



STATE OF MICHIGAN
DEPARTMENT OF CORRECTIONS
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

PATRICIA L. CARUSO
DIRECTOR

DATE: February 1, 2008

TO: Senator Alan L. Cropsy, Chair
Senate Appropriations Subcommittee on Judiciary and Corrections

Representative Alma Wheeler Smith, Chair
House Appropriations Subcommittee on Corrections

Patricia Caruso

FROM: Patricia L. Caruso, Director

SUBJECT: Prison Population Projections

Section 401 of PA 124 of 2007 requires that the Department of Corrections submit three-year and five-year prison population projection updates by February 1, including an explanation of the methodology and assumptions used in developing them. This report can be viewed at www.michigan.gov/corrections.

c: Bob Emerson, State Budget Director
Jacques McNeely, Office of the State Budget
Lindsay Hollander, Senate Fiscal Agency
Marilyn Peterson, House Fiscal Agency
MDOC Executive Policy Team

REPORT TO THE LEGISLATURE
Pursuant to P.A. 124 of 2007
Section 401
Prison Population Projection Report
January 2008

After 20 years of nearly continuous prison population growth - as high as 4,000 prisoners a year at times - the size of Michigan's prison population was successfully controlled for more than three years under the Department's Five Year Plan to Control Prison Growth (from October 2002 through February 2006). During that time, prison population was gradually reduced by nearly 1,200 inmates through calendar year 2004, and then it rebounded gradually by about 900 from the start of calendar year 2005 through the first couple of months of 2006. At the end of that time, the prison population remained 262 inmates lower than what had been the record high in October of 2002.

Then, in late February of 2006, some highly publicized crimes caused the entire Michigan criminal justice system to react with an escalating pattern of more arrests, more sentences to prison, fewer paroles and more revocations of parole. As a result, the prison population increased by 2,077 in calendar year 2006 (4.2%). Review of circuit court activity, prison intake, prison release and violator return trends in 2006 compared to 2005 indicated that the entire criminal justice system had become much tougher virtually across the board.

As a result of aggressive efforts to ease these trends, the prison population increased by only 100 inmates through the first three months of 2007 to a new record high of 51,554 inmates at the end of March. Nevertheless, available net operating capacity had dwindled to 420 vacant beds (less than 1% of capacity). With continued growth otherwise expected, the Department then took decisive action to further control growth by:

- Accelerating the Michigan Prisoner ReEntry Initiative (MRPI) in-reach processes by two months for inmates who were already past their earliest release dates and approved for parole via MPRI.
- Initiating a review by the parole board of prisoners who were serving active sentences for only drug or other nonviolent, non-weapon crimes and who were past their earliest release dates.
- Initiating a short-term MPRI Community Placement Program demonstration project for such prisoners when deemed appropriate by the Parole Board to mitigate and control risk, featuring a system of integrated transitional services coupled with rigorous drug testing and sanctions. The program consisted of four phases which assessed, referred, and placed targeted parolees into community-based transitional residential housing and services. The initial phase was the standard MPRI In-Reach phase, followed by placement in a community-based programming center, and then eventual transition to an approved home placement (with electronic monitoring as necessary), along with access to programming, assistance and services. The final phase allowed for periods of return to the community-based programming center if necessary for reasons such as rule noncompliance, family conflict or loss of home status.
- Initiating a review of the potential for paroles and commutations of medically fragile prisoners with high medical costs who posed little to no threat to public safety if released.
- Implementing the Executive Clemency Advisory Council to identify and review potential cases for commutation and parole consideration for reasons such as declining health.
- Achieving a 26% reduction in parole failures among MPRI participants, along with better outcomes for the parole population as a whole, yielding over 1,000 fewer parole revocations for the year. The results of the MPRI have been promising enough so far to move it up to scale in FY 2009. We plan to engage over 6,500 prisoners in the MPRI in FY 2009.

These actions resulted in additional paroles (despite a stable parole approval rate) while simultaneously reducing parole failures (despite a record high parole population), brought an end to the large monthly population increases that had occurred in 2006, and produced seven consecutive months of prison population decline in 2007. From April through October, the prison population was reduced by 1,653 inmates (an average of 236 per month). Despite an increase in prison population of 302 inmates during the last two months, the Michigan prison population ended calendar year 2007 at 50,203 prisoners, which is 1,251 fewer than a year ago (-2.4%). While this accomplishment is noteworthy, it is short-lived: Leading indicators now suggest that the prison population increases of the past two months may be the harbinger of another cycle of growth, especially because approved paroles pending release in future months are down from a year ago (as will be discussed in the Assumptions Section of this report).

Prison Population Projection Methodology

Michigan's prison population projections are generated by a computerized simulation model, developed originally by the National Council on Crime and Delinquency (NCCD) [their initial mainframe computer model, not the later micro-based, somewhat generic, and thus comparatively superficial PROPHET system]. It was then adapted for Michigan by research and planning staff in the Michigan Department of Corrections. The computerized simulation model mimics the movement of prisoners through the Corrections system and uses past practice and prior year trends to predict future patterns.

The projection model itself is simply an automated shell into which numerous probability distribution arrays must be fed (after creation outside the model by extensive statistical analyses), regarding how and when prisoners move through the various points in the corrections process (e.g., intake at reception, time to each subsequent parole hearing, likelihood of parole, timing of release to parole, chances of return as a violator, and discharge from sentence). These arrays are broken down by the various population subgroups with particular characteristics (i.e., offense, sentence length, etc.).

Michigan's projection model incorporates finer resolution than the original NCCD model. For example, Michigan's model has up to 50 distinct maximum-term groups, each of which can have up to six minimum-term pairings. This level of detail allows particular attention to relatively short sentences of 2 years or less, which have the most influence on 3 to 5 year projection accuracy.

The projection model does not forecast the annual number of prison admissions; but once entered as values, the model does disaggregate admissions randomly based on past distributions. Then, the projection model simulates the flow of existing prison population and new intake through the system, including feedback loops for parole violators with and without new sentences.

The source of the raw data for the projections is downloads from the MDOC Corrections Management Information System (CMIS), and the data are analyzed via the Statistical Package for the Social Sciences (SPSS). Once the projection model shell is populated with probability distribution arrays, numerous iterations of the model are run, "fine tuning" against two or more years of historical, actual trace vectors for purposes of validating the rebuilt data. Multiple projection runs can be combined – especially in times of particular uncertainty – to generate a confidence interval based on the monthly minimums and maximums for all of the runs, with the expectation that future population will more assuredly fall within the confidence interval.

After a successful result is obtained (which must track past trends accurately, and must correspond to short-term expectations for the future informed by considerable independent analysis of recent trends), then the projections are issued by the department. The model can also be used for "what if" analyses, such as simulating the impact of proposed legislative sunset provisions on modifications to sentencing laws.

Exceptions to the model's track record of better than 99% short-term projection accuracy have sometimes occurred over the years, when criminal justice practices and trends deviated from the past or showed

unstable or uncharacteristic patterns – in which case the problem has generally been inadequate history against which to validate and fine-tune the results. Long-term projections are generally considered less reliable because of the difficulty associated with predicting multi-year prison intake volume as well as changes in laws and policies that may affect the underlying statistical distributions which drive the model. That is why the projections are updated at least once each year – to adjust for any new laws, policies, court rulings, operational practices or trends.

New Prison Population Projection Assumptions

Prison Intake

Felony court dispositions data for 2007 through September showed a 2.8% increase in total dispositions (offenders) from the same time period in 2006, but the prison commitment rate had fallen by about 1% from 2006, essentially back to the rate that was experienced in 2005. The net result was a modest decrease of 3.5% in prison intake during 2007 compared to 2006, although that represents less than 400 fewer admissions against the all-time record high established in 2006. This projection update assumes that annual prison admissions will stabilize at the 2007 level absent new approaches to control prison growth.

Community Residential Programs (CRP) Prisoner Population

The CRP prisoner population is assumed to stay fixed at a very small size (only 30-50 prisoners over the past six months) throughout this projection update because the pre-Truth-in-Sentencing (TIS) prison population that remained eligible for CRP placement before reaching the ERD (Earliest Release Date) has dwindled to little or nothing. Post-ERD prisoners continue to be accepted into the program under certain conditions, but there has been no sign of any potential for growth under the current eligibility requirements.

Obviously, consideration will need to be given to redefining the concept and role of CRP in the future if the program is to remain tenable. At its peak, CRP had placed nearly 3,500 low-risk prisoners into community corrections centers and on electronic monitoring who were actively involved in getting established with housing and jobs in the community to demonstrate their readiness for parole approval, with only a 1-2% rate of new felony convictions. The CRP demonstration period in advance of parole consideration is a vital benefit of the program, as the parole approval rate for successful CRP prisoners is 95-98%, while the parole approval rate for their contemporaries housed in camps is only 68%.

Parole

There were a record high number of moves to parole in calendar year 2007 (nearly 700 more than the previous record set in 2003), due to a record high number of parole decisions. The parole approval rate was essentially stable at 52% (52.4% in 2007 versus 51.7% in 2006 for a difference of <1%). This projection update assumes that the annual number of moves to parole will decrease from the 2007 record level to a more modest average of the past several years absent new approaches to control prison growth. The reasons for this assumed decrease and then leveling off include:

- The unprecedented high number of parole decisions in 2007 was largely the result of efforts by the Department to control growth via the actions described earlier in this report, and the impact of those actions had stabilized by the end of October.
- A secondary result of the high numbers of parole releases and low numbers of parole failures in 2007, is a decrease in the numbers of lower risk, low security level cases with high and average parole guidelines scores who are becoming eligible for parole consideration in future months. Many prisoners who had been past their earliest release dates have now already been released, and the reduced parole failures have made fewer returned cases available for potential re-parole.

Consequently, the parole board now has fewer cases to consider and those remaining cases are less desirable candidates for parole.

- The modest reduction in new prison intake in 2007 has resulted in fewer relatively short sentence cases approaching their earliest release dates, further depressing the future parole board decision frequency for cases with comparatively higher parole approval rates.

Evidence in support of the assumed decrease in moves to parole from 2007 is that moves to parole in the last two months of 2007 were fewer in number than in 2006, and that there were about 700 fewer already approved future paroles-in-hand at the end of 2007 than there were at the end of 2006.

Parole Violator Technical Returns to Prison (parole revocation)

Continued statewide expansion of the Michigan Prisoner ReEntry Initiative and continued progress toward implementation of the full MPRI model, along with many other related efforts by the department to improve parolee success (such as collaborative case management, and the opening of the Tuscola ReEntry Center, for example), contributed to a 33% reduction in the number of parole revocations in 2007, despite record high numbers of moves to parole and a record high parole population in 2007. This projection update assumes that the annual number of parole revocations will stabilize yet gradually decline further – especially now that the MPRI has been expanded statewide in FY 2008 and will be brought up-to-scale beginning in FY 2009. There is a possibility that parole revocations may rebound somewhat in 2008 given the large parole population that now exists, and given that many of these parolees will have been in the community long enough to approach what had been the average time to return to prison for those who fail.

Ongoing, Expanded and New Initiatives

This projection update assumes varying impact from ongoing and expanded initiatives, which is difficult to isolate because of the complexity of the individual impacts on each other (i.e., they target similar cases at different stages in the system), so overall impact is derived from the projection model.

There will likely also have to be new initiatives proposed in the coming months since the anticipated prison capacity cannot accommodate the eventual size of the prison population that is projected by this forecast. Options will be identified, assessed on their merits, and proposed following thorough consideration of possible courses of action. The Department anticipates the announcement and explanation of proposed new strategies to address renewed prison population growth during and shortly after the release of the Governor's FY 2009 budget recommendations.

Prison Population Projections and Bedspace

Chart 1 summarizes the revised and extended prison population projections through 2012, and shows both the tremendous gains in prison population stability achieved in 2003-2005 as well as in 2007. Table 1 (quarterly figures) and Table 2 (monthly figures) show the specific revised projection details. Chart 1 also shows planned future net operating capacity, demonstrating the points in time at which this projection update now expects prison population to exceed the minimum capacity availability threshold of 350 beds (June 2008), and to exceed the total net operating capacity (April 2009) absent new approaches.

Planning and Community Development Administration; February 1, 2008

Michigan Department of Corrections
PROJECTED PRISON POPULATION

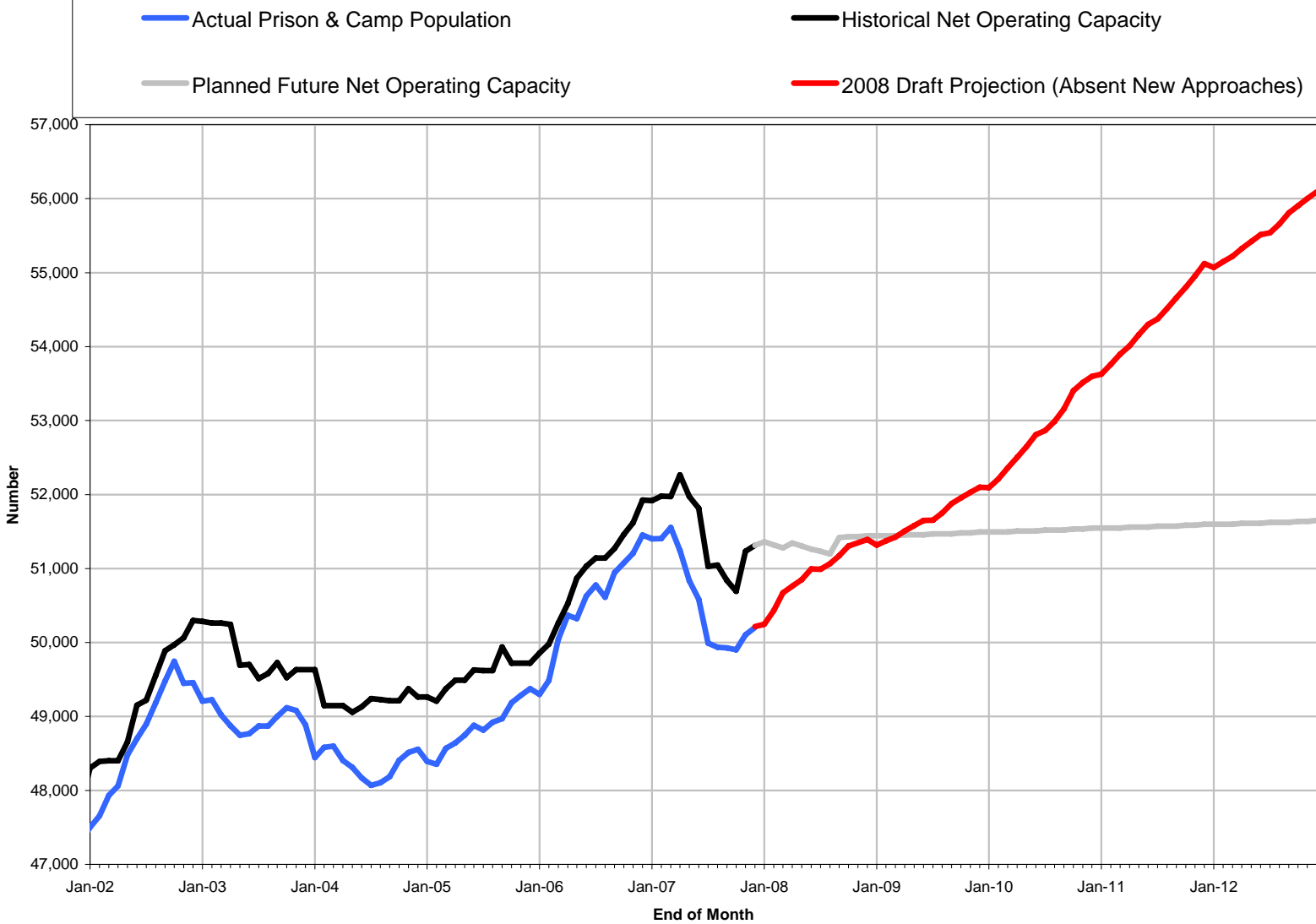


Table 1

Projected Prison Population January, 2008				
<u>End of Month</u>	<u>Total Prisoner Population Projection</u>	<u>Subtract Estimated CRP</u>	<u>Projected Prison/Camp Population</u>	<u>Yearly Growth</u>
Mar-08	50,712	40	50,672	
Jun-08	51,033	40	50,993	
Sep-08	51,215	40	51,175	
Dec-08	51,434	40	51,394	1,191
Mar-09	51,465	40	51,425	
Jun-09	51,690	40	51,650	
Sep-09	51,919	40	51,879	
Dec-09	52,140	40	52,100	706
Mar-10	52,399	40	52,359	
Jun-10	52,850	40	52,810	
Sep-10	53,195	40	53,155	
Dec-10	53,638	40	53,598	1,498
Mar-11	53,937	40	53,897	
Jun-11	54,342	40	54,302	
Sep-11	54,700	40	54,660	
Dec-11	55,164	40	55,124	1,526
Mar-12	55,261	40	55,221	
Jun-12	55,552	40	55,512	
Sep-12	55,847	40	55,807	
Dec-12	56,134	40	56,094	970

MDOC Office of Research & Planning 01/09/08

Table 2

**Projected Prison Population
January, 2008**

<u>End of Month</u>	<u>Total Prisoner Population Projection</u>	<u>Subtract Estimated CRP</u>	<u>Projected Prison/Camp Population</u>	<u>Yearly Growth</u>
Jan-08	50,287	40	50,247	
Feb-08	50,471	40	50,431	
Mar-08	50,712	40	50,672	
Apr-08	50,802	40	50,762	
May-08	50,889	40	50,849	
Jun-08	51,033	40	50,993	
Jul-08	51,030	40	50,990	
Aug-08	51,107	40	51,067	
Sep-08	51,215	40	51,175	
Oct-08	51,344	40	51,304	
Nov-08	51,388	40	51,348	
Dec-08	51,434	40	51,394	1,191
Jan-09	51,357	40	51,317	
Feb-09	51,413	40	51,373	
Mar-09	51,465	40	51,425	
Apr-09	51,548	40	51,508	
May-09	51,621	40	51,581	
Jun-09	51,690	40	51,650	
Jul-09	51,694	40	51,654	
Aug-09	51,790	40	51,750	
Sep-09	51,919	40	51,879	
Oct-09	51,993	40	51,953	
Nov-09	52,070	40	52,030	
Dec-09	52,140	40	52,100	706
Jan-10	52,133	40	52,093	
Feb-10	52,251	40	52,211	
Mar-10	52,399	40	52,359	
Apr-10	52,543	40	52,503	
May-10	52,689	40	52,649	
Jun-10	52,850	40	52,810	
Jul-10	52,903	40	52,863	
Aug-10	53,028	40	52,988	
Sep-10	53,195	40	53,155	
Oct-10	53,444	40	53,404	
Nov-10	53,554	40	53,514	
Dec-10	53,638	40	53,598	1,498
Jan-11	53,669	40	53,629	
Feb-11	53,798	40	53,758	
Mar-11	53,937	40	53,897	
Apr-11	54,048	40	54,008	
May-11	54,201	40	54,161	
Jun-11	54,342	40	54,302	
Jul-11	54,414	40	54,374	
Aug-11	54,554	40	54,514	
Sep-11	54,700	40	54,660	
Oct-11	54,842	40	54,802	
Nov-11	54,995	40	54,955	
Dec-11	55,164	40	55,124	1,526
Jan-12	55,109	40	55,069	
Feb-12	55,187	40	55,147	
Mar-12	55,261	40	55,221	
Apr-12	55,366	40	55,326	
May-12	55,461	40	55,421	
Jun-12	55,552	40	55,512	
Jul-12	55,578	40	55,538	
Aug-12	55,696	40	55,656	
Sep-12	55,847	40	55,807	
Oct-12	55,943	40	55,903	
Nov-12	56,042	40	56,002	
Dec-12	56,134	40	56,094	970

MDOC Office of Research & Planning 01/09/08