



ESSENTIAL CANNABIS INSIGHTS

SEPTEMBER 2021 VOL 4, ISSUE 7

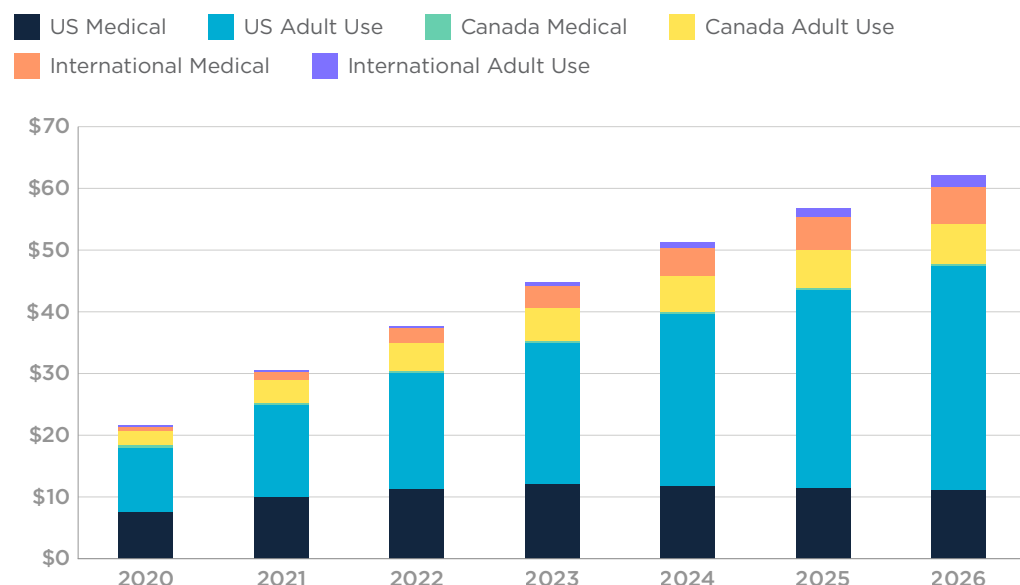
BDSA'S FALL 2021 CANNABIS MARKET FORECAST UPDATE

Setting the Stage

With a novel set of challenges created by the legal status of cannabis, the cannabis industry is hugely different from other industries, with each state being home to a unique supply chain and a unique set of regulatory demands. Despite this, the legal cannabis space is seeing rapid innovation, bringing new product formats to cater to

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BDSA Global Legal Cannabis Forecast (USD, Billions)



Source: BDSA September 2021 Cannabis Forecast

every type of consumer. As legalization spreads and cannabis use becomes more mainstream, understanding which markets are expected to bring the biggest share of growth is key to businesses and investors looking to make the most of their ventures in this dynamic industry.

In addition to BDSA's comprehensive and granular tracking of cannabis consumer behavior and dispensary retail sales, we also deliver Global Market Forecasts. BDSA clients and partners utilize the forecasts to understand and assess the total addressable market to gain confidence in setting short-term and long-term investment and entry/expansion strategy. The forecasts are an open book, providing a detailed look into how cannabis markets worldwide are expected to develop over the next five years, drillable by country, by state, by province, by channel, and by category out five years (currently to 2026).

With the most recent Fall 2021 release, BDSA has significantly increased the sales forecast for the global cannabis market, with sales expected to total \$30.6 billion in 2021 and more than double to reach over \$62 billion by 2026. Most of this growth is being driven by U.S. sales, which in turn are driven by growth in adult-use markets.

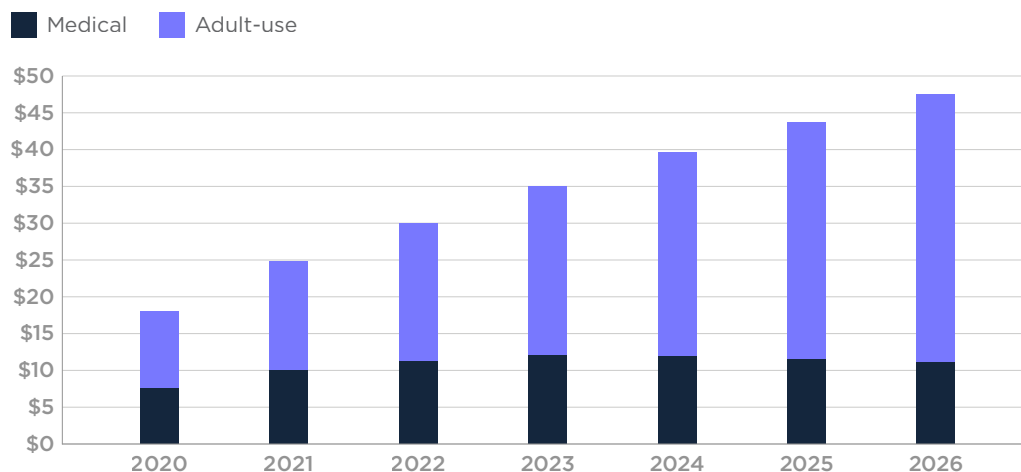
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UNITED STATES:

Adult-Use Drives US Growth, US Drives Global Growth

The birthplace of the medical cannabis movement and arguably the heartland of the cannabis legalization movement, the U.S. is home to the largest (BY FAR!) cannabis market in the world. Per BDSA, in 2020, legal cannabis sales totaled an estimated \$18 billion in the U.S., dwarfing the \$3.6 billion in legal sales seen coming from Canada and International Markets. Not surprising, BDSA expects the U.S. to continue to make up the bulk of legal cannabis sales worldwide over the next 5 years, with the U.S. markets forecasted to bring in \$47.6 billion of the \$62.1 billion worldwide total legal sales

US Legal Cannabis Forecast (USD, Billions)



Source: BDSA September 2021 Cannabis Forecast

BDSA Top 2026 US Markets

1. California
2. Colorado
3. Florida
4. New York
5. Michigan

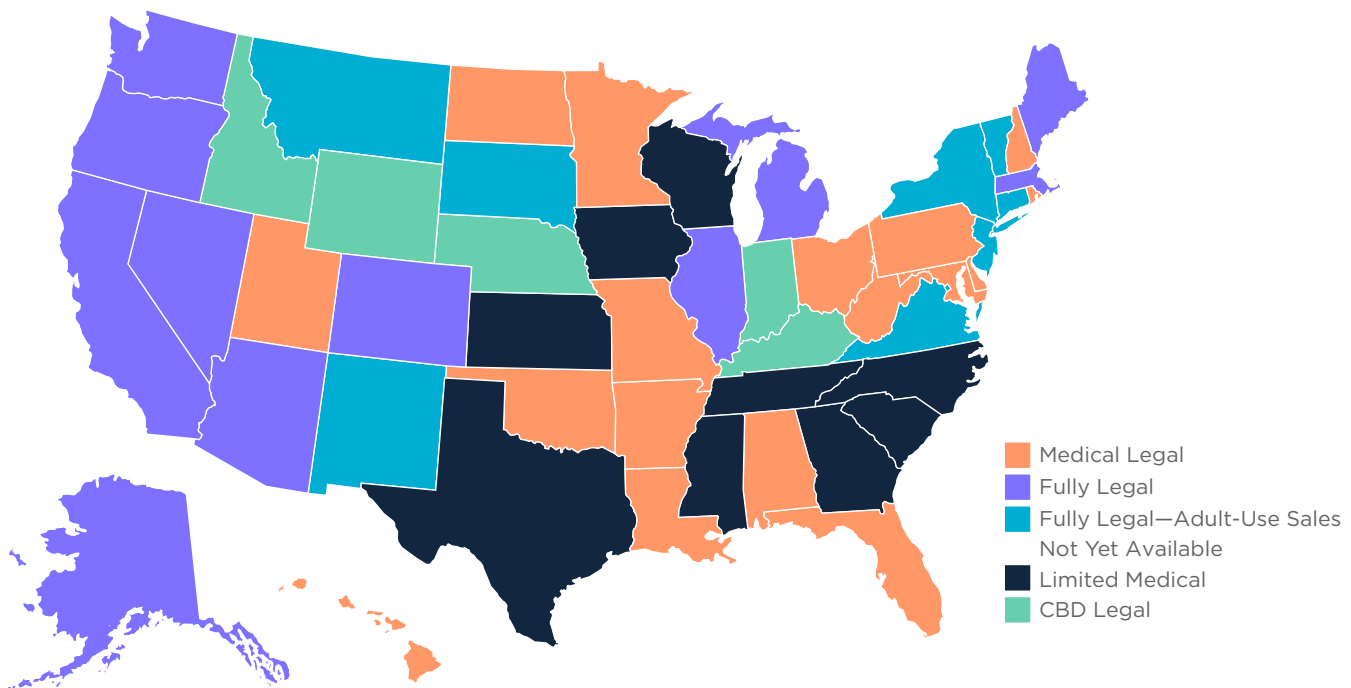
in 2026 (or 77%). The U.S. is unequivocally driving the growth of the global cannabis industry, with adult-use markets driving U.S. growth.

In the U.S., regulations are loosening, more markets are opening, consumer adoption and frequency of consumption is growing (even in the most mature markets), and we are seeing markets accelerate transitions from restricted to more open medical and from medical-only to adult-use-legal. Further, BDSA's U.S. forecast anticipates growth to come from states across the spectrum of regulations: strong growth in MATURE legal cannabis markets (think CA or CO), impressive performance in NEW legal markets (some of which have launched sales faster than ever...looking at you AZ), and a whole host of EMERGING markets that are expected to come online within the forecast period (we cannot have a conversation these days without talking about NY).

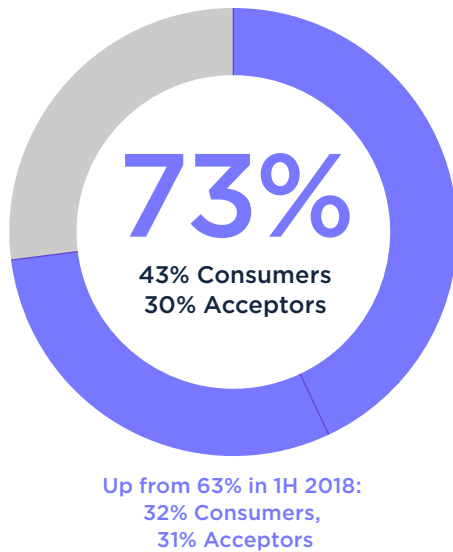
Regulations continue to loosen across the U.S. Cannabis is now fully legal for adult-use in 18 states, two U.S. territories and Washington D.C., so legal cannabis is no longer a phenomenon sector off to limited parts of the country. All but five states allow some sort of medical cannabis, and those with only limited medical access are loosening the rules around cannabis. Several limited medical states now allow more qualifying conditions and no longer prohibit the more popular cannabis form factors (such as smokable flower), moves that have historically been followed by rapid growth in patient counts and legal sales.

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US Cannabis and CBD Regulations (as of October 4, 2021)



Source: BDSA



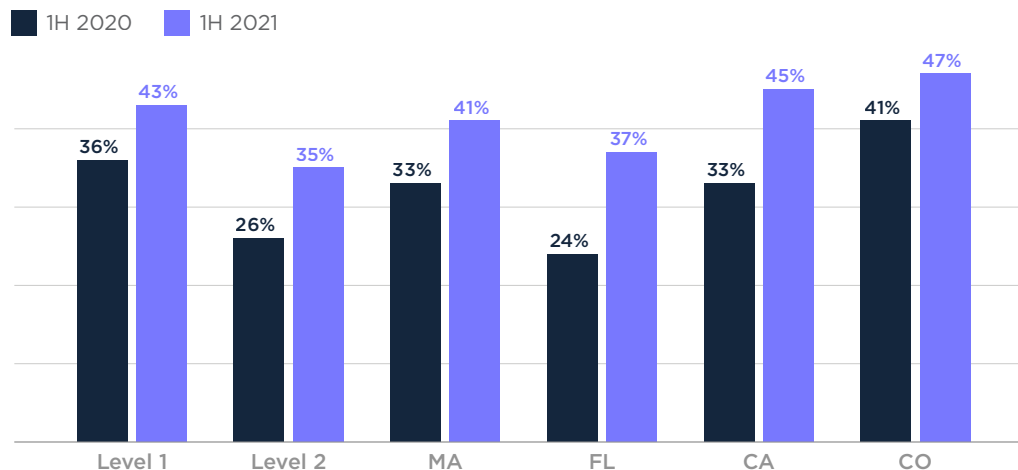
...of 21+ Adults in Fully-legal U.S. States Consume Cannabis or Are Open to consuming Cannabis: 1H 2021

27% are Rejectors
(would not consider in the future)

Source: BDSA Consumer Insights: 1H 2021 U.S. Adults 21+ in Legal Level 1 States

In Fully Legal States, ~75% of Adults are “Bought In” To Consuming. With 43% claiming of those surveyed in BDSA’s Spring 2021 Consumer survey claiming to be consumers and 30% claiming that they are open to consuming cannabis in the future, the cannabis consumer landscape in the U.S. is bigger and more diverse than ever. Attitudes on cannabis are also rapidly changing in favor of legalization. 64% of U.S. adults now agree that cannabis has medical benefits, and 87% of U.S. adults agree that some form of cannabis use should be legal.

Percent of Adult Population who are Cannabis Consumers



Important BDSA Consumer Insights Terminology:

Consumer: Adult who has consumed cannabis in the past 6 months

Level 1: Aggregate of fully legal adult-use states

Level 2: Aggregate of medically legal states

Source: BDSA Trending Consumer Insights Data: 1H 2020 and 1H 2021

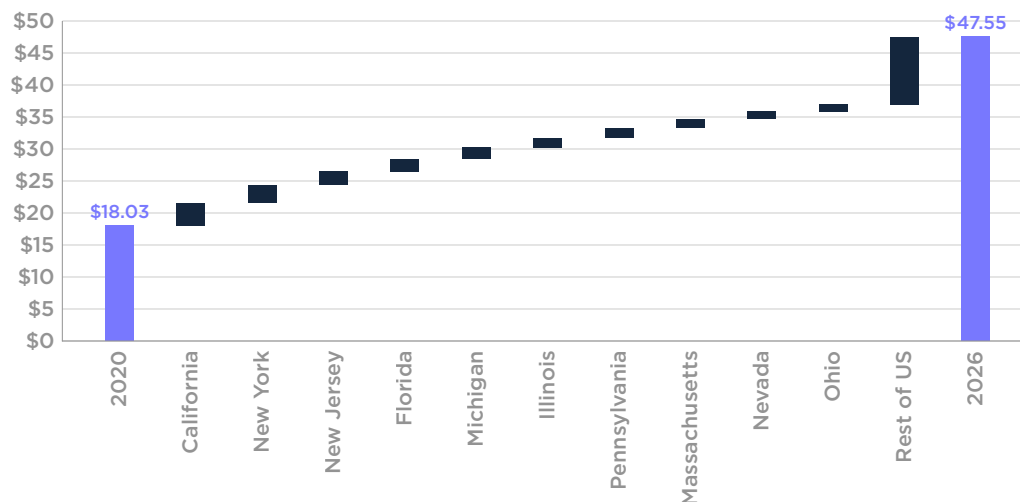
AND the Growth in Consumer Adoption can be Seen Across All Markets, Regardless of Regulations. Per BDSA's Trending Consumer Insights data, two of the earlier adopters of adult-use legalization, Colorado and Oregon, are both closing in on 50% of adults claiming to be past 6-month consumers, and other markets are not far behind. Several medical markets saw their consumer share increase by double digits between Spring 2020 and Spring 2021, such as Florida, which saw its consumer share jump by 13% in that period.

US: MATURE CANNABIS MARKETS SEE MASSIVE GROWTH

Some of the biggest contributors to overall growth in the cannabis industry in the past year have been the most MATURE adult-use cannabis markets, with BDSA tracking states such as California, Nevada, Oregon, and Colorado with double-digit growth for the first half of 2021 compared to the same period in 2020. California saw its adult-use market grow over 24% in H1 2021 versus H1 2020, totaling just under \$2 billion in sales for the first six months of the year. Colorado, the oldest adult-use market, also saw impressive growth with sales for the first half of 2021, totaling \$1.2 billion, 16% over the total for the same period in 2020. Even with more adult-use markets coming online each year, these legacy legal markets are expected to contribute a large share to the total growth of U.S. legal cannabis sales.

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BDSA US Legal Cannabis Forecast (USD, Billions)



Source: BDSA Cannabis Forecast

US: NEW CANNABIS MARKETS =STRONG PERFORMANCE

Roaring sales in NEW markets also contributed to faster than expected growth in 2020, and BDSA expects these legal cannabis markets to continue to be major drivers of total sales growth out to 2026. New adult-use markets like Illinois, Massachusetts, and Michigan are developing at an ever-increasing rate. With Illinois bringing in almost \$825 million in the first half of 2021 and Massachusetts bringing in over \$724 million in that same period, both markets have more than doubled their sales from the first half of 2020. Both markets are expected to be top-10 contributors to overall sales growth by 2026. Another key note relating to NEW legal markets is the rapid launch of the Arizona adult-use market, which went live with adult-use sales less than 90 days after legalizing. BDSA is looking at the AZ adult-use launch as an indication that new legal markets will launch faster than ever before, especially in states with well-established, highly regulated medical programs.

US: EMERGING CANNABIS MARKETS HAVE GREAT POTENTIAL

While mature and developing medical markets mentioned thus far will provide a massive chunk of the forecast growth in U.S. cannabis sales, EMERGING markets that recently legalized are also expected to yield huge contributions to the forecast sales growth out to 2026. So far in 2021, Connecticut, New York, New Mexico, and Virginia have legalized adult-use sales, coming on the heels of New Jersey and South Dakota in the 2020 general election. While some of these markets, such as Connecticut and South Dakota, have limited growth potential due to their populations, other new markets are expected to be top of the heap for legal sales by 2026. BDSA forecasts New York to bring in almost \$2.9 billion in total legal sales in 2026, making it the number four ranked market by dollar sales that year. Further, New York and New Jersey are expected to be the top contributors to overall sales growth from 2020 to 2026 after California.

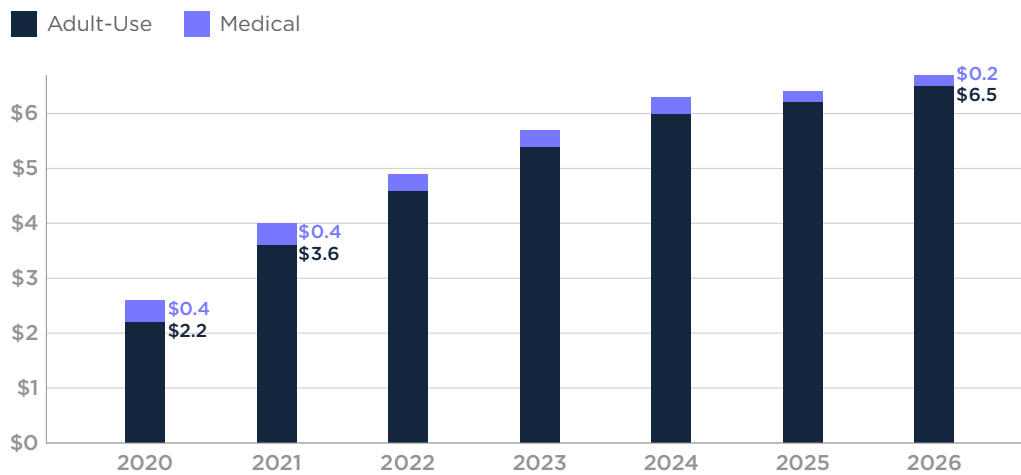
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CANADA: Retail Expansion Fuels Canadian Cannabis Growth to \$4 Billion in 2021

Canada's cannabis market continues to see strong growth as the adult-use channel matures. BDSA forecasts legal sales to total nearly \$4 billion in 2021, an increase of nearly 54% from 2020 sales. Adult-use will continue to drive sales growth in Canada, with total legal cannabis spending in Canada forecasted to reach \$6.7 billion in 2026, rising at a 2020-2026 CAGR of 17%.

The retail footprint for the adult-use market has been expanding nationally in Canada, with Ontario seeing a rapid boost in retail licensing towards the end of 2020. Further, Cannabis 2.0 products (such as edibles, beverages, and vapes) continue to gain share where available, and the category mix is evolving to resemble that of more-established U.S. markets.

Canada Legal Cannabis Spending (USD Billions)



Source: BDSA

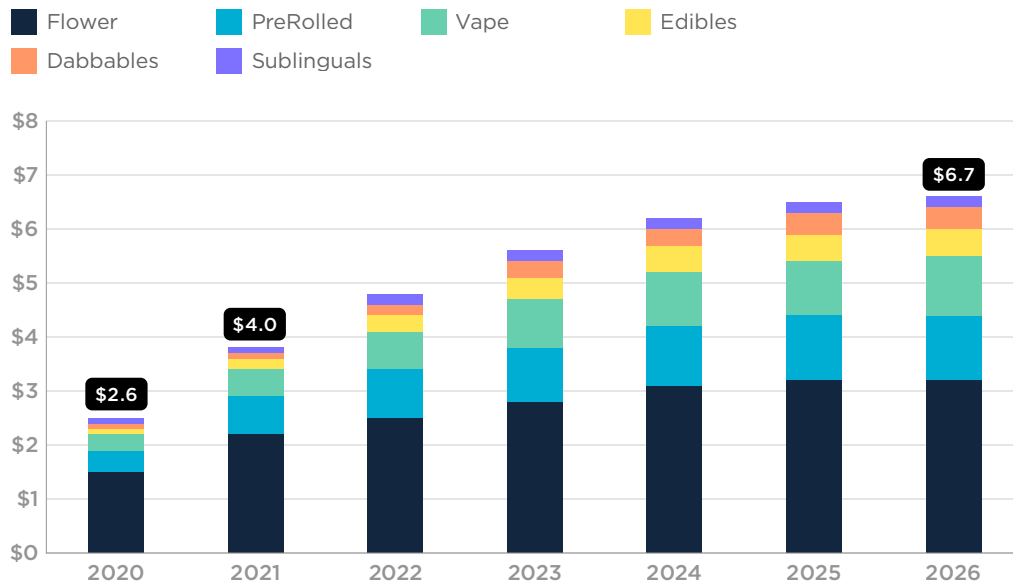
Adult-use sales in 2020 grew in step with Canada's ballooning retail footprint, which more than doubled to ~1,400 dispensaries nationwide that year. During the first half of 2021, the number of dispensaries has grown to more than 2,200. In-store adult-use spending grew more than 67% in the first half of the year versus first-half 2020, with Ontario continuing to dominate growth in that channel, according to government data.

- In mid-2020, Ontario's provincial authorities began a campaign to dramatically expand the number of dispensaries, adding ~270 in the second half of 2020 and nearly 540 during the first half of 2021. Unsurprisingly, Ontario's share of total Canadian in-store sales soared from 24% in June 2020 to nearly 38% in June 2021.
- Alberta, Canada's fourth-largest province, had led in dispensary count until the second quarter of 2021, when it was passed by Ontario. As of July, Alberta had an estimated 652 dispensaries, an increase of about 160 over the past year. The province still holds second-place in terms of in-store sales.
- British Columbia has also added about 160 new dispensaries (both private and government-operated) over the past year, with 362 as of July 2021. The province's share of in-store sales has declined a few tenths of a percent over the past year though it ranks just behind Quebec, which has nearly twice the population. Quebec's share of in-store sales has fallen from ~20% a year ago to just over 15% in June—the number of dispensaries has not-quite-doubled over that time.

In-store adult-use spending grew more than 67% in the first half of the year versus first-half 2020, with Ontario continuing to dominate growth in that channel, according to government data

In addition to the retail footprint expansion, Cannabis 2.0 products have grown rapidly in sales, number of brands and products, and availability since introduction, according to Canada retail sales tracking data from BDSA's partner Hifyre. Vapes, edibles, and other categories have been taking an increasing share from flower and other "legacy" product categories.

Canada Category Evolution



Source: BDSA September 2021 Cannabis Forecast

BDSA forecasts international (all countries not including U.S. and Canada) legal cannabis sales to total \$1.7 billion in 2021, growing to \$7.9 billion by 2026

INTERNATIONAL

The international legal market continues to be driven by Germany, Mexico, and the United Kingdom, with adult-use expected to drive growth in out-years. BDSA forecasts international (all countries not including U.S. and Canada) legal cannabis sales to total \$1.7 billion in 2021, growing to \$7.9 billion by 2026, a slight downward adjustment from our previous forecast—primarily driven by the delayed launch of adult-use sales in Mexico.