

Estimating Adult-Use Cannabis Demand in New Mexico's Market

BACKGROUND

Section 40 of New Mexico's Cannabis Regulation Act requires the Cannabis Control Division to set, by rule, the number of cannabis plants that a licensee may produce. Further, the rule shall set the number of allowed cannabis plants per licensee to meet an average national market demand for cannabis products in states where adult and medical cannabis are authorized during the preceding year using a consumer base of no less than 20% of the adult population of New Mexico.

This study uses **three methods** to fulfil statutory obligations with the research objectives of:

- Identifying the average market demand for cannabis in states with medical and adult-use programs;
- Projecting demand representative of 20% of the New Mexico population; and
- Determining plant counts per licensed producer necessary to meet representative demand

INDIRECT METHOD #1

We gathered pre-calculated estimates of the total (g or lbs) projected during a recent year provided in independently commissioned studies for Washington, Vermont, and Colorado. Using these figures alongside consumer data provided by the National Survey on Drug Use and Health (NSDUH), we calculated the relative difference in the number of past-month cannabis users who were 21+ from each state relative to New Mexico's population. By controlling for New Mexico's population, we were able to project assumed demand under the premise that New Mexico's adult population consumes at the same proportion of the population and grams purchased in the past month for each state. To account for modest differences in proportion of past-month consumers and weight of past-month purchases across each state, we averaged the total figures across all three, leading to the following projected demand total:

201,325 Year-End, Aggregate Total Plants Required to Meet NM AU Demand*

*Based on National Market Average Using Indirect Method #1.

INDIRECT METHOD #2

To cross-validate the state-specific modeling, we leveraged the NSDUH 2019 data set to independently model consumer demand for each state relative to New Mexico's population. Unlike Indirect Method #1, this method uses raw survey data with responses specific to each state for the proportion of past-month consumers as it relates to grams purchased during last retail visit. This provides insight into what percentage of the overall consumer base consumes at what weight—a more precise way of predicting demand for each state as it controls for differences in consumer behavior. Using the frequently cited statistic of the average consumer visiting a dispensary 6.22 times a month, we modeled past-month weight (g), then multiplied that figure to end up with annual demand. Following the same standards for Indirect Method #1, we averaged the total figures across all three states, leading to the following project demanded total:

203,443 Year-End, Aggregate Total Plants Required to Meet NM AU Demand*

*Based on National Market Average Using Indirect Method #2.

DIRECT METHOD

Using a series of survey recruitment panels, we recruited 1,167 total residents of New Mexico (>20% of whom used cannabis in the past month). Among a series of questions, we asked participants who indicated past-month cannabis use to report the number of grams they used on average each week during the past month. In a similar fashion as in our estimation method using the NSDUH data to determine state-level demand, we multiplied average monthly grams reported by the number of individuals who are 21+ in New Mexico and are past-month cannabis users. This empirically derived data, representative of New Mexico's population and geography, resulted in the following projected demand total:

294,487 Year-End, Aggregate Total Plants Required to Meet NM AU Demand*

*Based on rigorous scientific methods that likely improved accuracy and generality.

RESULTS

In order to determine plant limitations per licensed producer to meet demand, the year-end results of the methods must be divided by four to account for an estimated four harvest cycles. This calculation provides a final demand unit of plants per harvest cycle (PPHC) that more accurately reflects the available plants required at any given time to meet production each year. This unit is reflective of a license plant cap amount. We then divided that figure by 33, the assumed number of licensed producers based on existing medical producer licensees.

Method(s)	Year-End, Aggregate Total Plants for AU Demand	PPHC for AU Demand (*assumes 4)	PPHC Per Producer for AU Demand (*assumes 33)
Average of Indirect Method #1 and #2	202,384	50,596	1,533
Direct Method	294,487	73,622	2,231

CONCLUSION

Based on the three methods used in this study, the assumed range for PPHC per adult use producer in the initial New Mexico adult-use market is:

1,533 - 2,231

Considering that the Direct Method is empirically derived and estimated to have at least 5x larger representation for past-month consumers than the New Mexico data set collected by the federal survey (NSDUH), the higher end of the assumed range is likely to be more accurate than the lower end.

