

How High— And How Soon?

Projecting the Growth of the Legal Cannabis Market in New York City



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Executive Summary

When adult-use cannabis was legalized in New York State in 2021, many people predicted rapid growth for the new market that would generate substantial tax revenue from legal sales. Since then, the state has approved over 200 licenses for retail dispensaries located in New York City, and several dispensaries have opened in the five boroughs.

The growth in licensed dispensaries has been slower than expected, however, and the timeframe for future licensed stores to open is not clear. In addition to the persistent challenges license holders face in finding locations and funding required to open dispensaries, lawsuits threaten to continue to slow down the rollout of a legal cannabis market. At the time of this writing, a temporary restraining order has been issued on all new retail licenses being distributed and new stores being opened—including for business owners who already hold retail licenses. Meanwhile, over a thousand unlicensed “smoke shops” have proliferated across the city, selling cannabis products but not collecting the appropriate cannabis tax revenue for the city or state.

Amid the uncertain market rollout, the New York City Independent Budget Office (IBO) set out to address two questions: How large could New York City’s nascent cannabis market grow, and how long might it take to reach that size? Among the key findings from IBO’s research:

- Based on cannabis market growth in California, Colorado, Massachusetts, Oregon, and Washington state—all of which have seen at least five years of legal cannabis sales—IBO determined New York City may eventually see annual taxable sales between \$833.6 million and \$1.2 billion. A market of this scale would yield between \$33 million and \$47 million in annual city revenue. However, New York State’s unique requirements for retail licenses have contributed to a slower rollout of the legal market.
- If the New York State Division of Budget cannabis revenue forecasts for the coming four state fiscal years are accurate, IBO estimates that the city would receive \$4 million, \$20 million, \$31 million, and \$43 million in cannabis tax revenue in fiscal years 2024 through 2027, respectively. The New York City Office of Management & Budget estimates cannabis revenue of \$38 million by fiscal year 2027, which translates to \$950 million in sales that year.
- Referring to sales and dispensary data from the first eight months of legal sales, IBO developed scenarios to explore how long it could take for the city’s legal cannabis market to reach \$950 million in annual taxable sales. The rate of dispensary openings in New York City from December 2022 to July 2023 was about one per month, or 12 per year. The rate of sales per city dispensary seen so far from the legal market corresponds to about \$8.1 million per dispensary per year. If the rate of dispensary openings were to double to 24 per year and sales per dispensary stayed constant at \$8.1 million per year, IBO predicted the city’s market will reach \$950 million in annual taxable sales during fiscal year 2027, as predicted by the Mayor’s Office of Management and Budget.
- Based on state law enforcement officials’ announcement that they had recovered \$10 million in illicit cannabis products from 31 unlicensed dispensaries across New York

State, IBO determined that the estimated 1,500 unlicensed retailers in New York City may hold as much as \$484 million worth of cannabis products in total. If all those products were sold legally, the sales would generate \$19.4 million in revenue for New York City. The New York City Council recently passed legislation aimed at deterring the illegal smoke shops.

- The financial plan accompanying the city's 2024 Adopted Budget allocates a combined \$21 million from 2024 through 2027 to the Department of Small Business Services and Economic Development Corporation for cannabis industry support. Cannabis-related programs are not yet fully up and running, and funding will likely need to increase as agencies build staff and develop programs.

1. Introduction

In March 2021, New York became the sixteenth state to legalize adult-use, recreational cannabis when the Marijuana Regulation and Taxation Act (MRTA) was signed into law. Over a year later, in fall 2022, state officials predicted that New York City would be home to over 100 licensed cannabis dispensaries by the summer of 2023.

The rollout of New York's legal cannabis market, however, has moved more slowly than anticipated. Despite the state having granted retail dispensary licenses to over 200 city-based entrepreneurs, only nine licensed dispensaries have opened in New York City at the time of this writing. Cannabis sales in New York City are subject to state and local cannabis taxes that total 13 percent, but they are not subject to the usual city combined sales tax of 8.875 percent. An exact timeline for further dispensaries to open in the city remains undefined. License owners have faced challenges in finding locations for dispensaries and funding to open new businesses.

Further slowdowns have come from lawsuits. An injunction issued in November 2022 prevented any Conditional Adult-Use Retail Dispensary (CAURD) licenses from being distributed to businesses based in Brooklyn and four other regions of the state until March 2023. A temporary restraining order in place at the time of this publication has prevented all new CAURD licenses from being distributed and all new CAURD dispensaries from opening—including for businesses that have already received licenses from the state. Future lawsuits could threaten to create additional delays in opening licensed cannabis dispensaries in New York City.

Meanwhile, a surge in unlicensed smoke shops selling cannabis products means that some cannabis sales are not resulting in revenue collection for the city. (While licensed dispensaries properly collect state and local taxes on retail cannabis sales, unlicensed shops do not.) The opaque nature of this unlicensed market likely makes it impossible to determine the exact amount of revenue lost to illicit cannabis sales.

Considering this ongoing uncertainty, IBO considered some potential growth scenarios for New York City's budding market. Based on statewide revenue forecasts for state fiscal years 2024 through 2027 published by the New York State Division of Budget (DOB) in the Fiscal Year 2024 New York State Executive Budget Financial Plan, IBO calculated the share of revenue implied for New York City over the coming four years. (All years refer to city fiscal year unless otherwise noted.) IBO compared these calculations with city revenue forecasts from the New York City Office of Management & Budget (OMB) in the Adopted 2024 Financial Plan Revenue supplement. Both DOB's and OMB's revenue forecasts imply annual taxable sales of over \$950 million in New York City by 2027.

To determine the potential scale of the city's eventual legal retail market, IBO examined the experiences of five states with at least five years of legal retail cannabis sales: California, Colorado, Massachusetts, Oregon, and Washington. IBO also considered a range of scenarios to determine how long it could take for the city's market to reach a scale of \$950

million in annual sales, in line with OMB's revenue projection for 2027. Market growth and sales data from the first eight months of New York City's legal cannabis sales suggest that, if dispensaries maintain high enough average taxable sales per year, if enough new dispensaries open each year, and if legal actions do not prevent licensed shops from opening, the city may be able to reach \$950 million in annual taxable cannabis sales by 2027.

2. Background

Signed into law in March 2021, the MRTA legalized adult cannabis use in New York State and established a framework for a legal cannabis market. The legislation established the State Office of Cannabis Management (OCM), the agency responsible for implementing the MRTA. OCM is overseen by the Cannabis Control Board (CCB), which leads the state's regulatory and rulemaking process with input from a panel of experts on the Cannabis Advisory Board (CAB).

New York State's cannabis legislation established 11 different types of licenses, which OCM and CCB are in the process of regulating and awarding. Thus far, the state has awarded recipients for cultivator, processor, and retail licenses (representing the basic supply chain of the industry). The first phase of retail licenses in New York, developed and distributed by OCM, are known as Conditional Adult-Use Retail Dispensary (CAURD) licenses and are reserved for "justice-involved" individuals and non-profit organizations who serve justice-involved individuals in New York.¹ Additionally, OCM has an established goal of providing 50 percent of total overall licenses to social and economic equity applicants, which is a broader category than justice-involved individuals.² Eligibility criteria for licenses have so far been largely determined by OCM as the state cannabis regulator, as opposed to specific rules established by the MRTA.

The first state-authorized retail dispensary in New York State opened in Manhattan in the final days of December 2022. As of August 2023, 241 CAURD licenses have been approved for businesses located in New York City, though only nine licensed retail dispensaries have opened: five in Manhattan, one in Queens, two in the Bronx, and none in Brooklyn or Staten Island. Three of these dispensaries operate as delivery-only at the time of this writing.

3. Estimating Legal Cannabis Market Growth in New York City

Revenue Comes from Taxes on Retail Sales and THC Content of Cannabis Products

Under the MRTA, the cannabis industry is subject to three taxes: (1) a potency tax; (2) a state excise tax; and (3) a local excise tax.

1. **First**, when cannabis product manufacturers sell to distributors, the distributors pay a potency tax based on the THC content of the products they buy. The potency tax rate depends on the form of the cannabis product: \$0.03/mg THC for edibles, \$0.008/mg THC for concentrates, or \$0.005/mg THC for flower products. If the manufacturer sells products directly to consumers, then the potency tax is applied at the point of retail sale.
2. **Second**, at the time of sale of cannabis product to a consumer, the retailer collects a state excise tax of 9 percent of the product's price.
3. **Third**, a local excise tax of 4 percent is also imposed on retail sales, which is collected by the state and distributed to local governments based on where the retail dispensary is located.

The local excise tax will directly determine the amount of revenue that accrues to New York City from legal cannabis sales in the city. Cannabis retail activity is not subject to the state or local general sales tax.

City and State Project Healthy Cannabis Tax Revenue by 2027

Both the state DOB and city OMB have published projections for cannabis tax revenue collections at the state and city level, respectively, from 2024 through 2027. OMB's revenue estimates for New York City grow steadily from \$20.0 million in 2024 to \$38.0 million in 2027. DOB's statewide estimates start at \$70.0 million in 2024, of which \$38.0 million are expected to come from licensing fees and \$32.0 million from excise and potency taxes. The state's estimates grow to \$339.0 million by 2027.

IBO estimated what the statewide revenue projections, if accurate, would imply for New York City revenue. Based on the total sales implied by the statewide estimates and the proportion of CAURD licenses that have been awarded to businesses located in the five boroughs, IBO calculated the share of sales that would take place in New York City. The IBO calculations also accounted for the share of statewide revenue that will come from the potency tax rather than from retail sales. IBO's calculations are close to OMB's projections, particularly for 2025

Cannabis Tax Revenue Forecasts From Mayor's Office of Management and Budget & The New York City Independent Budget Office, 2024 through 2027				
<i>By Fiscal Year</i>				
	2024	2025	2026	2027
OMB City Forecast	\$12,000,000	\$20,000,000	\$30,000,000	\$38,000,000
Taxable Sales per Capita	\$36	\$60	\$90	\$114
IBO City Forecast Based on State Projections	\$4,000,000	\$20,000,000	\$31,000,000	\$43,000,000
Taxable Sales per Capita	\$12	\$60	\$93	\$128

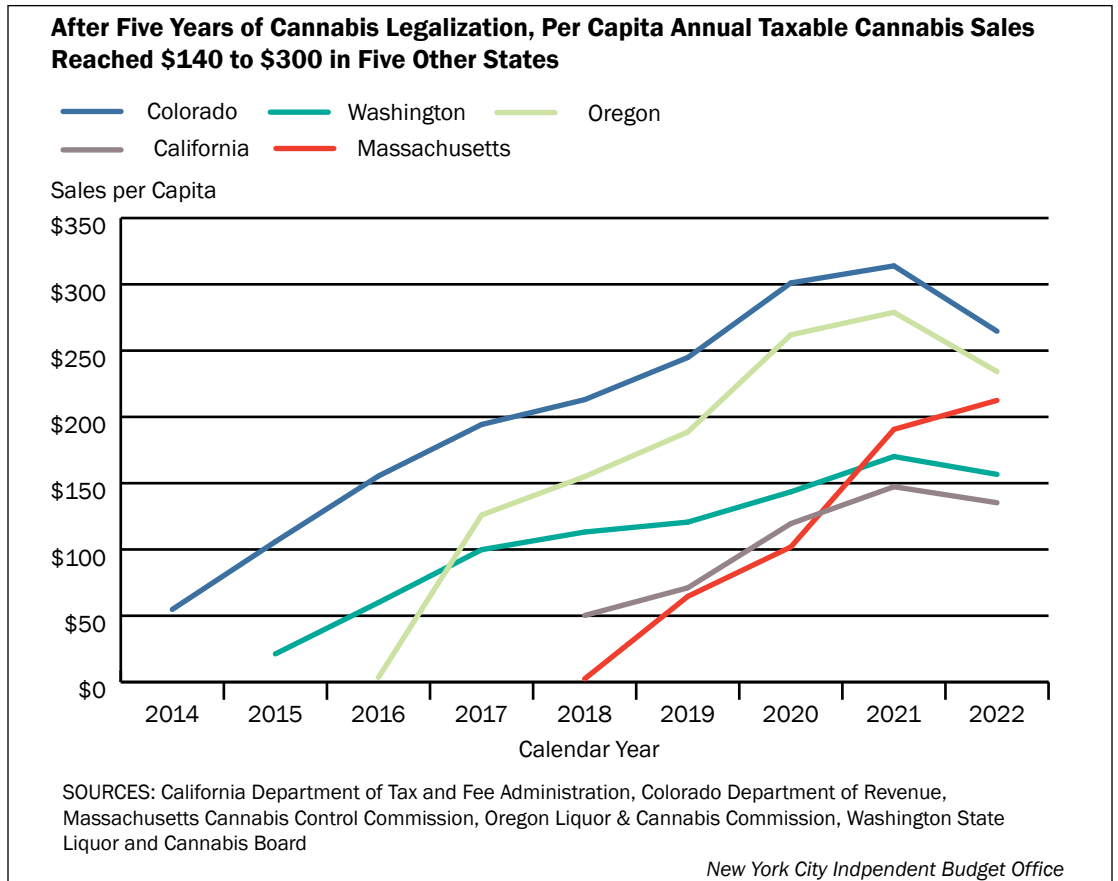
SOURCES: IBO analysis of New York State Division of Budget forecast, New York City Office of Management and Budget
New York City Independent Budget Office

and 2026. By 2027, OMB's and DOB's projections imply annual sales per capita of \$114 and \$128, respectively.

Cannabis Markets in Five Other States Offer Clues for Potential Growth of NYC Market

Other states that have legalized cannabis offer some insight into possible trajectories of cannabis sales and tax revenue in New York City. IBO looked at five states that have had legal cannabis sales for five years or more—California, Colorado, Massachusetts, Oregon, and Washington. In these states, after several years of cannabis legalization, annual taxable sales tended to reach between \$140 and \$300 per capita.

These examples provide a framework to estimate the potential size of a fully grown cannabis market in New York City. Based on a conservative assumption that total annual taxable sales in New York City will eventually reach between \$100 and \$140 per capita (lower than



what was observed in each of the five states above), IBO estimates that the total market for cannabis products in the city will reach between \$833.6 million and \$1.2 billion in annual taxable sales, which would translate to \$33 million to \$47 million in annual city revenue. If New York City reaches levels of annual per capita sales seen in Colorado in 2021—the highest per capita sales in the five states above—the resulting revenue would be \$105 million. Until the market develops further over the coming months and years, it will be impossible to predict accurately the size to which New York City’s legal cannabis market will grow.

It is worth noting that, by being among the first states in their regions to legalize cannabis, California, Colorado, Massachusetts, Oregon, and Washington each enjoyed additional revenue from having a first-mover advantage. Out-of-state visitors who could not purchase cannabis in their own states presumably visited early legal cannabis markets, increasing retail sales in those markets. Because all of New York’s regional neighbors besides Pennsylvania have legal retail cannabis markets, New York is unlikely to benefit from similar circumstances. Another important difference between states that may affect legal market growth is New York’s unique focus on awarding early retail licenses to justice-involved individuals and other social equity applicants.

In the five states above, the total number of dispensaries per 100,000 residents ranges from 2.2 in California to 19.4 in Oregon. After all the current NYC-based dispensary licensees open shop, there will be 241 retail dispensaries in New York City, or 2.9 per 100,000 residents. This puts the rate of dispensaries per capita in New York City below the rates in Massachusetts, Washington, Colorado, and Oregon.

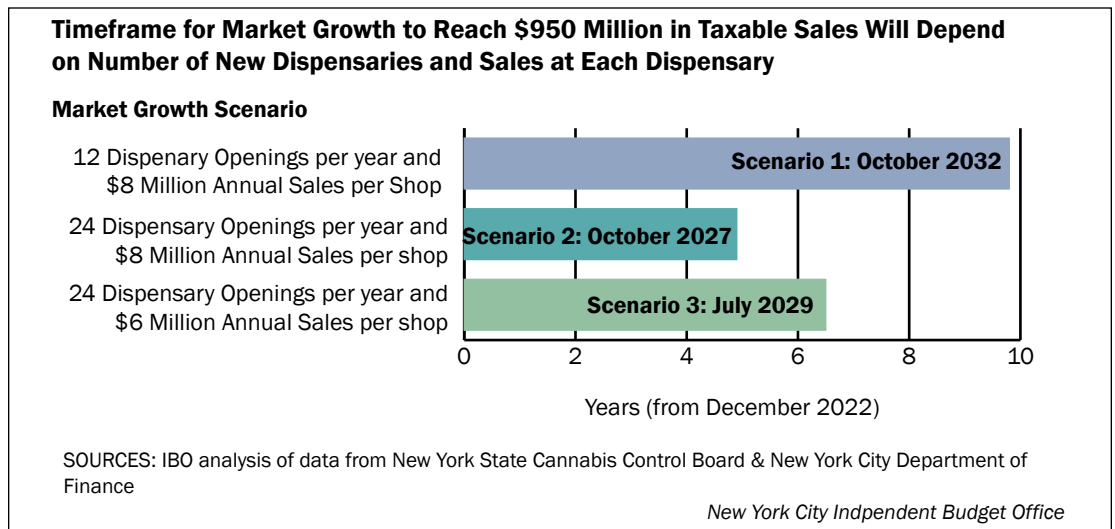
Market Growth Timeframe Will Depend on Number of Dispensaries and Sales per Store

The growth of cannabis markets in the five states studied suggests that annual cannabis sales in New York City could feasibly reach \$950 million or \$114 per capita, as projected by OMB. It is less clear, however, whether such market growth will be seen by 2027. The lack of clarity is due to the widely acknowledged slow rollout of licensed cannabis dispensaries in New York City and across the state.

To address the question of market growth timing, IBO developed three scenarios with different assumptions in two variables: annual rate of dispensary openings in New York City, and average annual cannabis sales per dispensary. The models estimate, under each of the three scenarios, how long it would take to reach \$950 million in annual taxable sales, the level of sales implied by the OMB forecast for 2027.

The first baseline scenario assumes a continuation of the volume of cannabis sales per dispensary and the pace of dispensary openings during the first several months of legal cannabis sales in New York City. Based on city tax revenue data and statewide cannabis retail sales data from January through June 2023, IBO estimates average sales of \$8.1 million per New York City dispensary during calendar year 2023. In the first eight months of legalization, New York City saw nine licensed retail dispensaries open—a rate of about one opening per month or 12 per year.

The second scenario assumes a doubling of the current rate of growth in new dispensaries to an average of 24 new shops per year while holding steady the average sales per dispensary at \$8.1 million. This scenario illustrates the possibility that taxable sales will keep steady even as more licensed dispensaries open up across the city.



It is also possible, however, that as the number of licensed stores grow, average sales at each store will decline. The third scenario assumes that 24 new dispensaries will open per year—double the pace in the baseline scenario—and average annual sales per dispensary will fall to \$6.0 million, three-quarters the baseline assumption. In this case, the overall market size would continue to grow, but each dispensary would make up a smaller portion of the market as sales are more distributed between retail locations.

These scenarios suggest that if the New York City cannabis market continues to grow at the rates seen in the first eight months of legal adult-use cannabis sales, the city market will not reach \$950 million in annual sales until late calendar year 2032. The second scenario shows that with double the rate of new dispensary openings—24 a year—if city dispensaries maintain average annual sales of \$8.1 million, the city will reach \$950 million in sales in Q2 2027, in line with OMB projections. In the third scenario, the city reaches the \$950 million milestone in around June 2029.

Each of these scenarios assumes that the current temporary restraining order on new licenses and dispensaries is resolved quickly and dispensaries will continue to open in the near future. In the case that the injunction continues indefinitely as the lawsuit moves through the state’s courts, each of these timeframes for reaching \$950 million in annual legal cannabis sales would be extended into the future..

Unlicensed Retail Sales May Slow Revenue Growth

As of July 2023, there are roughly 1,500 unlicensed smoke shops in New York City, according to the New York City Sheriff’s Office. Other estimates of the number of unlicensed cannabis retailers in the city go as high as 8,000, but could not be confirmed by IBO.³ Unlicensed smoke shops sell cannabis, tobacco, and e-cigarette products despite not holding appropriate licenses to do so. These retail locations do not collect tax on retail sales of cannabis products, and many of them also sell tobacco and nicotine products without collecting the appropriate tax for those products. In addition to unlicensed smoke shops, some consumers continue to purchase cannabis from street dealers and unlicensed delivery services. Any cannabis retail activity that takes place via an unlicensed seller rather than a licensed dispensary reduces cannabis tax revenue collected by New York City.

Based on data released by the state OCM and Department of Taxation and Finance on June

22, 2023, summarizing three weeks of enforcement activities against unlicensed smoke shops, officials recovered about \$10 million in illicit cannabis goods from 31 smoke shops across the state. If these shops are indicative of the average amount of product held by unlicensed smoke shops statewide, then IBO estimates that the 1,500 unlicensed retailers in New York City may hold as much as \$484 million worth of cannabis products in total. If all those products were sold legally, the sales would generate \$19 million in revenue for New York City. (Because there is no guarantee that all the inventory would be sold if it were held by licensed dispensaries, this figure should be considered an upper limit of the potential foregone tax revenue represented by smoke shops.)

City and state authorities have made efforts to decrease unlicensed cannabis retail sales but have so far found it difficult to close unlicensed smoke shops. In February 2023, Manhattan District Attorney Bragg targeted over 400 stores for potential eviction proceedings for unlawful cannabis sales. In May 2023, Governor Hochul signed a law that increased OCM's ability to assess civil penalties against unlicensed cannabis businesses, including fines up to \$20,000 per day. In August 2023, the New York City Council passed a bill that prohibits commercial owners from knowingly leasing commercial space to unlicensed sellers of cannabis and other illicit products.

It is worth noting that unlicensed cannabis sales are also present in California, Colorado, Massachusetts, Oregon, and Washington, as well as other states that have more recently legalized cannabis sales and use. Because unlicensed businesses avoid taxes and reporting, it is inherently difficult to measure the presence of these unlicensed markets. Estimates of the size of the unlicensed markets vary; in Colorado, an estimated 30 percent to 35 percent of cannabis sales are illicit, while in California some estimates are as high as 80 percent to 90 percent.

As enforcement operations continue in New York, the precise timeframe for—and ultimate effects of—reducing unlicensed retail cannabis activity is unclear. As the number of unlicensed smoke shops in New York City falls, total local cannabis tax revenue will likely increase—especially if more licensed dispensaries open at the same time.

City Has Budgeted Over \$20 Million To Support Cannabis Industry

Beyond revenues, the city has also planned expenditures to facilitate the rollout of the legal cannabis market. This spending is discretionary at the city level and not mandated by the MRTA. While the city licenses other types of businesses and has a role in regulating/licensing tobacco and e-cigarettes, the city has no official role in licensing or regulating the legal cannabis market and follows the regulatory decisions made at the state level by OCM and CCB.

So far, New York City has allocated funding to the Department of Small Business Services (SBS) and the Economic Development Corporation (EDC) to support the cannabis industry.⁴ In August 2022, the Adams Administration announced Cannabis NYC, a new initiative within SBS meant to provide business services to industry stakeholders that has largely focused on outreach to those interested in participating in the legal cannabis market. According to the New York City 2024 Adopted Budget, the city plans to allocate a combined \$20.8 million from 2024 through 2027 for cannabis industry support via SBS and EDC. The city's total cannabis-related spending will likely increase in future financial plans. Cannabis-related programs are not yet fully up and running, and funding will likely increase as agencies build staff and programming.

Within this total, the city has allocated \$8 million to capitalize a Cannabis Impact Fund

housed within EDC. This loan fund will provide below-market rate loans to early-stage cannabis for-profit businesses that are run by social and economic equity applicants, including members of communities disproportionately impacted by cannabis prohibition. The loan fund is intended to support the legalized market's access to capital, which is a challenge for new cannabis businesses because federally regulated banks are generally unwilling to engage with them. EDC hopes to procure investments from private capital to contribute to the fund, for an ultimate revolving loan fund of \$20 million to \$30 million. This loan fund is modeled somewhat after the state's social equity loan fund, although the state experienced difficulty recruiting private investments to its social equity fund. It remains to be seen if generating investment in the fund will prove similarly challenging on the city level.

4. Conclusion

In this brief, IBO presented a forecast of the potential size of a fully operational cannabis market in New York City, as well as expected impacts of cannabis legalization on city expenditures. Ultimately, the direction and pace of the legal cannabis market rollout in New York City will depend on several factors: the speed of dispensary openings, the scale of annual sales of cannabis at each dispensary, the rate at which consumers choose licensed dispensaries over unlicensed smoke shops, and the impact of legal actions on the nascent cannabis market. IBO's analysis indicates that the city's and state's revenue projections are potentially within reach, especially if the rate of new licensed dispensary openings increases.

5. Methodology

Calculating City Share of Statewide Revenue Forecasts

IBO calculated New York City cannabis tax revenue using the New York State Division of Budget forecast of state revenue as follows. For each year of the state forecast, IBO estimated the portion of projected state revenue in any year coming from the state retail tax of 9 percent on cannabis sales in the entire state, rather than state revenue coming from the potency tax. (The projected amount of revenue from licensing fees is reported separately and excluded from IBO's calculations in state fiscal year 2024.) The amounts of retail state revenue were then divided by 9 percent to determine the dollar value of retail sales in the entire state. Next IBO used the percent of statewide cannabis licenses awarded for businesses located in the city to calculate the value of projected retail sales in the city, which, when multiplied by the local 4 percent retail tax, yields the projection of city tax revenue.

Estimating NYS Retail Cannabis Tax Revenue. The state's forecast of cannabis tax revenue does not distinguish revenue from the state retail tax and the potency tax. IBO's approach to estimating the retail tax is based on calculations to estimate the potency tax. Although the potency tax is paid by retail distributors at the time of purchase from manufacturers, IBO assumes that the potency tax is fully passed through to consumers in the final retail price of cannabis products—an assumption that minimizes the estimates of state retail tax revenue and results in the most conservative estimate of city cannabis revenue.

The first step was to use actual retail product data to construct a representative cannabis product with retail price of \$100. IBO then determined the THC content of the representative product as well as the corresponding potency tax implicit in the retail price. The potency tax is based on THC content of product sold by manufacturers, rather than wholesale price at time of sale. THC content is not altered by the retailer, so for any product with a specific THC content and a final retail price of \$100, the potency tax as a percentage of the final price will not vary with the amount of retail mark-up.

IBO gathered information on product pricing and THC potency from 1,115 products listed on the websites of eight dispensaries across New York—five in New York City, and one each in Ithaca, Rochester, and Schenectady—all of which had full product information on their websites at the time the data was collected (May 15 - 26, 2023). Products were sorted into the three categories differentiated by their potency tax rate per milligram of THC: \$0.005 for flower and pre-rolled products, \$0.008 for concentrates and vapor oils, and \$0.03 for edible products.

Based on dispensary price and potency lists, IBO determined the average price per mg THC in each product category, and then calculated the average THC content of a representative \$100.00 cannabis product in each tax category: flower/pre-rolled products, 1,290.17 milligrams; concentrate/vapor oil, 779.77 milligrams; and edibles, 156.13 milligrams. Multiplying each of these THC amounts by their respective potency tax rates—\$0.005 per THC mg, \$0.008 per THC mg, and \$0.03 per THC mg, yields potency taxes of \$6.45, \$6.24, and \$4.69 on \$100 worth of, respectively, flower/pre-rolled, concentrate/vapor, and edible products.

IBO Estimated City Cannabis Tax Revenue Based on DOB's Forecast of Statewide Revenues				
<i>By Fiscal Year, dollars in millions</i>				
	2024	2025	2026	2027
A. State Revenue Forecast	\$32	\$158	\$245	\$339
B. State Taxes from Sales B = A * 0.54	17	86	133	184
C. Total State Sales C = B / 0.09	193	955	1,481	2,049
D. Total City Sales D = C * 0.52	101	497	771	1,067
E. City Tax Revenue E = D * 0.04	4	20	31	43
SOURCE: IBO analysis of New York State Division of Budget forecast				
<i>New York City Independent Budget Office</i>				

With the aim of determining the THC content and corresponding potency tax of a representative cannabis product with retail price of \$100—not a representative \$100 product in each potency tax category—IBO used statewide sales data reported by the Cannabis Control Board to create a weighted average of the three potency tax figures. Weights were based on the proportion of total sales for each product category, resulting in an average potency tax of \$6.04 on a representative \$100 cannabis product sold in New York State. At a rate of 9 percent of distributor sales, the state retail tax on the same representative \$100 of retail product is \$9.00.

To account for the likelihood that some of the cannabis products sold to distributors would remain unsold to consumers, IBO adjusted the potency tax revenue per \$100 of cannabis sales upward. For every \$100 cannabis sold, the revenue to the state effectively equals the sum of the retail tax, the potency tax on sold product, and the potency tax the distributor had paid on unsold product. Based on industrial organization and inventory management reports, IBO assumed that 20 percent of cannabis products bought from producers is unsold to consumers.⁵ To account for the potency tax paid on retailers' unsold products, the effective potency tax on per \$100 of sales is \$7.55. That means that each representative \$100 cannabis retail product on average generates \$9.00 in state excise tax from retail sales and \$7.55 from the potency tax based on THC content—or \$16.55 total tax for New York State.

The final step in determining the retail tax proportion of New York State revenue was to divide the retail tax rate on \$100 of product into the sum of the retail tax rate and the effective potency tax rate on the same amount of product, which resulted in the following proportions: 54.4 percent of state revenue from the excise tax and 45.6 percent from the potency tax. [$\$9.00 / (\$16.55) = .5438$] IBO applied the 54.4 percent proportion to the total statewide cannabis tax forecast to yield the total tax revenue that came from retail activity. Dividing the retail cannabis tax revenue of the state by the state excise tax rate of 9 percent determined the total value statewide retail sales in each year.

NYC Sales as a Proportion of Statewide Sales. IBO's estimate of the share of total retail sales that will take place in New York City rather than the rest of the state was based on the proportion of retail licenses that have been awarded to city-based businesses. As of July 2023, 241 out of 463 retail licenses have gone to licensees in the five boroughs, or 52 percent. Taking 52 percent of total statewide retail sales in each fiscal year, IBO estimated the total citywide sales in each year of the forecast.

Finally, IBO applied the local excise tax rate of 4 percent to the citywide retail cannabis sales, to find the city's expected tax revenue in fiscal years 2024 through 2027.

Calculating Cannabis Sales for California, Colorado, Massachusetts, Oregon, and Washington

IBO collected data on statewide annual taxable cannabis sales from the California Department of Tax and Fee Administration, the Colorado Department of Revenue, the Massachusetts Cannabis Control Commission, the Oregon Liquor & Cannabis Commission, and the Washington State Liquor and Cannabis Board. Sales data started in calendar year 2014 for Colorado, 2015 for Washington, 2016 for Oregon, and 2017 for both California and Massachusetts. The different start dates for sales data reflect the different points in time for cannabis legalization in each state. Data was collected through calendar year 2022 for all five states. To calculate per capita sales, IBO used U.S. Census Bureau data to confirm the population of each state in each year for which sales data was available. To calculate per capita sales figures, IBO divided total sales in each state in each year by the same state's population in the same year.

To find the number of licensed retail dispensaries in each state, IBO looked at data from each state's cannabis oversight agency. IBO also referred to media coverage of cannabis market development for supplemental estimates of the number of retail dispensaries operating in each state. State dispensary numbers reflect the latest data available: 2021 for Colorado, Oregon, and Washington, and 2022 for California and Massachusetts.

Glossary

Cannabis Advisory Board (CAB): a panel of experts that advises CCB and is tasked with creating and administering the framework for awarding the community grants reinvestment fund—a portion of cannabis revenue that will be distributed to areas of the state most disproportionately impacted by cannabis prohibition.

Cannabis Control Board (CCB): the approval and oversight body which oversees the state's OCM. OCM has five members, all of whom are nominated by the governor. CCB reviews and votes on the results of the regulatory and rulemaking process for cannabis being run by OCM, including administering the application process for cannabis businesses and issuing licenses.

Conditional Adult Use Retail Dispensary (CAURD) Licenses: CAURD licenses are the initial licenses awarded by OCM for retail dispensaries within the state. The licenses must go to justice-involved individuals or non-profit organizations serving justice-involved individuals. The licenses are awarded regionally with license share based on weekday population estimates.

Cannabis Product Types (according to NYS Department of Taxation & Finance):

- *Flower:* the flower of a plant of the genus Cannabis that has been harvested, dried and cured but has not undergone any processing whereby the plant material is transformed into a concentrate.
- *Concentrate/vapor oil:* the separated resin, whether crude or purified, obtained from cannabis; or a material, preparation, mixture, compound or other substance which contains more than three percent by weight or by volume of total THC.
- *Edibles:* a product containing either cannabis or concentrated cannabis and other ingredients, intended for use or consumption through ingestion, including sublingual or oral absorption.

Dormitory Authority of the State of New York (DASNY): a New York State public benefit corporation that provides construction financing and construction services for state projects. In the implementation of the MRTA, DASNY has managed the procurement process for the New York Social Equity Cannabis Investment Fund and is involved in siting locations for retail dispensaries and utilizing social equity funds to support the businesses.

Excise Tax: a set tax or fee applied to a specific product.

Justice-Involved Individuals: Justice-involved individuals are individuals who were affected by the criminal enforcement of cannabis prohibition. Justice-involved individuals were either convicted of a cannabis-related offense or are the spouse/domestic partner, parent/guardian, child/dependent of someone who was convicted. Justice-involved individuals to qualify for CAURD licenses must have at least 2 years of experience running a profitable business. They also need to have been convicted of their cannabis-related offense in the state of New York.

Marijuana Regulation and Taxation Act (MRTA): passed in March of 2021, the MRTA was the legislation that legalized adult cannabis use in New York State and established a framework for a legal cannabis market.

New York State Division of Budget (DOB): DOB is the executive state agency that works to prepare and implement the state’s budget, coordinate the capital plan, and track fiscal responsibility within the state government.

Office of Cannabis Management (OCM): OCM is tasked by the MRTA with implementing a regulatory framework for medical and adult-use cannabis and hemp in the state of New York. This includes, but is not limited to production, licensing, packaging, marketing, and the sale of cannabis.

Office of Management and Budget (OMB): OMB is the city agency that is responsible for ensuring the Mayor’s priorities are funded and implemented in the city’s budget. They oversee and direct other executive agencies to create the city’s operating and capital budgets. OMB creates estimates of city’s future revenues, including cannabis excise tax revenue.

Social and Economic Equity Applicants: Social and economic equity applicants include justice-involved individuals, but overall represent a broader category of those negatively impacted by cannabis prohibition. This category includes individuals who have lived in communities disproportionately impacted by the War on Drugs, small farmers, Minority and Women Owned Businesses (MWB/E’s) and service-disabled veteran owned businesses.

THC: The main psychoactive ingredient of cannabis. THC can refer to Delta-9-tetrahydrocannabinol; Delta-8-tetrahydrocannabinol; Delta-10-tetrahydrocannabinol; and the optical isomer of such substances.

Endnotes

¹A justice involved individual is someone or a close relation of someone who has been convicted of a marijuana-related offense in New York State before March 31, 2021. <https://cannabis.ny.gov/caurd-info>

²Social and economic equity applicants include justice involved individuals, as well as a broader category of individuals including persons who have lived in communities disproportionately impacted by the War on Drugs, small farmers, Minority and Women Owned Businesses (MWB/E’s) and service-disabled veteran owned businesses.

³ In August 2023, Crain’s New York published reporting that included a quote claiming there were as many as 8,000 unlicensed smoke shops in the city. IBO sought to confirm this figure in producing this report, because it varied greatly from past estimates the city has provided (which have tended to be in the range of 1,000-2,000). The 8,000 figure, and its corresponding market estimates, were then included in a City Council press release announcing legislative efforts on smoke shop enforcement. IBO has not been able to identify any documentation of the methodology for the

⁴The Economic Development Corporation is a public benefit corporation that engages in economic development work on behalf of the City of New York. It receives pass-through funds through the Department of Small Business Services in addition to revenues it self-generates.

⁵Berthiaume, D. (2023, February 3). Excess inventory continues to hang around. Chain Store Age. <https://chainstoreage.com/excess-inventory-continues-hang-around>; Jensen, E. (2017, June 8). What is the real cost of dead inventory? Manufacturing.net. <https://www.manufacturing.net/home/article/13117104/what-is-the-real-cost-of-dead-inventory>

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