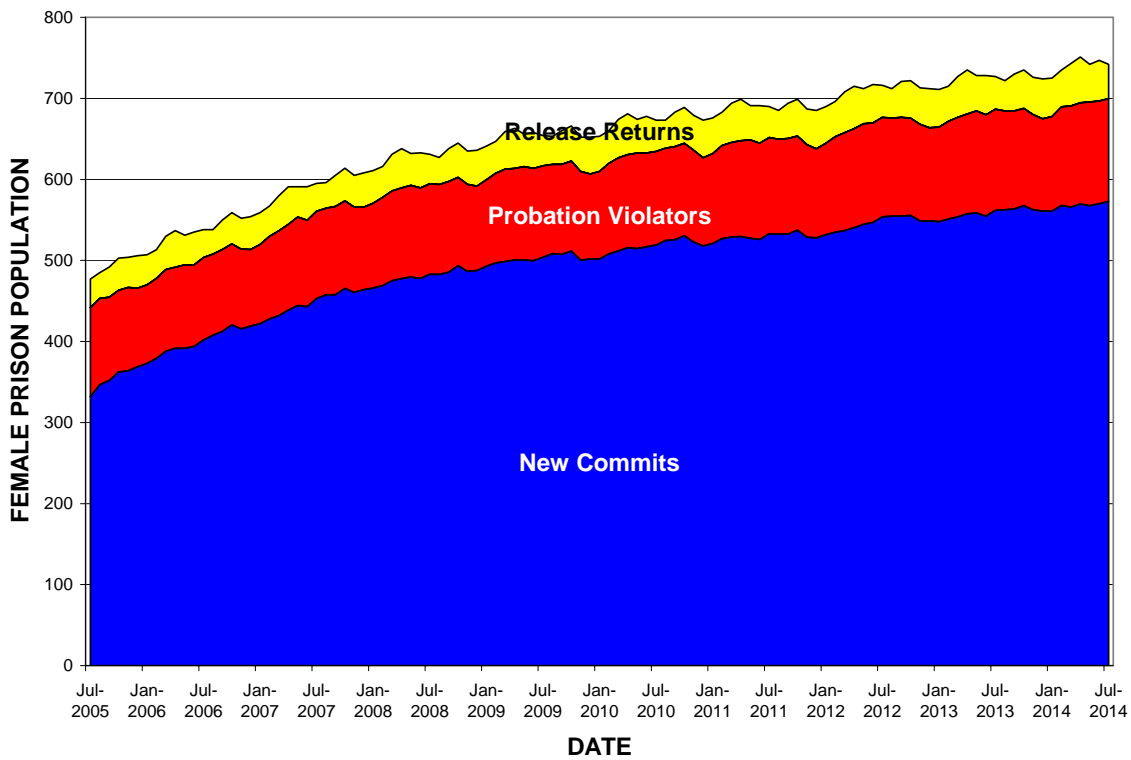**Figure 11. Projected Female Prison Population by Admission Type, FY 2006**

Figure 12. Projected Female Prison Population by Admission Type, FY 2006-2014

16

Female Prison Population Projections by Offense Type

Methamphetamine offenders will figure prominently in projected expansion of the female inmate population over the next nine years. Whereas methamphetamine offenders were the third most common offense type at the beginning of the forecast period, they are projected to be the second most common by the end of FY 2006, trailing only person offenders. Moreover, the forecast suggests that by the end of FY 2014, the number of female methamphetamine offenders (205) will nearly equal that of person offenders (206).

Table 7. Projected Female Prison Population by Offense Type, FY 2006-2014

Offense Type	July 2005	July 2006	July 2014	2005-2006 Numeric Difference	2005-2006 Percent Change	2006-2014 Numeric Difference	2006-2014 Percent Change
Person	143	148	206	5	3.5	63	44.1
Property	98	100	125	2	2.0	27	27.6
Drugs	78	84	109	6	7.7	31	39.7
Meth	95	134	205	39	41.1	110	115.8
Sex	19	24	27	5	21.1	8	36.8
DWI	13	12	15	-1	-7.7	2	15.4
Other	30	35	54	5	16.7	24	80.0
PSI holds	2	1	1	-1	-50.0	-1	-50.0
Total	479	539	743	60	12.5	264	55.1

The female methamphetamine inmate population is estimated to grow by 39 in FY 2006, an increase of 41 percent (see Table 7). By the end of FY 2014, this group is projected to number 205, a growth of 110 (116%) (see Figure 13). The forecasted increase among female metham-phetamine offenders comprises 65 percent of the overall projected growth for FY 2006 and 42 percent over the entire nine-year period.

Other drug offenders are projected to have the second-largest numerical increase (6) for FY 2006, whereas person offenders are estimated to have the second-largest numerical increase (44) from FY 2006-2014. With a growth rate of 80 percent (24 offenders) over the entire forecast period, projections indicate that other offenders will have the second-highest percentage increase from FY 2006-2014. DWI offenders, on the other hand, are projected to have the smallest growth rates for both the short (-8%) and long term (15%).
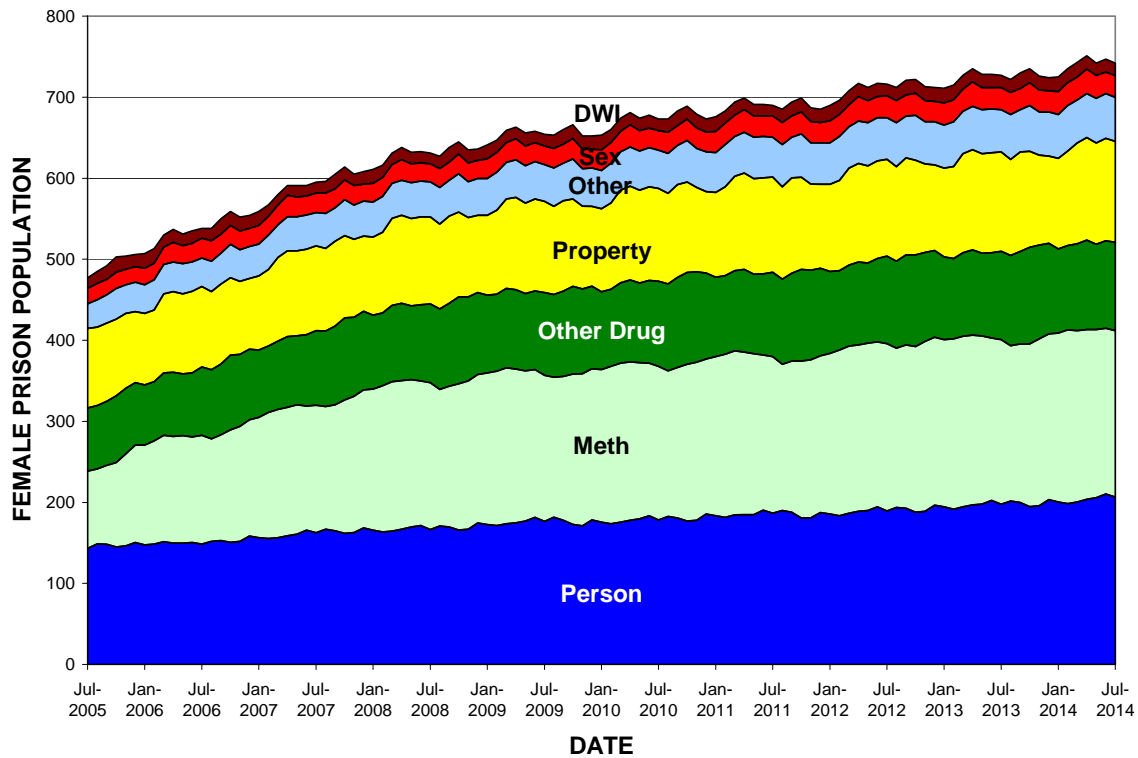
Figure 13. Projected Female Prison Population by Offense Type, FY 2006-2014

Short-Term Offender (STO) Forecast

Since July 1, 2003, offenders committed to the commissioner of corrections with a length of stay of 180 days or less have been serving their term of imprisonment at a county jail, workhouse, or other place authorized by law. Because these "short-term offenders" do not occupy a bed space in an MCF, they were excluded from the overall projections. However, separate STO projections were developed for both male and female offenders.

The total STO population is projected to grow by six offenders during FY 2006, a two percent increase (see Figure 14). Male STOs are estimated to account for all but one of the six-offender increase. Over the full nine-year forecast period, the STO population is projected to expand by 20 percent (61), topping out at 371 offenders by the end of FY 2014. The forecast indicates that male and female STO populations will both grow at a rate of 20 percent over the entire forecast period, with males increasing by 52 and females by 9 (see Figure 15).
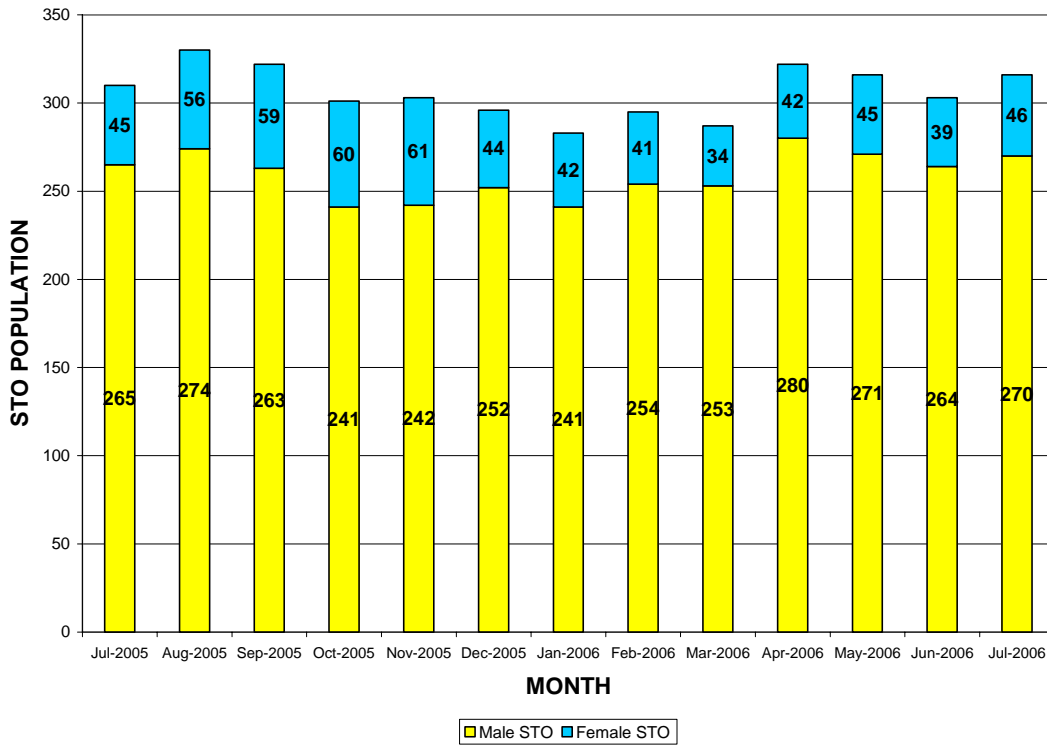
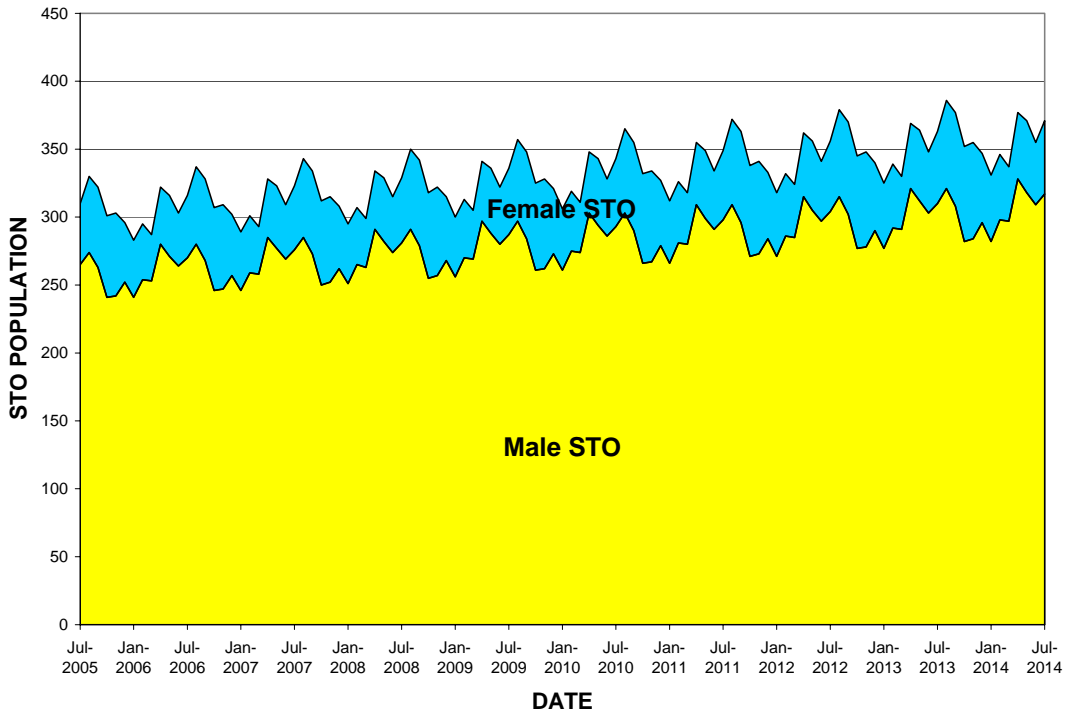**Figure 14. Projected STO Population by Offender Gender, FY 2006**

Figure 15. Projected STO Population by Offender Gender, FY 2006-2014

CONCLUSION

The boom in the prison population over the last few decades has been driven largely by an increase in drug offenders. One type of drug offender – those imprisoned for methamphetamine offenses – has played a significant role in prison population expansion over the last several years and will continue to have an impact over the next decade. In fact, due in no small part to the recent surge in female methamphetamine new commitments, the forecast suggests that the female prison population will grow at a significantly faster rate in FY 2006 and beyond.

After several years of dramatic growth, the male methamphetamine offender population increased at a much slower pace during FY 2005. The present forecast indicates that methamphetamine will still contribute to the rise in the male prison population, but not nearly to the extent that it will for female offenders.

Other major areas of difference between the male and female inmate forecasts include sex offenders and DWI offenders. Unlike the relatively large increase projected for male sex offenders, the forecast suggests minimal growth in the number of female sex offenders. Similarly, DWI offenders had the highest projected growth rates for male offenders but the lowest for female offenders.

Projections presented in this report are based on current laws, trends, and practices in the State of Minnesota. Any changes would attenuate the validity of these projections and require modification of the forecast.

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APPENDIX

DATA, METHODOLOGY, AND FORECAST ASSUMPTIONS

The Structured Sentencing Simulation (SSS) model was used to generate the current Minnesota Department of Corrections (DOC) state prison population forecast. SSS uses prison admission and stock population data to simulate movement of offenders through the correctional system. Admission data, which contain in-depth information on all offenders admitted to the DOC during calendar year (CY) 2004, is used to produce future prison admissions throughout the forecast period (2005-2014). Accordingly, future prison admissions generated by the SSS model for this year's forecast will resemble offenders admitted during CY 2004.

The stock population data, on the other hand, contain detailed information on all inmates incarcerated in an MCF on January 1, 2005. Stock population data thus provide a "one-day snapshot" of all incarcerated offenders on the first day of the forecast period for this year's projections.

The forecast produced by the SSS model is based not only on prison admission and stock population data, but also on a number of key assumptions made about factors such as the volume of future prison admissions, impact of new law changes, and projected capacity of institutional and community programs. Assumptions used in this year's projections follow.

FY 2006 Prison Population Forecast Assumptions

1. *Current prison population projection period* – January 2005 to December 2014.

2. *Future prison admissions* – In an effort to sharpen accuracy of projections, particularly during the first several years of the forecast period, prison admissions were separated into three categories: new commitments, probation violators, and supervised release violators. Prison admissions were grouped in these categories due to the relatively large disparity in offender lengths of stay among the three types. That is, new commitments receive, on average, substantially longer sentences and typically have longer lengths of stay than probation violators, who generally have greater lengths of stay than supervised release violators.

   Because admission trends can differ significantly among the three types, separate assumptions were made about each for both male and female offenders. However, due to the volatility of these trends over time, separate assumptions were made only for the first year of the forecast period (2005). For years 2-10 (2006-2014), a flat two percent annual increase was used for both male and female offenders for all three admission types.

   First-year admission assumptions, which were based on a comparison of January-August admission data from 2004 and 2005, are presented in the following table. For example, because the number of male offenders admitted as new commitments from January-August 2005 was virtually the same as the number admitted during January-August 2004, a zero percent, first-year admission assumption was used for male new commitments. Similarly, increases of five and nine percent were the first-year admission assumptions used for male probation and supervised release violators, respectively, due to commensurate increases in these two admission types from 2004-2005. Based on a comparison of January-August admission

23

First-Year Admission Assumptions for Male and Female Offenders

Admission Type	Percent Change between January-August 2004 and 2005	
	Male Offenders	Female Offenders
New commitment	0%	17%
Probation violator	5%	-38%
Supervised release violator	9%	-3%

data for 2004 and 2005, a 17 percent increase was assumed for female new commitments, whereas 38 and 3 percent decreases were the first-year assumptions used for female probation and supervised release violators, respectively.

3. *Future short-term offender (STO) admissions* –STOs were excluded from the overall projections since they do not occupy a bed space in an MCF. A separate STO forecast was developed in which the projections were disaggregated by offender gender. Although the same admission assumptions were used for male STOs, different ones were used for female STOs.

   STO admissions do not contain any supervised release violators, as these offenders are admitted as either new commitments or, more frequently, probation violators. Because male STO admission trends from 2004-2005 are similar to those of male non-STOs, the same admission assumptions were used for the male STO forecast; e.g., zero and five percent increases for new commitments and probation violators, respectively, during 2005, and a flat two-percent annual increase for both types thereafter (2006-2014).

   For females, STO admission trends from 2004-2005 were markedly different from those of non-STOs. More specifically, the first-year admission assumption was a zero percent change for new commitments and a 24 percent increase for probation violators. As with male STOs, a flat two-percent annual increase was the assumption used for both female STO admission types from 2006-2014.

4. *Institutional and community programs* – Three programs currently provide offenders with an opportunity for release into the community prior to their original supervised release date: Work Release, the Challenge Incarceration Program (CIP), and the new Conditional Release Program (CRP). To accurately forecast the prison population, it is necessary to account for offenders entering these programs. As a result, assumptions were made about capacity, duration, and eligibility criteria of these three programs over the forecast period.

   a. *Work Release:* Since 1968, carefully-screened inmates who have served at least one-half of their term of imprisonment and are within eight months of their supervised release date have been allowed to work at paid employment or participate in approved vocational programming in the community. The number of eligible offenders who participate in the work release program at a given time is dictated by the DOC's budget, which indicates that monthly program capacity from 2006-2014 will be 240 offenders (210 males and 30 females). Accordingly, current projections assumed these numbers.

   b. *Challenge Incarceration Program (CIP):* Implemented in 1992, this three-phase program is geared toward nonviolent drug and property offenders. During the first "boot camp" phase, which lasts a minimum of six months, male offenders are imprisoned at the MCF-Willow River, whereas female CIP participants are incarcerated at the MCF-Togo.

Following successful completion of the institutional phase, offenders are placed in the community for Phases 2 and 3, each of which generally lasts six months. Offenders who complete all three phases are then placed on supervised release until sentence expiration. For offenders who fail, time spent in CIP is added to their length of stay.

Recent history indicates that CIP operating capacity has been 90 male and 20 female offenders. Beginning in 2007, however, the MCF-Willow River will begin a gradual expansion that will add 90 beds by July of that year. Consequently, current projections assume that operating capacity during 2005 and 2006 will be 90 male and 20 female offenders. From 2007-2014, however, the present forecast assumes a male capacity of 180.

Recent history likewise indicates that CIP has consisted almost exclusively of drug offenders. Analyses conducted for the current projections suggest that the pool of eligible CIP participants will need to be expanded to include other non-drug offenders in order to meet the operational capacity of 180 from 2007-2014. As a result, the present forecast assumes that only drug offenders will be eligible prior to 2007, but that other offenders (except for person and sex offenders) will be eligible from 2007-2014.

The following historical data on CIP is included in forecast assumptions: Eligible offenders enter the program no earlier than three months after their admission to prison; and those who complete Phase 1 will be released, at a minimum, 12 months before their original supervised release date. Consistent with recent data on CIP success/failure rates, the present forecast further assumes that 70 percent of CIP participants will successfully complete Phase 1. For the 30 percent who fail, time spent in CIP will be added to their length of stay.

c. *Conditional Release Program (CRP):* Mandated by the 2005 Minnesota Legislature, CRP is an intensive treatment program for carefully screened, nonviolent drug offenders who, upon successful completion of the program, are eligible for release after they have served either 36 months or half of their term of imprisonment, the lesser of the two. Eligible offenders began entering CRP, which generally lasts six months, in November 2005. Like CIP, offenders who fail CRP will have the time they spent in the program added to their length of stay.

Recent analyses suggest that monthly program capacity will be 15 males and 5 females. Current projections assume that a total of 50 males and 15 females will participate before the program sunsets in June 2007. Like CIP, it is assumed that 70 percent of CRP participants will successfully complete the program. Of the 30 percent who fail, time spent in CRP will be added to their length of stay. Similar to CIP, it is further assumed that offenders are not eligible to enter CRP until three months after they are admitted to prison. Given the potentially significant reduction in time served for CRP participants, the minimum amount of time saved is assumed to be 20 months for program completers.

5. *New Law Changes* – Several laws were passed during the 2005 legislative session that are assumed to have an impact on future prison population levels within the current forecast period. Assumptions regarding the impact of these legislative changes follow.

   a. *Criminal Sexual Conduct (CSC) offenders:* Mandatory life sentences with the possibility of release were created for offenders convicted of either first- or second-degree CSC in

which one heinous element was present. Based on 2003 sentencing data, it is estimated that this provision will begin to impact the prison population in FY 2009 and add 22 prison beds by the end of FY 2014, the end of the forecast period.

b. *Methamphetamine offenses:* Legislative provisions were created for methamphetamine by defining it as a narcotic, increasing the statutory maximum for possession of metham- phetamine precursor drugs, recodifying anhydrous ammonia offenses, and expanding the definition of crimes involving children and vulnerable adults. It is assumed, based on 2003 sentencing data, that these changes will add 22 prison beds during FY 2006 and 44 by FY 2014.

c. *Domestic Assault by Strangulation:* A new felony offense was created for crimes in which a family or household member is assaulted by strangulation. Using 2003 sentenc- ing data, it is estimated that this provision will add 40 prison beds during FY 2006 and slowly escalate over the next five years, topping out at 103 beds by FY 2011.

d. *Identity Theft:* The identity theft statute was amended to include offenses involving pos- session or dissemination of pornographic works. Based on data from 2004, it is assumed that this provision will add five prison beds each fiscal year.

6. *Pre-Sentence Investigation (PSI) Holds* – PSI holds comprise a group of offenders yet to be sentenced, but who nevertheless occupy a prison bed. It is necessary, therefore, to account for these offenders in population projections. However, because admission and offense type data are not available on these offenders until after they are sentenced, PSI holds are treated as a discrete category when the forecast is disaggregated by admission and offense type.

On January 1, 2005, the first day of the forecast period, there were 21 male and 2 female PSI holds in an MCF. Based on an analysis of PSI hold stock population data from January 1, 2004, the present forecast assumes that these 23 offenders in the stock population will remain in PSI hold status anywhere from 0.3 to 6.2 months, with 2.1 months being the average. In addition, given that PSI hold admission data from 1996-2005 suggest that the annual number of admissions has been relatively stable over the ten-year period, current projections further assume that 160 offenders (150 males and 10 females) will enter PSI hold status each year and stay in that status from 0.2 to 8.5 months, with the average being 1.9 months.

7. *Supervised release date adjustments* – The SSS model uses admission and stock population data to forecast the prison population. Both sets of data contain information on offenders' scheduled release dates (SRD). An SRD can change, however, if the offender receives ex- tended incarceration disciplinary time or dies while incarcerated. To account for these poten- tial changes to SRDs, an analysis was performed on admission and stock population data files used in this year's forecast. SRDs in both files were compared with actual release dates (for released inmates) or updated SRDs (for offenders still incarcerated) as of October 15, 2005. If an offender's actual release date or SRD was different from that listed in the data files, it was adjusted accordingly. The monthly impact of SRD changes was estimated from November 2005-December 2014 to fully account for the effect of these adjustments on the prison population over the entire forecast period.