

EXECUTIVE SUMMARY

California Cannabis Market 2024 Report



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Department of
Cannabis Control
CALIFORNIA

OVERVIEW

This report summarizes a data-driven economic analysis of the 2024 California cannabis market and outlook. It also includes an initial overview of the hemp market. The size of the licensed and unlicensed market is quantified and market conditions are evaluated in terms of factors affecting cannabis demand (consumption) and supply (production) in California and other states.

Market conditions for licensed cannabis businesses in California were challenging in 2024. Wholesale and retail cannabis prices continued to decrease. Taxes, fees, and other regulation compliance costs make it expensive to produce licensed cannabis. Competition from the illicit market means that licensed cultivators effectively compete with unlicensed cultivators in California and other states despite not being able to legally sell across state lines.

There are some positive trends heading into 2025. The licensed market continues to grow. Licensed cannabis production increased 11.8% to 1.4 million pounds in 2024. Nominal wholesale prices in Q4 2024 are 4.8% higher year-over-year (YoY), and the gross value of the industry increased by 7.5% in 2024. The California market is likely to continue to grow—per capita consumption is lower than in states that legalized adult non-medical cannabis before California.

An estimated 11.4 million pounds of illicit cannabis is produced in California each year. Department investments in enforcement supports the licensed market by raising costs for illicit operations.

Factors such as suspending the Cultivation Tax and SB 833 are helping to lower costs for businesses. But prices remain low and business conditions are tough. **Figure 1** illustrates annual licensed production and sales by county through 2024.

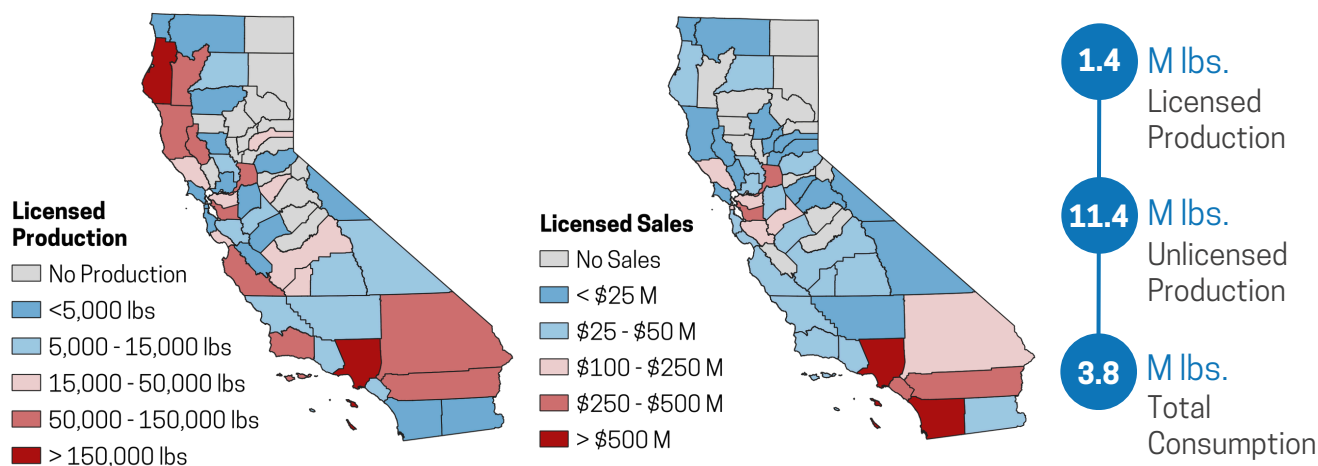
Hemp and cannabis markets continued to overlap in 2024. Governor Gavin Newsom directed CDPH to implement regulations banning intoxicating hemp cannabinoids. This will push some consumers to the licensed cannabis market.

The Executive Summary is comprised of the following sections:

- Cannabis Production
- Impact of Policy, Regulations, and Taxes
- Cannabis Consumption
- Cannabis Market Conditions
- Market Outlook

The short-run market outlook for 2025: prices are stable, industry value is up, and the licensed market is growing.

Figure 1. Licensed Production and Licensed Retail Sales by County



CANNABIS MARKET PRODUCTION

Licensed cannabis production in California continued to increase through 2024. Estimated licensed production increased by 11.8% YoY to approximately 1.4 million pounds in 2024. Production has increased by over 70% since 2020. Data show that the licensed market is growing despite the decline in the unit value of some products.

Nominal prices decreased by 3.9% in 2024. The gross value of production increased by 7.5% YoY in 2024. The licensed market grew in both value and quantity in 2024.

Table 1 summarizes California licensed cannabis production by year. Medicinal production is slightly contracting, which is more than offset by the increase in adult-use production.

Table 1: Estimated Licensed Cannabis Production

Fiscal Year	Adult-use Pounds, thousands, flower-equivalents	Medicinal	Total	YoY Change %
2020	734.1	104.7	838.9	N/A
2021	863.3	120.7	984.0	17.3
2022	1,014.5	99.8	1,114.3	13.2
2023	1,184.4	93.7	1,278.0	14.7
2024	1,336.7	92.7	1,429.4	11.8

Table 2 summarizes total licensed production nominal wholesale value from 2020 to 2024. It also shows the YoY change in industry value. The current wholesale value of the industry is about \$1 billion.

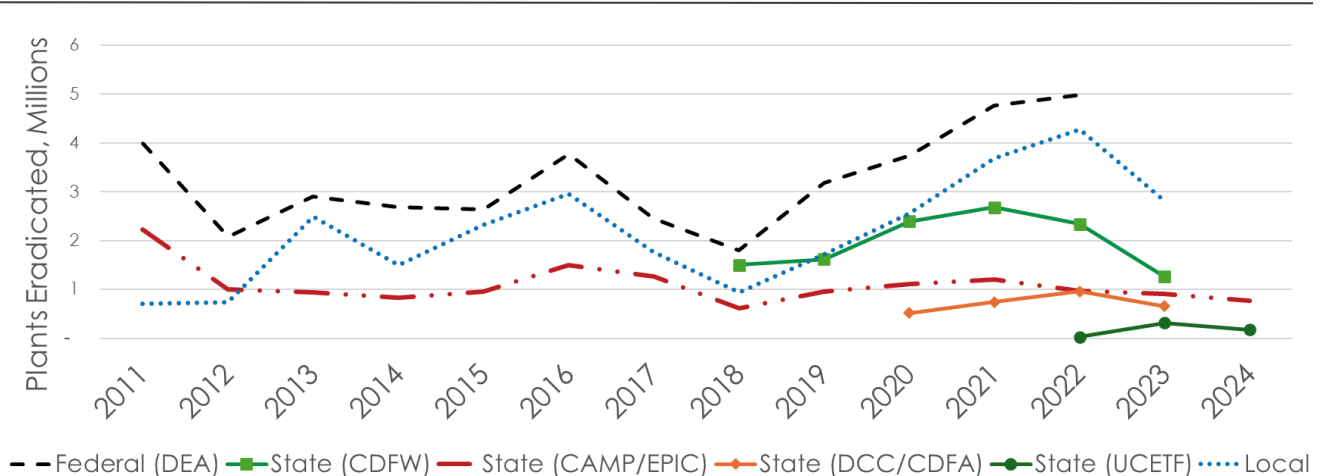
Table 2: Annual Licensed Production Value

Fiscal Year	Production Dollars, millions	YoY Change %
2020	\$1,155	N/A
2021	\$1,276	10.5
2022	\$881	-30.9
2023	\$959	8.7
2024	\$1,031	7.5

The licensed market competes with the illicit market. The illicit market includes diversion from the licensed market and unlicensed businesses. An estimated average of 11.4 million pounds of unlicensed cannabis is produced in California each year, with a wholesale value of \$7.9 billion in 2024.

Enforcement is critical for increasing the effective cost of producing in the illicit market. This helps push production towards the licensed market. **Figure 2** illustrates eradications over time. The Department supports licensed market enforcement and illicit plant eradication efforts through UCETF. Multiple state, federal, and local agencies support enforcement activities.

Figure 2. Reported Annual Eradication by Agency and Jurisdiction



REGULATIONS, TAXES, AND FEES

Regulations, taxes, and fees are standard for legal, licensed businesses in all industries.

Efforts to streamline regulations and reduce business costs help licensed businesses compete with the illicit market. Recent changes have reduced costs for licensed businesses, examples include:

- [The statewide cultivation tax was suspended in 2022](#). This reduced the cost of production by \$161 per pound (\$10.08/oz) of flower and by \$46 per pound of trim (\$2.87/oz). Economic analysis finds that market intermediaries and consumers are likely the main beneficiaries from eliminating the cultivation tax.
- [Large \(Type 5\) cultivation licenses were introduced in 2023](#). The regulations also established a process for converting groups of licenses to Medium cultivation licenses. Consolidation leads to economies of scale, improved production efficiency, and helps lower cultivation costs.
- [Senate Bill \(SB\) 833 introduced Limited Operations Status licenses](#). This allows cultivators to change license renewal dates, temporarily change to a smaller, Reduced-Size Cultivation License, and/or temporarily put a license into Limited Operations Status. This lowers license fee costs and allows cultivators to choose not to produce in some years, which decreases supply and should put upward pressure on price in those years.

Local taxes and fees can also increase costs. Many counties levy revenue or square footage-based cultivation taxes. Local revenue-based taxes are as low as 1% in San Francisco and as high as 7-10% in Santa Cruz, San Luis Obispo, and Santa Clara. Square footage-based taxes are as low as \$1 per square-foot in Lake and as high as \$25 per square-foot in Imperial County.

Figure 3 illustrates the current patchwork of local taxes and fees in California.

Figure 3. Cannabis County Taxes and Fees, 2024



The regulation of intoxicating cannabinoids derived from hemp has been evolving to address public health and safety concerns. Governor Newsom directed CDPH to implement regulations banning products with any detectable THC. These products may be sold through licensed cannabis businesses. More formal integration of the hemp and cannabis markets is still being evaluated in California and other state markets. The pending 2024 Farm Bill may also limit intoxicating cannabinoids derived from hemp.

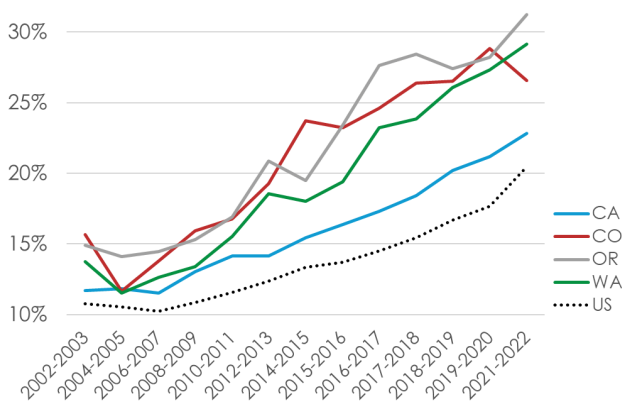
Limiting hemp-derived products may push consumers to the licensed cannabis market. However, cannabinoids derived from hemp are generally cheaper than those derived from cannabis due to fewer (current) regulations. Hemp market integration would have important implications for California's cannabis industry.

CANNABIS CONSUMPTION

Consumption trends through 2024 show that consumers are moving toward value-added products as the industry continues to innovate and bring different types of products to market. The outlook for 2025 is consumption increasing consistent with historical trends.

Federal survey data show that prevalence of cannabis use in California increased from 12% in 2011 to 21% in 2021. California prevalence is still below that of other states with legal cannabis markets, which suggests room for additional growth. **Figure 4** illustrates trends in California, the U.S. total, and selected other states.

Figure 4. Cannabis Use Prevalence (share)



Total (licensed and unlicensed) California cannabis consumption is estimated at 3.8 million pounds in 2024. Around 1.4 million pounds is from the licensed market and about 2.4 million pounds is from the unlicensed market. The estimated licensed market share is about 40%, which is an increase from 33% in 2019. The estimated license market share has held steady at about 40% since 2021. That is, increasing demand appears to be outpacing increases in licensed production.

Retail sales revenues in the first half of 2024 were down 4.4% from the first half of 2023. In fact, retail sales revenues have been decreasing since Q3 2021. This trend is driven entirely by

lower prices. The quantity sold, in terms of weight and units, has continued to increase. The licensed market is growing.

Consumers are shifting product purchases. Between Q2 2021 and Q2 2024 sales of:

- Packaged flower decreased from \$615 to \$391 million.
- Vape products increased from \$309 to \$354 million.
- Sales of pre-rolls increased from \$171 to \$200 million.

Figures 5 and 6 illustrate trends in retail sales value and quantity. Consumers are shifting purchases as businesses continue to innovate and bring new products to market.

Figure 5. Quarterly Retail Sales Value By Product

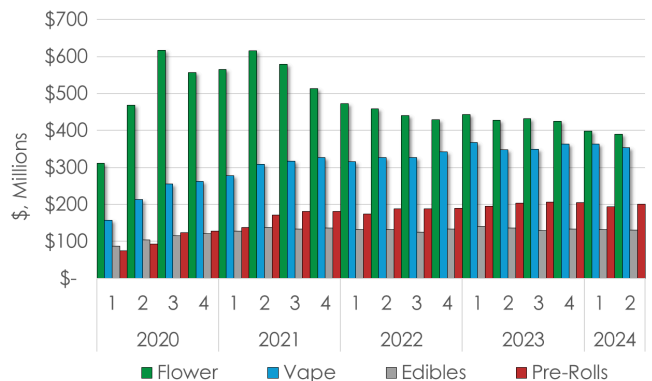
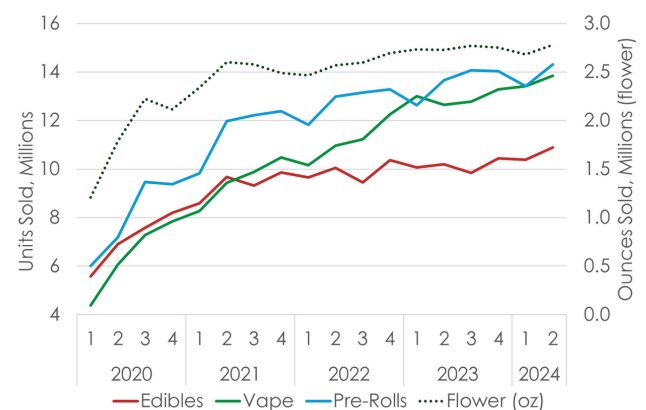


Figure 6. Quarterly Units Sold By Product



CANNABIS MARKET CONDITIONS

Price movement and businesses exiting and entering the market are the outcome of changes in supply and demand over time. Trends in consumption, production, and prices suggest that the licensed market is continuing to stabilize through 2024.

Wholesale prices of flower have been decreasing in California and other states since 2021. YoY inflation-adjusted prices decreased by 8% over 2021, 43% over 2022, 10% over 2023, and 6% over 2024. However, prices increased by 11.7% from Q1 to Q4 2024.

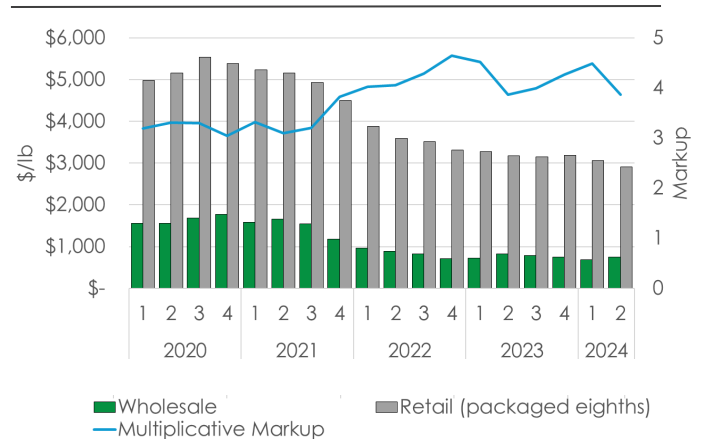
Although average inflation-adjusted prices across cultivation methods have decreased in 2024, wholesale prices of indoor and mixed-light flower have stabilized. As of Q4 2024, YoY outdoor flower prices have decreased by 36%, indoor flower prices have decreased by 0.3%, and mixed-light prices have increased by 4.5%.

Retail prices in California have also been decreasing. As of Q2 2024, weighted average prices of the four top retail products decreased by 8% YoY.

Figure 7 illustrates trends in wholesale price, retail price, and the wholesale-retail markup.

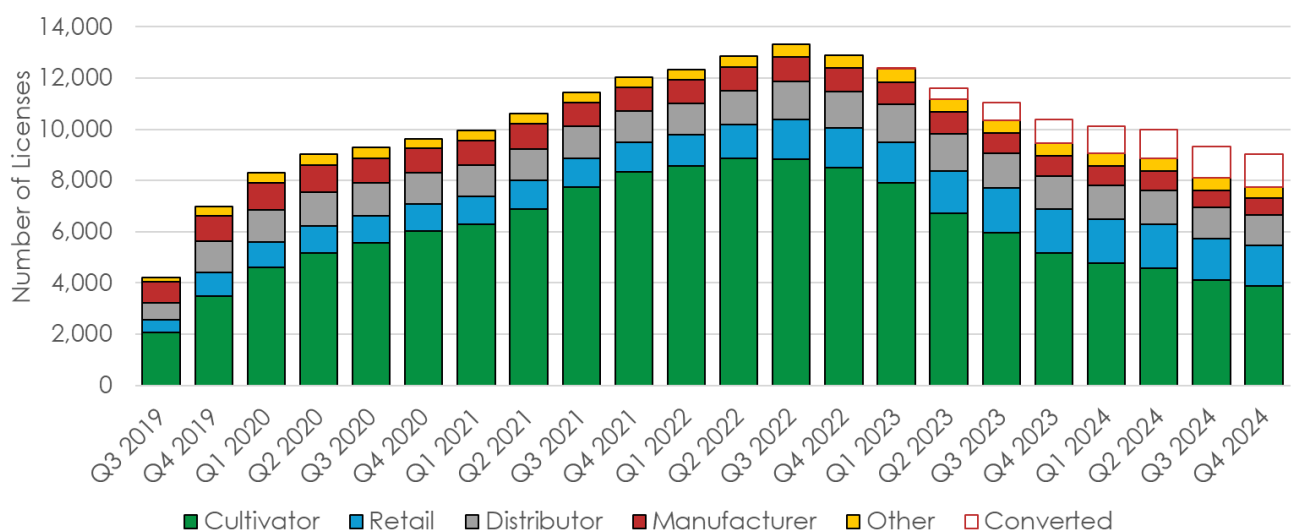
Wholesale price decreased more than retail price. Retail markup has increased from 3.1 in Q1 2020 to 3.9 in Q2 2024.

Figure 7. Wholesale and Retail Prices and Markups



There is continued consolidation and some businesses exiting the market. **Figure 8** illustrates trends in active annual Department licenses. From Q4 2023 to Q4 2024, the number of active DCC cultivation licenses has decreased by 18%. However, this decrease is partially due to consolidation and conversion to Medium and Large licenses. When omitting converted cultivation licenses, the YoY decrease in active licenses is 15%.

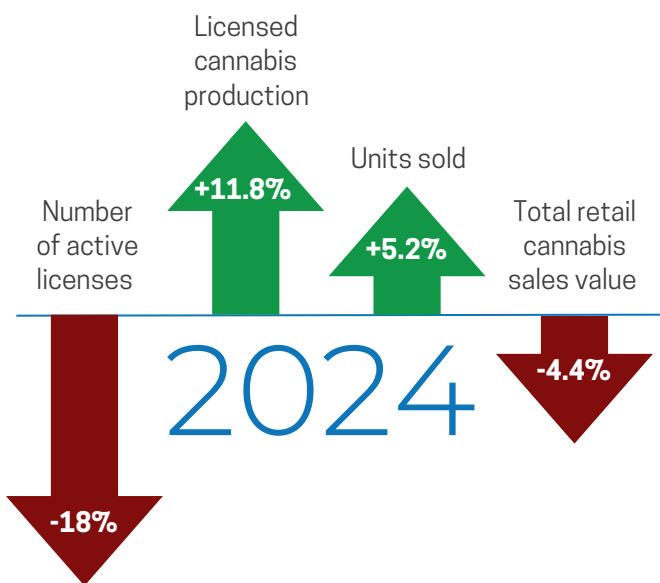
Figure 8. Active Annual Plus Provisional DCC Licenses by Quarter



MARKET OUTLOOK

Active Department licenses decreased by 18%, and retail sales value decreased by 4.4%. Total production increased by 11.8%, the nominal wholesale value of cannabis increased by 7.5%, and retail units sold increased by 5.2%. In short, prices are down for some retail and wholesale production (YoY), but quantity is up and the industry is growing.

Figure 9. Market Conditions 2024 YoY Change



The outlook for 2025 is more stability in wholesale and retail prices and businesses continuing to exit the market. Nominal wholesale price in Q4 2024 is currently up by 4.8% YoY. This is a positive trend, if it continues. The outlook depends on several key factors highlighted in this report.

- **Consolidating cultivation licenses allows cultivators to achieve economies of scale.** This helps cultivators compete with unlicensed producers. In addition, the Limited Operations Status license is expected to result in a decrease in cannabis production. This, in turn, would have an upward effect on price, and benefit all cultivators.

- **Increased eradication and efforts to limit the unlicensed market help support the licensed market.** The analysis of eradication data suggests that unlicensed production post-legalization is similar to pre-legalization levels.
- **Enforcement is critical for limiting the illicit market.** Department enforcement efforts are currently funded through license fees. This creates a challenging paradox: enforcement curbs illicit operations, but relying on license fees to fund these efforts raises costs for licensed businesses. Alternative funding is needed.
- **Taxes and fees are a substantial share of licensed business costs.** Lowering local taxes, fees, and restrictions can increase the number of retail locations, which can help pull consumers into the licensed market.
- **Hemp market integration is important to monitor.** CDPH emergency regulations and the 2024 Farm Bill ban intoxicating cannabinoids derived from hemp. This pushes some consumers to the cannabis market. Hemp is cheaper to produce than cannabis due to fewer regulations. It is important to monitor market integration as products derived from hemp evolve to meet consumer demand.

The California cannabis industry is slowly maturing. Cannabis consumption (licensed and unlicensed) is slightly outpacing licensed production—more than half of consumption is still from unlicensed cannabis. Strong demand and reduced supply as licensed cultivators exit the market while restrictions on hemp-derived cannabinoids take effect should put upward pressure on price.

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