



NMSC Projections Supplement for Fall 2020

Male and Female Prison Populations in New Mexico Have Continued to Decrease

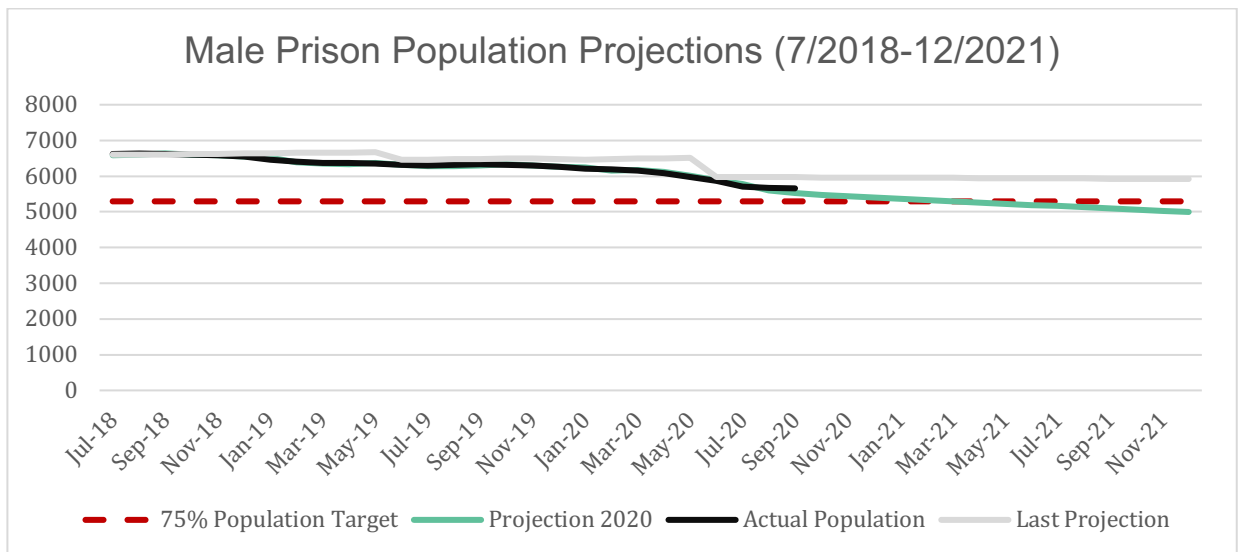
The policies adopted by the state to combat COVID-19 will affect the prison population. However, as the crisis is continuing at this writing, it is difficult to create an accurate 10-year projection that accounts for dramatic changes that will likely come. Instead of publishing a long-term projection, NMSC has created a model for the population over a one-year term. These projections show population trends since the last report, as well as provide a short-term estimate of where the population is headed over the next year assuming trends continue with *no additional interventions*. Here are areas of uncertainty we are monitoring:

- The New Mexico Supreme Court has suspended jury trials – Currently, jury trials are not being processed by the courts at least until the end of the year. However, in FY19 55% of closed new cases were settled through plea bargains (cases settled by plea bargain/total closed new cases) which could continue to feed in some new admissions.¹ New admissions will likely decrease from current levels.
- Parole populations – Parole admissions have shown a slight downward trend.
- NMCD population targets – As a response to COVID-19, NMCD has set population targets at 75% of capacity. That puts a target at **5,332 males** and **659 females**. The targets are indicated on the graphs by a dashed red line.
- In House Parole – There are 72 inmates serving In House Parole. These individuals will be eligible for release once they meet the conditions of parole including approved release plans. Of this group 3 are female, 69 are male.

Table 2. In House Parole Count					
CNMCF	12	NENMCF	1	SNMCF	13
GCCF	5	OC PF	11	SCC (Female Facility)	1
LCCF	8	PNM	9	WWCF (Female Facility)	2
NNMCF	8	RCC	2	GRAND TOTAL	72

- Methodology: Male and female projections were generated separately using ARIMA models based on the peak population each month extending back to January 2001. Both models were initiated in April of 2019 where the steepest decline begins. When selecting a model, there are often many viable options. In addition to looking at quantitative data, consideration of qualitative trends and policy changes is key. Keeping in mind the external indicators pointing to a decrease in population, the models were chosen for their downward trend.
 - Male: The dataset was differenced once to induce stationarity. An ARIMA model of AR=1 and MA=2 was selected. Using the projection to predict past values, the largest error is 2.37% of the known value.

¹ https://s3.amazonaws.com/realfile3016b036-bbd3-4ec4-ba17-7539841f4d19/79968cf9-5462-40fd-a32bd338f4419f36?response-content-disposition=filename%3D%222019+Statistical_Addendum.pdf%22&responsecontent-type=application%2Fpdf&AWSAccessKeyId=AKIAIMZX6TNBAOLKC6MQ&Signature=cUemg237%2ByRGDPj%2FyCEt7Gd4dJA%3D&Expires=1606756902



- Female: The dataset was differenced once to induce stationarity. An ARIMA model of AR=1 and MA=1 was selected. Using the projection to predict past values, the largest error is 3.92% of the known value.

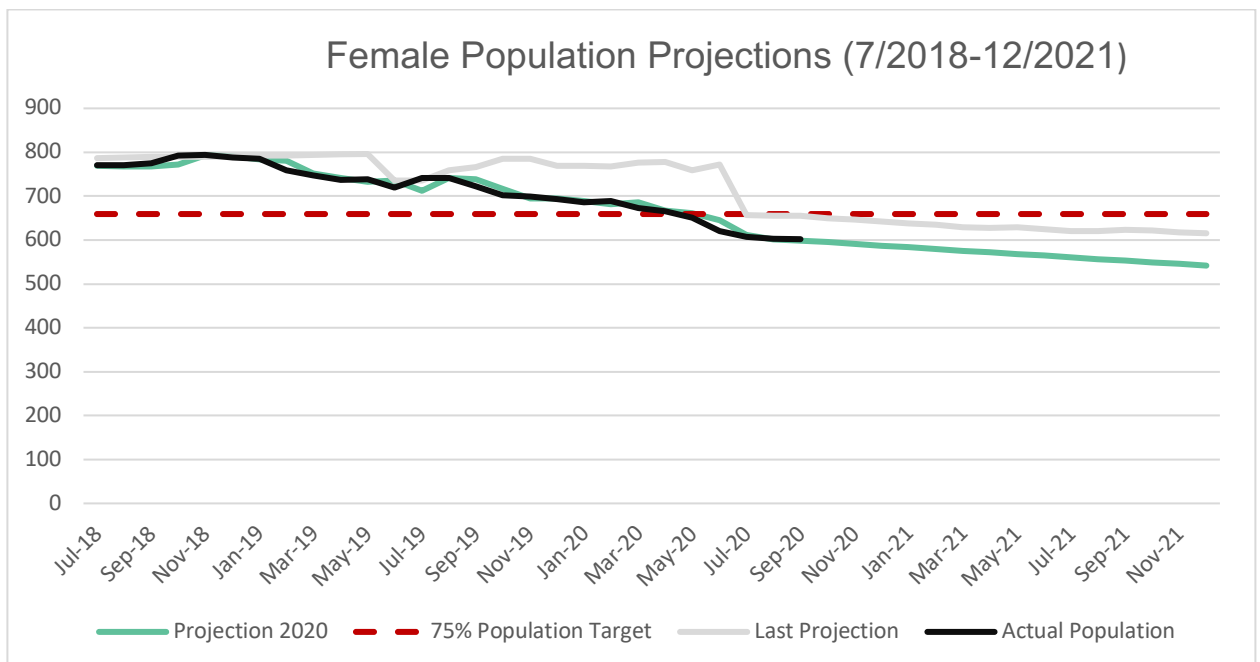


Table 3. Population Projection by Month (1/2021 to 12/2021)			
Date	Male Forecast	Female Forecast	Total Population Forecast
Jan-21	5,359	583	5,943
Feb-21	5,326	580	5,906
Mar-21	5,293	576	5,869
Apr-21	5,260	572	5,832
May-21	5,227	568	5,795
Jun-21	5,194	565	5,759
Jul-21	5,161	561	5,722
Aug-21	5,128	557	5,685
Sep-21	5,096	553	5,649
Oct-21	5,063	549	5,612
Nov-21	5,030	546	5,575
Dec-21	4,997	542	5,539