REPORT TO THE LEGISLATURE
Pursuant to P.A. 119 of 2023
Article II, Section 317
Prison Population Projection Report
March 2024

INTRODUCTION

The Michigan prison population increased by 612 prisoners during calendar year 2023 to a total of 32,986 prisoners at the end of the year (1.9%). The prison only population has not been this low since late 1991 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 2023 year-end prison population was 36.0% smaller than the record high of 51,554 prisoners reached in March of 2007 (18,568 prisoners smaller than the peak population).

During 2023, the net operating capacity of the prisons increased by 287 beds leaving the capacity of the system 95.7% occupied at the end of the year with 1,476 beds available at various security levels across 26 prison facilities.

The population projections issued in November of last year were 98.6% accurate at the end of 2023 (475 projected prisoners higher than the actual prisoner population).

FACTORS DRIVING PRISON POPULATION CHANGE

The increase in the size of the prison population during 2023 was primarily due to an increase in new court commitments. During 2023 prison intake recovery continued for a third consecutive year (up 9.7% from 2022), 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 12.2% from 2022. Also contributing were probation violators (sent to prison either for probation violations or because of new sentences for crimes committed on probation) which increased for a second consecutive year (up 2.3% from 2022) and parole violator returns (up 2.8% from 2022)

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, specifically prison intake, paroles, and parole revocations.

Prison Intake

Recovery from the COVID-19 pandemic was evident for a third consecutive year, as both court dispositions to prison and prison intake continued to increase. Despite these increases, positive signs of slowing were evident in 2023. Felony court dispositions (through July, the latest data available) showed an increase of 1.6% (from 2022); while still an increase, this is markedly less than the 20.8% increase seen in 2022 (from 2021). Similarly, prison intake increased 9.7% in 2023, compared to a 32.5% jump in 2022. Notably, the prison commitment rate for felony court dispositions also increased to 19.7%, signaling a return to pre-COVID rates (which returned to the previous tight 19-22% range).

This projection update thus assumes annual prison admissions will continue the 2023 rate of increase until reaching pre-covid levels in early 2025, and then flatten 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 the parole grant rate (up 1.6% from 2022), paroles remained flat in 2023 due to a decrease in Parole Board Decisions (down 2.4% from 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 86% 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 2023 level through the projection period results in an increase in future moves to parole. The model is anticipating the future impact on parole movements will result from the increase of prison intake over the last few years.

Parole Revocations

Parole violator technical (PVT) returns to prison continued the long downward trend and were generally flat versus 2022 (up 24 or 2.8% from 2022). It is expected PVTs will remain fairly flat through the remainder of the projection period.

Parole violators returned with new sentences (PVNS) also continued the long overall decline after rebounding from the COVID-19 pandemic drop off in court processing (down 16.8% from 2022). PVNS cases have reached historic lows with no sign of an increase and are expected to remain flat.

Implications for the New Prison Population Forecast

Given the above discussion regarding assumptions, it is projected the prison population through 2026 will slow the population growth of 2023 and then remain fairly stable throughout the remaining projection period.

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 2028. 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

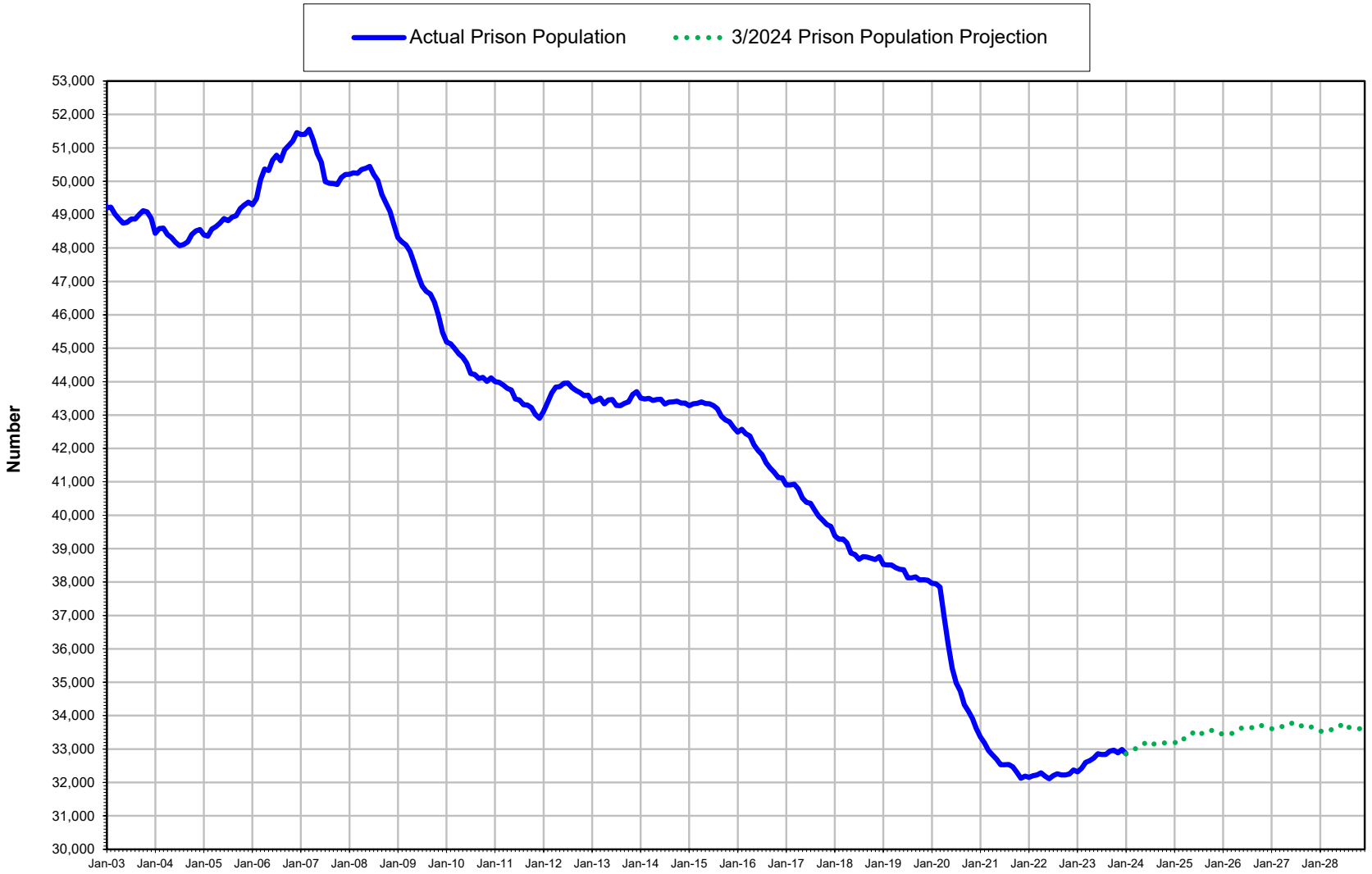

Table 1

Prison Population Projection

March 2024

End of Month	Projected Prisoner Population	Yearly Change
Mar-24	32,992	
Jun-24	33,228	
Sep-24	33,132	
Dec-24	33,208	222
Mar-25	33,292	
Jun-25	33,560	
Sep-25	33,494	
Dec-25	33,474	266
Mar-26	33,460	
Jun-26	33,652	
Sep-26	33,692	
Dec-26	33,655	181
Mar-27	33,695	
Jun-27	33,776	
Sep-27	33,687	
Dec-27	33,616	-39
Mar-28	33,602	
Jun-28	33,716	
Sep-28	33,645	
Dec-28	33,577	-39

MDOC Office of Research & Planning 3/12/2024

Table 2

Prison Population Projection

March 2024

End of Month	Projected Prisoner Population	Yearly Change
Jan-24	32,857	
Feb-24	32,888	
Mar-24	32,992	
Apr-24	33,046	
May-24	33,089	
Jun-24	33,228	
Jul-24	33,212	
Aug-24	33,144	
Sep-24	33,132	
Oct-24	33,189	
Nov-24	33,178	
Dec-24	33,208	222
Jan-25	33,202	
Feb-25	33,156	
Mar-25	33,292	
Apr-25	33,326	
May-25	33,408	
Jun-25	33,560	
Jul-25	33,496	
Aug-25	33,455	
Sep-25	33,494	
Oct-25	33,571	
Nov-25	33,472	
Dec-25	33,474	266
Jan-26	33,444	
Feb-26	33,418	
Mar-26	33,460	
Apr-26	33,509	
May-26	33,601	
Jun-26	33,652	
Jul-26	33,607	
Aug-26	33,637	
Sep-26	33,692	
Oct-26	33,745	
Nov-26	33,662	
Dec-26	33,655	181
Jan-27	33,604	
Feb-27	33,621	
Mar-27	33,695	
Apr-27	33,657	
May-27	33,684	
Jun-27	33,776	
Jul-27	33,676	
Aug-27	33,702	
Sep-27	33,687	
Oct-27	33,730	
Nov-27	33,642	
Dec-27	33,616	-39
Jan-28	33,535	
Feb-28	33,525	
Mar-28	33,602	
Apr-28	33,572	
May-28	33,629	
Jun-28	33,716	
Jul-28	33,581	
Aug-28	33,648	
Sep-28	33,645	
Oct-28	33,654	
Nov-28	33,592	
Dec-28	33,577	-39

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