

REPORT TO THE LEGISLATURE
Pursuant to P.A. 166 of 2022
Article II, Section 319
Prison Population Projection Report
November 2023

INTRODUCTION

The Michigan prison population increased by 188 prisoners during calendar year 2022 to a total of 32,374 prisoners at the end of the year (0.6%). The prison only population has not been this low since early 1992 and the total prisoner population hasn't been this low since late 1989 when Michigan had prisoners reacclimating to society while serving sentence in halfway houses (Community Residential Programs – CRP – were eliminated in 1998 by the Truth in Sentencing statutes).

The 2022 year-end prison population was 37.2% smaller than the record high of 51,554 prisoners reached in March of 2007 (19,180 prisoners smaller than the peak population).

During 2022, the net operating capacity of the prisons decreased by 881 beds leaving the capacity of the system 94.7% occupied at the end of the year with 1,801 beds available at various security levels across 26 prison facilities.

The population projections issued in May of last year were 98.5% accurate at the end of 2022 (495 projected prisoners higher than the actual prisoner population).

FACTORS DRIVING PRISON POPULATION CHANGE

The increase in the size of the prison population during 2022 was primarily due to an increase in new court commitments and probation violators sent to prison. During 2022 prison intake recovery continued for a second consecutive year (up 26.7% from 2021 and 46.1% from 2020), as courts continued processing a backlog of cases caused by the COVID-19 pandemic. New court commitments made up the larger part of this increase, up 35.1% from 2021. Also contributing were probation violators (sent to prison either for probation violations or because of new sentences for crimes committed on probation) which increased after 8 years of decline (up 25.3% from 2021).

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). 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 at each hearing, 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 the 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 projection is downloads from the MDOC data systems 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.

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.

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. The model can also be used for “what if” analyses, such as simulating the impact of proposed legislative sunset provisions or 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

The prison population projections in this report are a baseline forecast that assumes no new legislative or policy initiatives. Therefore, the assumptions underlying these projections pertain to the key factors that drive prison population, prison intake, paroles, and parole revocations.

Prison Intake

Recovery from the COVID-19 pandemic was evident for a second consecutive year, as court dispositions to prison continued to rebound in 2022 (up 20.8% from 2021). This resulted in a similar rebound in prison intake, which increased 32.5% from 2021. Prison intake is still showing an upward trend. It is anticipated this trend will continue through 2024 as the backlog of court cases continues to be processed, resulting in an increase of 500 commitments to prison per year for both 2023 and 2024.

This projection update thus assumes annual prison admissions will increase 10.1% in 2023, 9.2% in 2024, and then flatten in 2025 due to the uncertainty of whether prison admissions will return to the downward trend in place since 2006 or continue increasing into the future.

Paroles

Despite an increase in both the parole grant rate (up 1.6% from 2021) and Parole Board Decisions (up 7.9% from 2021), paroles were still down in 2022. This decline can be attributed to the significant drop in court dispositions to prison (impacting both prison intake and returns to prison for parole violations with new sentences) that occurred due to the COVID-19 pandemic, resulting in a smaller prison population of which 87% of prisoners have not completed their minimum sentence or are not legally eligible for parole consideration due to life sentences.

Assuming the parole grant rate continues at the 2022 level through the projection period results in a stable number of paroles for 2023, followed by an increase in both 2024 and 2025, as some of the intake backlog becomes parole eligible.

Parole Revocations

Parole violator technical (PVT) returns to prison decreased for a 6th consecutive year in 2022 (down 22.0% from 2021, a low last seen in the early 1980s). This decrease was enhanced by another decrease in parole violators returned with new sentences (PVNS) (down 2.3% from 2021)

Despite the yearly decrease in PVT returns to prison, monthly trends show a different picture. In early 2022 PVT returns to prison flattened. It is expected PVTs will remain flat until late 2024 and then increase to track increased paroles and then remain fairly flat through the remainder of the projection period.

On the other hand, PVNS cases have reached historic lows with no sign of an increase. Thus, PVNS cases are expected to remain flat.

Implications for the New Prison Population Forecast

Given the above discussion regarding assumptions, it is projected the prison population will continue rebounding through 2024 due to processing of the court backlog. Thus, the prison population is expected to increase about 1,100 prisoners in 2023, an additional 1,200 prisoners in 2024, and then continue a slight increase through the remainder of the projection period due to the flat prison intake for those years.

Again, keep in mind this baseline projection makes no assumptions about future changes in criminal justice statutes, policies or practices that would further affect the size of the prison population.

It should be remembered that the prison population projection is not expected to be precisely on-target from one month to the next, but rather will be expected to see the actual population alternately curving under and over the projection line periodically during the course of time, to even out the month-to-month fluctuations in favor of the longer-term trend.

PRISON POPULATION PROJECTIONS

The following chart summarizes the revised and extended baseline prison population projections through calendar year 2027. Table 1 (quarterly) and Table 2 (monthly) show the figures corresponding to the projection line in the chart.

Michigan Department of Corrections ACTUAL AND PROJECTED PRISON POPULATION

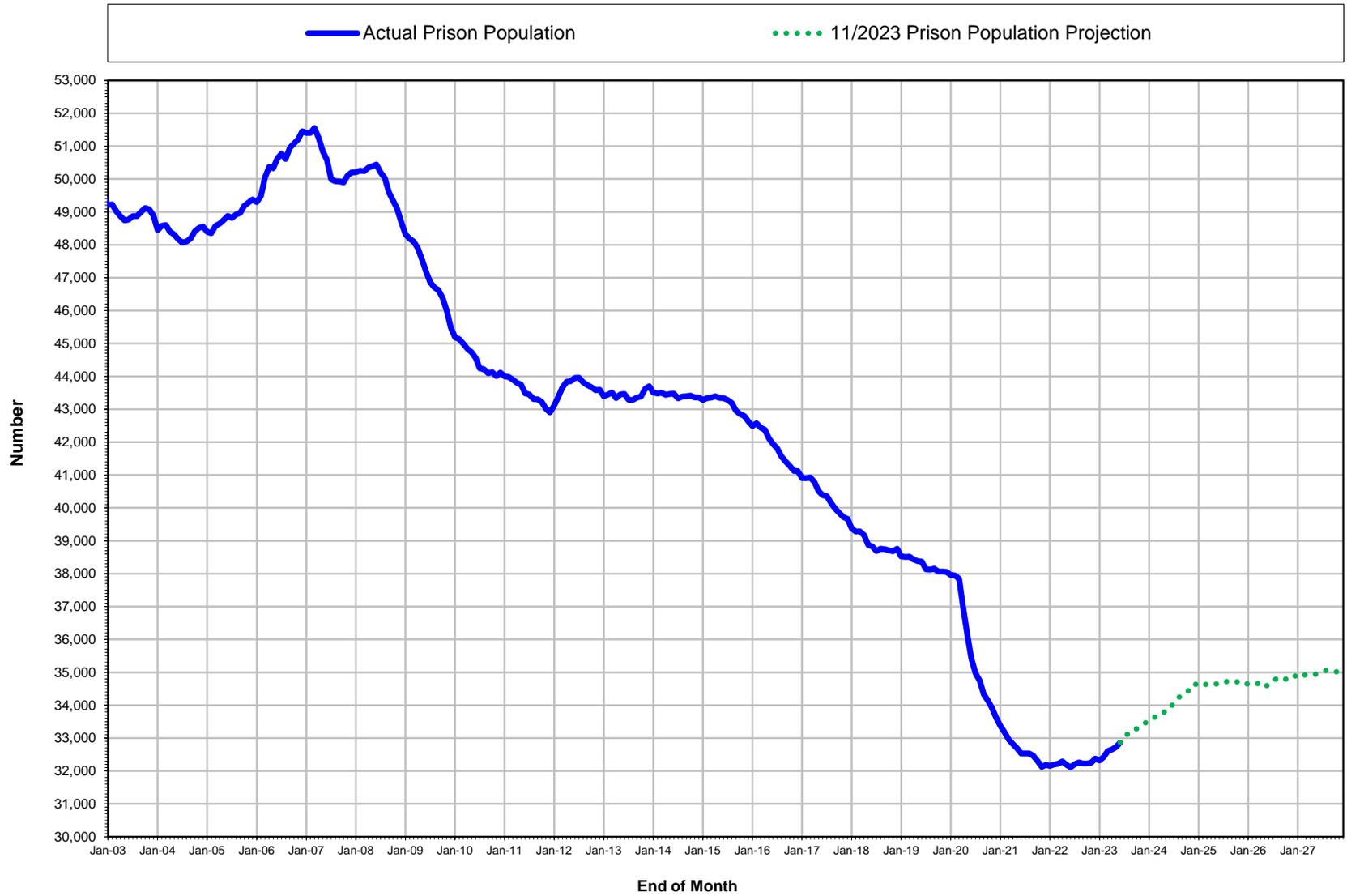


Table 1

Prison Population Projection		
November 2023		
<u>End of Month</u>	<u>Projected Prisoner Population</u>	<u>Yearly Change</u>
Dec-23	33,461	1,087
Mar-24	33,712	
Jun-24	33,916	
Sep-24	34,309	
Dec-24	34,661	1,200
Mar-25	34,654	
Jun-25	34,651	
Sep-25	34,742	
Dec-25	34,717	56
Mar-26	34,650	
Jun-26	34,637	
Sep-26	34,844	
Dec-26	34,914	197
Mar-27	34,940	
Jun-27	34,960	
Sep-27	35,020	
Dec-27	35,076	162

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Table 2

**Prison Population Projection
November 2023**

<u>End of Month</u>	<u>Projected Prisoner Population</u>	<u>Yearly Change</u>
Nov-23	33,362	
Dec-23	33,461	1,087
Jan-24	33,506	
Feb-24	33,589	
Mar-24	33,712	
Apr-24	33,779	
May-24	33,795	
Jun-24	33,916	
Jul-24	34,061	
Aug-24	34,219	
Sep-24	34,309	
Oct-24	34,383	
Nov-24	34,498	
Dec-24	34,661	1,200
Jan-25	34,582	
Feb-25	34,590	
Mar-25	34,654	
Apr-25	34,678	
May-25	34,645	
Jun-25	34,651	
Jul-25	34,654	
Aug-25	34,742	
Sep-25	34,742	
Oct-25	34,722	
Nov-25	34,690	
Dec-25	34,717	56
Jan-26	34,624	
Feb-26	34,645	
Mar-26	34,650	
Apr-26	34,673	
May-26	34,558	
Jun-26	34,637	
Jul-26	34,712	
Aug-26	34,836	
Sep-26	34,844	
Oct-26	34,792	
Nov-26	34,810	
Dec-26	34,914	197
Jan-27	34,836	
Feb-27	34,856	
Mar-27	34,940	
Apr-27	34,951	
May-27	34,937	
Jun-27	34,960	
Jul-27	35,023	
Aug-27	35,062	
Sep-27	35,020	
Oct-27	35,004	
Nov-27	35,038	
Dec-27	35,076	162

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