

REPORT TO THE LEGISLATURE
Pursuant to P.A. 166 of 2020
Article V, Section 401
Prison Population Projection Report
March 2021

INTRODUCTION

The Michigan prison population decreased by 4,436 prisoners during calendar year 2020 to a total of 33,617 prisoners at the end of the year (-11.6%). 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 – eliminated in 1998 by Truth in Sentencing statutes).

The 2020 year-end prison population was 34.8% smaller than the record high of 51,554 prisoners reached in March of 2007 (17,937 prisoners smaller than the peak population).

During 2020, the net operating capacity of the prisons increased by 839 beds as off-line beds were brought back on-line to provide quarantine housing; leaving the capacity of the system 83.8% occupied at the end of the year with 6,479 beds available at various security levels across 28 prison facilities.

The population projections issued in March of last year were 89.3% accurate at the end of 2020 (4,027 projected prisoners higher than the actual prisoner population). It should be noted that typical accuracy for the population projections is above 95%, however 2020 was a surprising year with the COVID-19 pandemic stopping prison intake for an entire month (April) and drastically reducing prison intake for the remainder of the year.

FACTORS DRIVING PRISON POPULATION CHANGE

The decline in the size of the prison population during 2020 was primarily due to a decrease in felony court dispositions (down by 39.7% from 2019) due to COVID-19, which resulted in a corresponding decrease in prison admissions with new sentences (down by 42.8% from 2019). The 1.0% drop in the prison commitment rate (from 19.6% in 2019 to 18.6% in 2020) coupled with less felony court dispositions (down 39.7%) contributed to the prison intake decline.

The prison intake declined again in 2020 since the recent peak in 2013. The 2020 decline occurred across all intake categories. Most of the prison intake decrease was driven by fewer new court commitments, followed by probation violators sent to prison either for probation violations or because of new sentences for crimes committed on probation, and finally parole violators with new sentences. The fewer probation violators sent to prison represented the 7th consecutive year of decline in this intake category and a 75% decline since the peak in 2002. The fewer parole violators with new sentences represented the 12th consecutive year of decline in that category of prison intake and a 75% decline since the 2008 peak.

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

For the first quarter of 2020, court dispositions to prison were comparable to 2019 (down 2.5%) and prison intake was similar (down only 2 cases from 2019). This suggests prison intake might have been flattening out and stabilizing. By April, however, the COVID-19 pandemic drastically impacted prison intake; court dispositions to prison fell sharply (by 82% from March) and April's prison intake fell to a never seen before zero as prison intake was stopped to control COVID-19 outbreaks. For the remainder of 2020, both court dispositions and prison intake remained down approximately 50% from 2019.

It is a difficult time to make assumptions about prison intake, as it is largely dependent upon the rate of recovery from the COVID-19 pandemic. This baseline projection assumes that as vaccinations progress and lead towards recovery, prison intake will slowly return to levels seen before the pandemic.

This projection update thus assumes annual prison admissions will increase until 2019 levels are reached, resulting in a 54.8% increase in 2021, a 20.9% increase in 2022, and then stability thereafter.

Paroles

Throughout the year, the Parole Board put a tremendous effort into its response to COVID-19. During March, April, and May the Parole Board re-reviewed and decided to grant or deny parole to the equivalent of two additional months of prisoners, effectively accomplishing five months of work in three months. As the Parole Board cannot grant parole release to the roughly 85% of prisoners who have not completed their minimum sentence, the Parole Board re-review was focused on the previously denied prisoners who were due to be reviewed later in the 2020. The goal was to find prisoners whose risk had reduced while continued and could be safely paroled. The process worked effectively as hundreds of prisoners with reduced risk were released before their previous continuations expired. However, the re-review process in the first half of the year depleted the available numbers of risk appropriate paroles in the later months of the year and resulted in 2020 producing comparable paroles to 2019.

The grant rate was down slightly for 2020, as were Parole Board Decisions. Assuming the parole grant rate continues at the 2020 level through the projection period results in a decline in future moves to parole for 2021 and 2022.

The model is showing the future impact on parole movements that result from the combination of declining intake over the last few years, declining returns to prison over the last few years for parole violations, as well as the need for less Parole Board rehearings as prisoners receive treatment programs in preparation for their first parole hearing resulted in the decreasing Parole Board Decisions. The model then shows an increase in paroles for 2023, which is the result of the anticipated increase in prison intake for the next couple years.

Parole Revocations

Parole violator technical (PVT) returns to prison decreased for a 4th consecutive year in 2020. This decrease was enhanced by another decrease in parole violators returned with new sentences (PVNS). Parole revocations are related to the number of paroles that occur. The stable number of paroles in 2020 is expected to produce a stable number of parole revocations through 2021. Paroles are expected to decrease slightly in 2021 and 2022, which will cause a slight decrease in parole revocations going forward.

Implications for the New Prison Population Forecast

Given the above discussion regarding assumptions, it is projected the prison population through 2021 will slow the population decline of 2020, grow slightly in 2022, decline again in 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 2025. 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

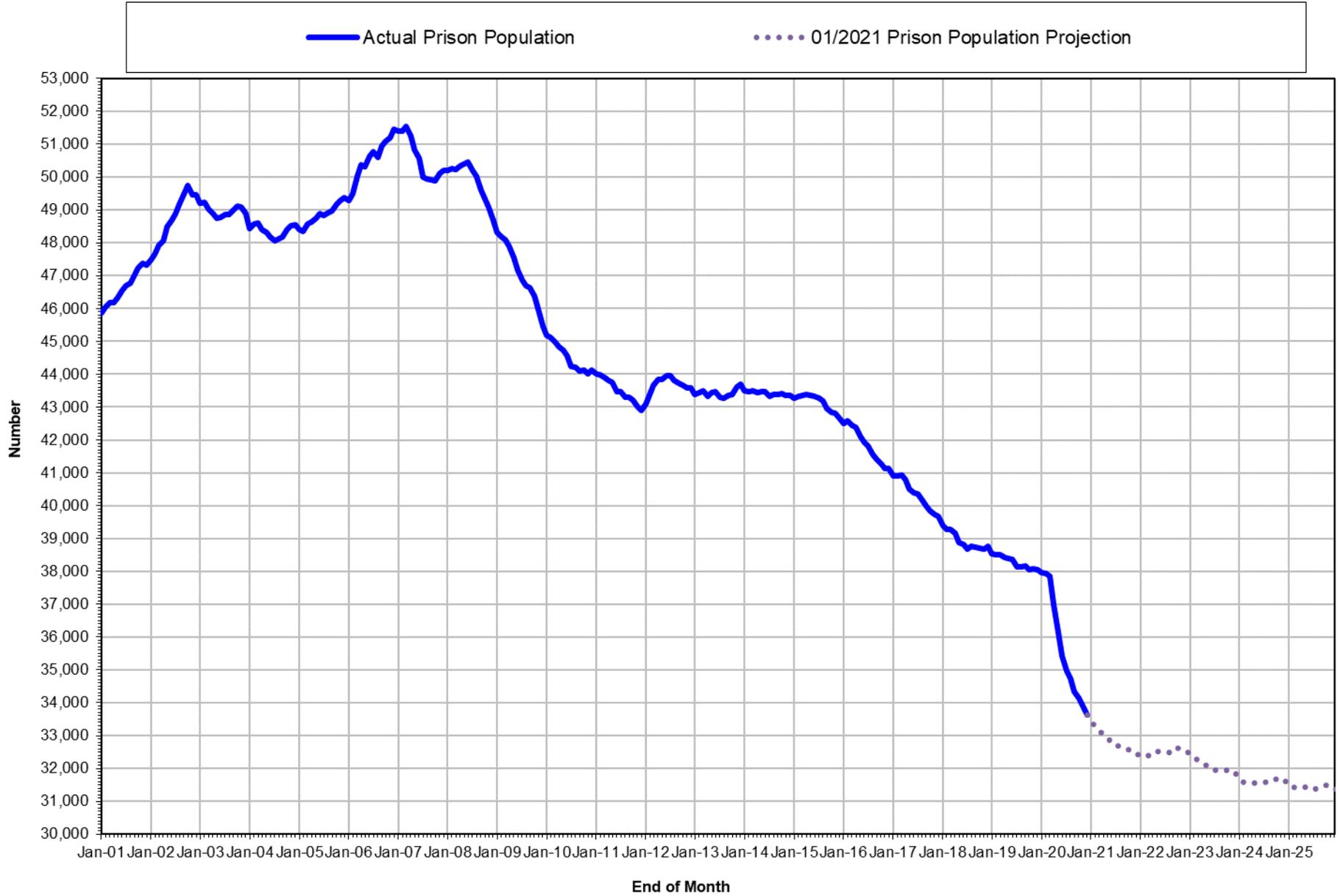


Table 1

Prison Population Projection		
January 2021		
<u>End of Month</u>	<u>Projected Prisoner Population</u>	<u>Yearly Change</u>
Mar-21	33,148	
Jun-21	32,837	
Sep-21	32,628	
Dec-21	32,455	-1,162
Mar-22	32,413	
Jun-22	32,511	
Sep-22	32,487	
Dec-22	32,536	81
Mar-23	32,256	
Jun-23	32,054	
Sep-23	31,949	
Dec-23	31,848	-688
Mar-24	31,579	
Jun-24	31,556	
Sep-24	31,591	
Dec-24	31,619	-229
Mar-25	31,413	
Jun-25	31,402	
Sep-25	31,462	
Dec-25	31,389	-230

Table 2

Prison Population Projection
January 2021

<u>End of Month</u>	<u>Projected Prisoner Population</u>	<u>Yearly Change</u>
Jan-21	33,461	
Feb-21	33,272	
Mar-21	33,148	
Apr-21	33,037	
May-21	32,886	
Jun-21	32,837	
Jul-21	32,700	
Aug-21	32,696	
Sep-21	32,628	
Oct-21	32,566	
Nov-21	32,460	
Dec-21	32,455	-1,162
Jan-22	32,384	
Feb-22	32,337	
Mar-22	32,413	
Apr-22	32,505	
May-22	32,508	
Jun-22	32,511	
Jul-22	32,483	
Aug-22	32,482	
Sep-22	32,487	
Oct-22	32,618	
Nov-22	32,539	
Dec-22	32,536	81
Jan-23	32,428	
Feb-23	32,318	
Mar-23	32,256	
Apr-23	32,188	
May-23	32,098	
Jun-23	32,054	
Jul-23	31,954	
Aug-23	31,985	
Sep-23	31,949	
Oct-23	31,952	
Nov-23	31,830	
Dec-23	31,848	-688
Jan-24	31,697	
Feb-24	31,569	
Mar-24	31,579	
Apr-24	31,569	
May-24	31,539	
Jun-24	31,556	
Jul-24	31,578	
Aug-24	31,597	
Sep-24	31,591	
Oct-24	31,694	
Nov-24	31,615	
Dec-24	31,619	-229
Jan-25	31,460	
Feb-25	31,431	
Mar-25	31,413	
Apr-25	31,424	
May-25	31,436	
Jun-25	31,402	
Jul-25	31,342	
Aug-25	31,418	
Sep-25	31,462	
Oct-25	31,498	
Nov-25	31,401	
Dec-25	31,389	-230