



Jobs Report 2024

Positive growth returns

By Bruce Barcott and Beau Whitney

Design by Sasha Beck

America's legal cannabis industry created nearly 23,000 new jobs in 2023, as national sales revenue returned to double-digit growth.

The 2024 Vangst Jobs Report found **440,445 full-time equivalent jobs** supported by legal cannabis as of early 2024.

That job total represents a 5.4% year-over-year increase. America's legal cannabis industry added 22,952 new jobs over the past twelve months — a sign that the business climate has begun to stabilize somewhat nationally after the turmoil of the past two years.

Nationwide, annual cannabis sales increased to \$28.8 billion in 2023, a 10.3% rise over 2022's sales. That figure includes all state-regulated medical and adult-use sales, but does not include hemp-derived products.

That's good news for an industry that has endured strong headwinds. After a rough 2022 that saw a contraction of more than 10,000 jobs, sales and hiring stabilized and began trending slightly upward in the second half of 2023.

Not all job markets expanded equally. Below the surface, a complex mix of factors were at play.

The past year's growth was driven largely by steep-curve expansion in young Midwestern markets — Michigan, Missouri, and Illinois — and the moderate growth of East Coast markets like New York, New Jersey, and Connecticut.

Meanwhile, mature markets in the West were hit by price compression, oversupply, and competition from hemp-derived products

and unlicensed sales. They saw a decline in annual sales and the loss of thousands of jobs.

In years past, the cannabis industry sailed steadily on through rough macroeconomic weather. Indeed, cannabis famously enjoyed a "Covid bump" of expanded sales during a pandemic that battered most other storefront retail operations.

Not so with today's challenges. The current era of high interest rates and expensive capital has hit cannabis with full force. Cannabis companies nationwide are delaying expansion due to the high cost of debt. As the Federal Reserve indicates it may start lowering rates in later 2024, it's tough to justify locking in a loan at today's high rates when cheaper money may become available a few months down the road.

Add to that a cash flow concern percolating in many markets: More and more vendors are delaying invoice payments in order to cover their short-term costs. A recent Whitney Economics survey found that 82% of cannabis companies are struggling with accounts receivable issues. That impacts a business' ability to pay the industry's famously onerous local, state, and federal taxes — and dampens a company's ability to hire more staff.

There are bright spots on the horizon. After an alarming revenue decline, mature markets like Colorado should find a solid landing point and settle into their natural equilibrium over the next 12 to 24 months. Slow-growing markets like New York will continue to expand, and the newly legal Ohio market should open its first retail stores by the end of the year.

Meanwhile, lower interest rates in the second half of 2024 are expected to open up the lending window and provide more cash for thriving companies to expand and add needed staff.

And, as always, federal reform looms out there as a medium-term unknown. Few expect a significant reform measure (SAFER banking or — long shot — federal legalization) to win approval in Congress prior to 2025. The Biden Administration’s effort to move cannabis to Schedule III continues to grind away, and predictions vary as to the real effects of rescheduling — everything from the unleashing of a new era of post-280E prosperity to a more muted financial effect accompanied by uncertainty around the FDA’s regulatory role.

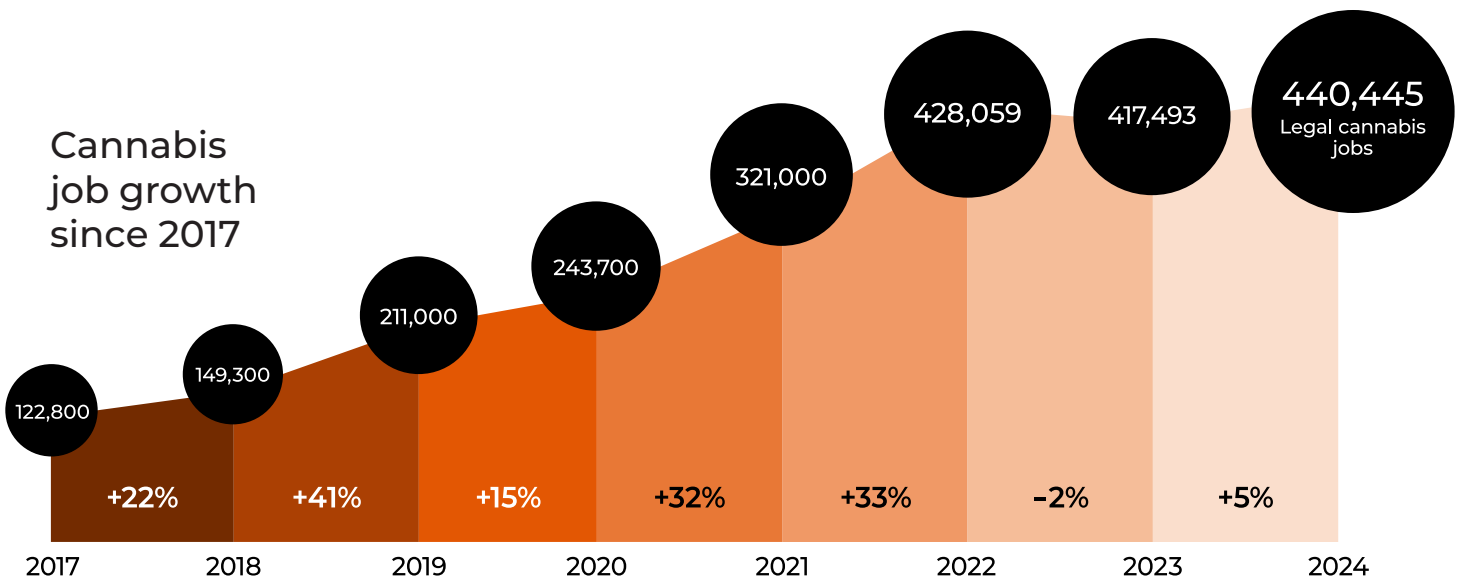
America’s top cannabis job markets

Total cannabis jobs per state, as of March 2024

1	California	78,618
2	Michigan	46,746
3	Florida*	30,238
4	Illinois	29,966
5	Massachusetts	27,407
6	Pennsylvania*	23,402
7	Colorado	23,384
8	Arizona	20,749
9	Missouri	20,468
10	Washington	18,745
11	Oregon	14,608
12	Nevada	12,825
13	New Jersey	12,237
14	Maryland	11,964
15	Oklahoma*	11,142

* Medical-only state

Cannabis job growth since 2017



Why cannabis job growth returned in 2023

Last year's Vangst Jobs Report documented the loss of 10,566 jobs, a first for America's legal cannabis industry. Stretching back to 2014, when the first legal adult-use stores opened in Colorado and Washington, the industry had enjoyed job growth of 15% to 41% year-over-year. For nearly a decade, cannabis was America's fastest-growing industry.

That changed in 2022, when a post-pandemic sales slump coincided with investment pullback, global inflation, rising interest rates, depressed wholesale prices, and changes in consumer purchasing patterns. Companies stopped chasing growth and market share, instead focusing on efficiency and profitability. Layoffs hit companies coast-to-coast as businesses pared back on labor costs in the name of survival.

Those challenges didn't subside in 2023. An oversupply of cannabis in many states is squeezing farmers, who are selling at historically low wholesale prices. Consumers are enjoying bargain-priced flower, which makes for happy shoppers but leaves retailers (and the entire supply chain) in a bind as they watch their profit margins shrink. Extractors face increased competition from operators moving unlicensed distillate into licensed products. Unpaid invoices are piling up as companies hang on, hoping to stay solvent long enough to regain their footing when prices rebound and the good times return. Many companies were forced to do more with less last year simply because they weren't getting paid by their vendors.



In the face of these troubles, why did job growth return in 2023? Credit the expansion of new and maturing markets in the Midwest and East Coast.

Michigan's astonishing growth — sales of more than \$3 billion, up 33% over 2022 — continued for another year, creating more than 11,000 new jobs.

Missouri's first full year of adult-use sales brought in more than \$1.3 billion, fueling the addition of 10,735 new jobs.

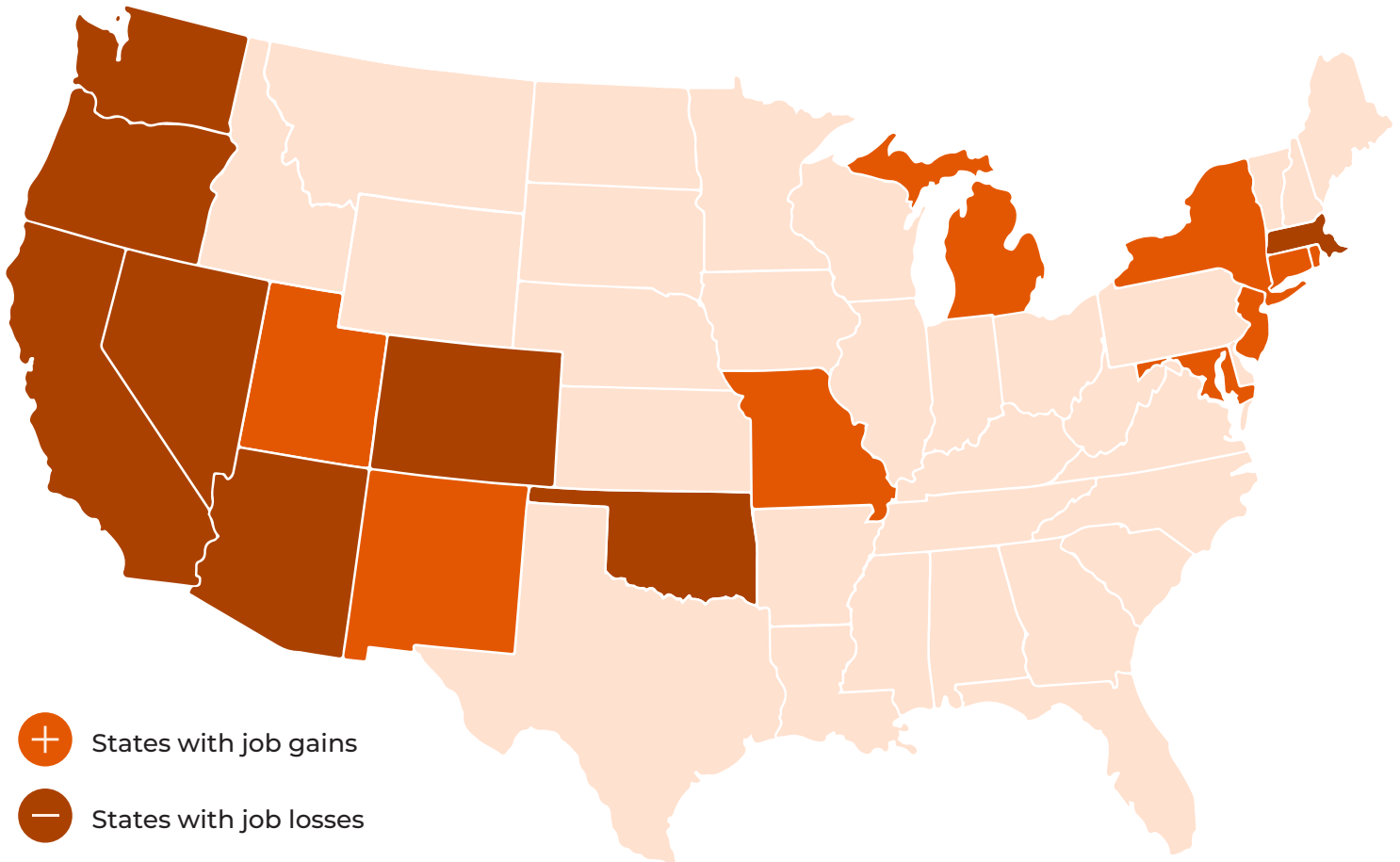
Startup adult-use markets in New Jersey, New York, Maryland, Connecticut, and Rhode Island saw total revenue grow 50% to 100% over 2022. That resulted in the creation of more than 13,000 new jobs along the East Coast.

A countervailing pullback in mature markets in the American West (California, Colorado, Oregon, Washington, and Nevada) resulted in the loss of roughly 15,000 jobs across the region.

Young markets expanded while mature markets contracted.

The takeaway: The national 5.4% growth in jobs wasn't spread evenly. Now more than ever, America's cannabis industry is a state-by-state, region-by-region job market.

Young markets in recently legalized states continue to expand and create employment opportunities, while labor demand in mature markets contracts along with revenue and profit margins.



Which states added jobs – and why

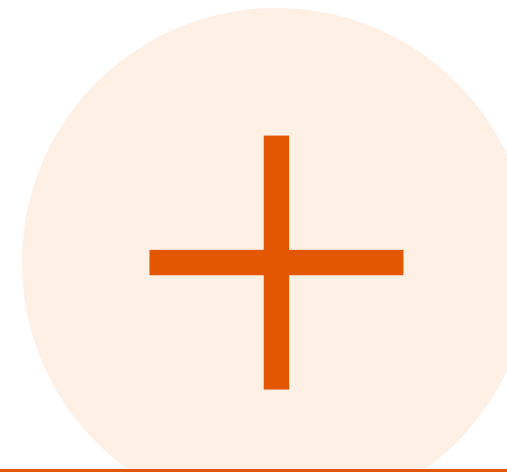
Michigan and Missouri led the nation in cannabis job gains over the past year, with each state adding more than 10,000 jobs in the space of twelve months.

Michigan's gains were driven by the addition of 130 new legal retail outlets, which captured more of the unlicensed market demand and fueled a rise from \$2.3 billion to \$3 billion in annual revenue. There are clouds on the horizon, however, as we discuss on our Michigan focus page (see p. 10).

Credit Missouri's gain to the state's successful first year of adult-use retail sales, which began in Feb. 2023. Missouri's monthly revenue (medical and adult use) quickly reached \$126 million and never dipped below \$110 million for the rest of the year. Retailers benefitted from an influx of out-of-state consumers from nearby medical-only states — and even saw purchasers from Illinois, where cannabis taxes are dramatically higher than Missouri's low 6%.

New York and New Jersey continued their slow-and-steady rollout. With a little more than 100 stores, New Jersey added nearly 5,000 jobs but has captured less than one-third of the state's full cannabis demand. New York added 2,050 jobs but has so much growth still to come. We estimate that 95% of New York's full cannabis demand is still being met by the unlicensed market.

Maryland added 3,680 jobs by opening adult-use sales to its existing 101 medical dispensaries. More jobs are coming soon, as 75 new adult-use retail licenses are scheduled to be issued in 2024.



Cannabis jobs: Job gains in past year

State	Jobs added	% gain	Total jobs, Mar 2024
Michigan	11,341	+ 39%	46,746
Missouri	10,735	+ 110%	20,468
New Jersey	4,870	+ 66%	12,237
Maryland	3,680	+ 44%	11,964
Connecticut	2,135	+ 104%	4,189
New York	2,050	+ 103%	4,050
New Mexico	1,952	+ 30%	8,517
Rhode Island	510	+ 45%	1,649
Utah	363	+16%	2,574

Which states lost jobs – and why

California and Colorado led the nation in cannabis job losses for the second straight year, although the negative growth wasn't nearly as bad as we saw in 2022.

California's struggles with high taxes and unlicensed sales led to decreased sales and the loss of nearly 5,000 jobs — not good news, but better than the previous year's loss of 12,600 jobs.

An oversupply of cannabis and the waning of cannabis tourism led Colorado to negative growth once more, shedding 4,472 jobs as annual sales retreated to a level not seen since 2018. The price of an ounce has fallen 30% since 2021, squeezing every retailer's profit margin. Meanwhile, the expansion of legal adult-use sales to 20 states has reduced Colorado's cannatourism trade to a fraction of its former self.

The experience of buying legal weed in a retail store may also have lost some of its novelty for some of the 40 million annual visitors to Las Vegas. Nevada's 2023 annual revenue came up \$50 million short of the \$880 mark set in 2022, and roughly 1,000 jobs crapped out.

We expect losses in these markets to continue to thin in 2024 and turn positive once again in 2025.

Cannabis jobs: Job losses in past year

State	Jobs lost	% loss	Total jobs, Mar 2024
California	4,975	- 6%	78,618
Colorado	4,472	- 16%	28,384
Washington	3,305	- 15%	18,745
Oklahoma	1,242	- 10%	11,142
Oregon	1,052	- 7%	14,608
Nevada	1,028	- 7%	12,825
Massachusetts	963	- 3%	27,407
Arizona	847	- 4%	20,749

Job Growth: Hot markets in 2024

Overall, we expect to see steady and moderate job growth in the cannabis industry in 2024. Four states stand out as having the most likely hiring increases in the coming year: Ohio, New York, New Jersey, and Maryland.

Ohio

With nearly 12 million residents, Ohio is the nation's seventh largest market in terms of its Total Potential Market. It will take a while to capture that market, but Ohio's robust medical marijuana infrastructure should help it hit the adult-use ground running.

With 120 currently operating medical dispensaries expected to open to adult-use customers in late 2024, many are already hiring additional staff. Look for more rounds of licensing to occur in 2025, with up to 200 more stores opening over the next two to three years. See *Market in Depth: Ohio*, page 11, for a deeper dive.

New York

Look for New York's famously slow adult-use rollout to gain speed in 2024.

Fed up with the glacial pace of the state's retail rollout — and a flood of smoke shops selling unlicensed weed — New York Gov. Kathy Hochul ordered a top-to-bottom review of the state's licensing bureaucracy in March.

That should light a fire under the state Office of Cannabis Management and move more licenses out the door.

The potential is there. Thousands of unlicensed smoke shops are currently capturing the bulk of the state's sales (aside from the traditional street-seller market). But the problem may lie more with financing than licensing: The state has issued 500 licenses for retail stores, but only 85 of those licensees have opened for business.

A crackdown on smoke shops combined with greater startup-capital support for existing licensees could create a wave of new jobs in 2024. New York has often disappointed us in the past but we remain eternally optimistic.



New Jersey

Look for slow and steady job expansion in the Garden State in the coming year.

The state Cannabis Regulatory Commission (CRC) continues to issue new licenses, and CRC leaders have predicted 30% revenue growth in 2024. That would put New Jersey's market over \$1 billion in annual sales.

With a population of 9 million, the state's annual revenue should eventually grow to top \$2 billion or more. We expect thousands of new jobs to open up in NJ in 2024.

Maryland

Maryland's 75 licensed retailers sold nearly \$800 million in their first full year of adult-use sales. An additional 75 retail licenses were awarded in March 2024.

In theory, that should double the state's revenue and job count. But as in New York, those licenses were awarded to social equity candidates — and that often means financing challenges. In addition, the attorney who delayed New York's adult-use rollout for months has filed a similar lawsuit challenging Maryland's 75 new licenses.

If Maryland can dispatch the lawsuit and overcome financing challenges, the market should create thousands of new jobs in the coming year.



Market in Depth: Michigan

Buoyed by the opening of the first licensed retail stores in Detroit, Michigan added more than 11,000 jobs last year to solidify its spot as the nation's second-largest cannabis market, behind only California. Annual sales increased 33%, from \$2.3 billion to \$3 billion, as state regulators licensed 130 new retail outlets. With a state population of 10 million, Whitney Economics calculates that the state's 2023 sales met roughly 85% to 90% of Michigan's natural in-state consumer demand.

Those are impressive numbers. But behind the state's gleaming upward-trending graph lies a tale of growing trouble.

The problem: Too much weed.

Michigan is learning the hard lesson laid down by Oregon a few years ago: Oversupply kills cannabis companies. With more than 1,000 licensed growers producing far more flower and trim than the market can consume, wholesale and retail prices have plunged. Three years ago flower sold for \$230 per retail ounce. In early 2024 that same ounce could be had for \$93.

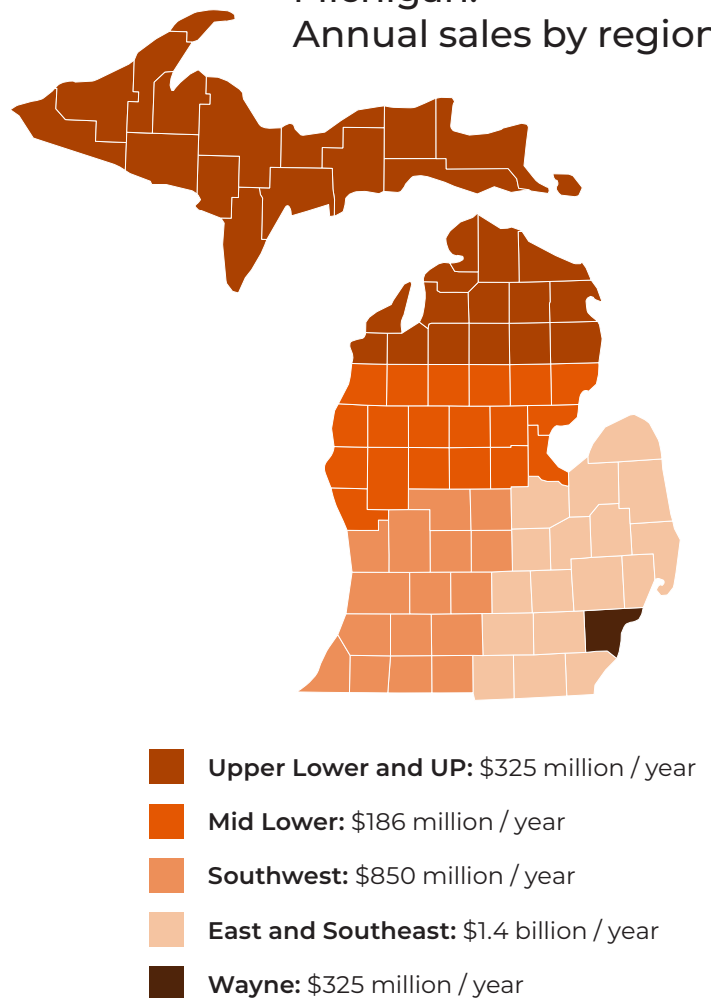
Consumers love a bargain, but they generally don't double or triple their monthly flower consumption in response to falling prices. The result: The same amount of foot traffic generates a smaller basket size than it did two to three years ago. And the situation is not improving. In Jan. 2022, growers shipped 85,000 pounds of flower. In Jan. 2024 growers shipped 345,000 pounds of flower.

Growers and manufacturers are seeing more delayed payment for product — as well as outright theft. With bankruptcy not an option for cannabis companies, a few Michigan retailers have sold their inventory,

abandoned the store, and fled town, leaving growers and product manufacturers with tens of thousands of dollars in unpaid invoices.

Looming on the horizon: Ohio legalization. Michigan has benefitted from out-of-state customers from bordering Wisconsin, Indiana, and Ohio, where cannabis sales are illegal. That will soon change, however, as Ohio's first state-licensed stores are expected to open in late 2024 or early 2025.

Michigan: Annual sales by region



Data: Michigan Cannabis Regulatory Agency

Market in Depth: Ohio

Where will the next cannabis hiring boom happen? Easy answer: Ohio.

Following passage of Issue 2 in Nov. 2023, adult-use cannabis possession is now legal in the Buckeye State. Fully licensed retail stores are expected to open in late 2024 — and dispensaries are already hiring for the coming boom.

With a population of nearly 12 million, an Ohio market that captures full consumer demand would bring in roughly \$3.4 billion annually and support 45,000 to 50,000 jobs. That won't happen overnight — but we expect a fast ramp-up from today's 7,400 jobs to about 15,000 by early 2025.

Many of Ohio's 120 operating medical marijuana dispensaries (which will receive the first adult-use licenses) are already hiring for the anticipated adult-use opening. The head of the ODCC expects 250 to 300 operating stores by the end of 2026.

Convenience and price are the major factors in converting unlicensed-market consumers to licensed-market consumers. Ohio's tax rate of 13% (10% state, 3% local) should keep pricing competitive, but Issue 2 capped the total number of retail outlets at 350. That limit may need to be revised upward if Ohio wants to fully migrate its cannabis consumers.

For comparison, Michigan, with 10 million residents, has licensed 760 stores and captured 85% to 90% of the state's cannabis demand.

If Ohio can move licenses out the door with moderate efficiency, we expect a ramp-up similar to Missouri's. That state went from \$200 million to \$1.3 billion in annual sales within the space of two years.

Key dates to watch:

June 7, 2024:

Deadline for the Ohio Division of Cannabis Control (ODCC) to publish application materials. The first round of applications will be open to currently-licensed medical marijuana operators only.

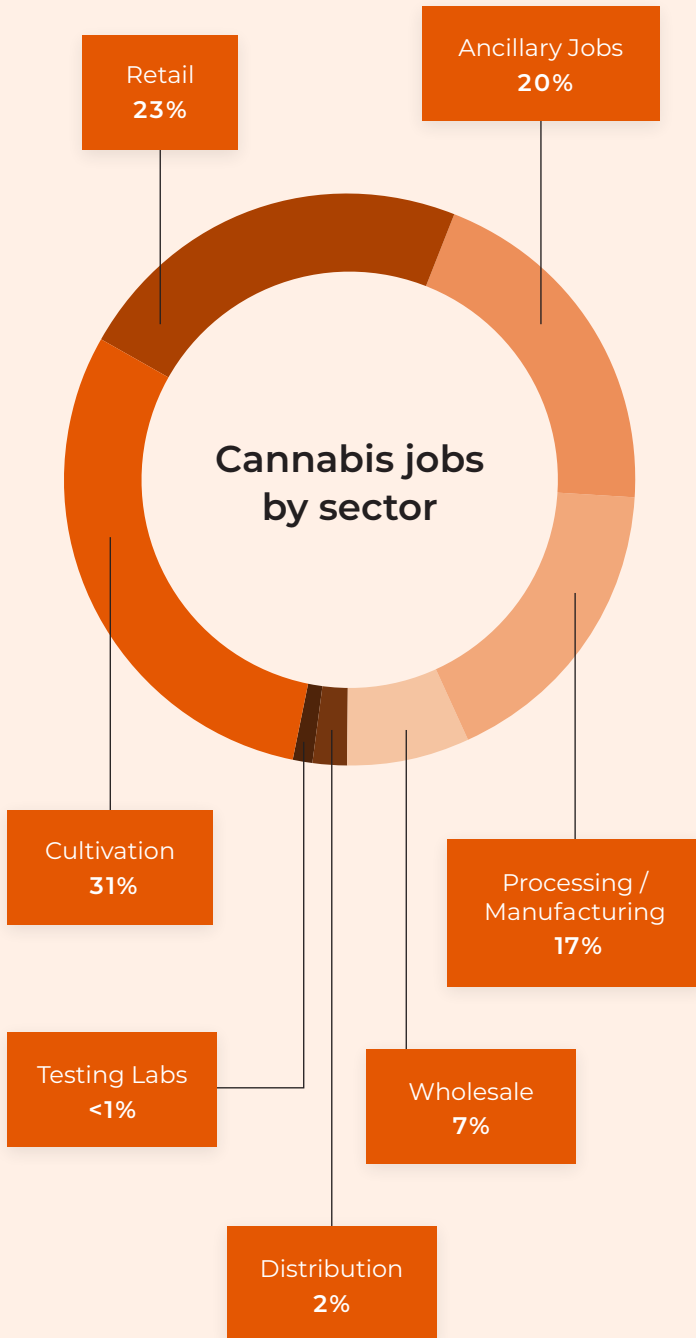
Sept. 7, 2024:

ODCC expected to issue the first provisional adult-use licenses. Adults 21 and older will be able to purchase as soon as a dispensary's license goes live.



What is a cannabis job?

America's legal cannabis industry supports 440,445 jobs with more than \$28.8 billion in annual revenue. Here's a breakdown of job sectors within the industry.



What's it pay?

Cultivation

Director of Cultivation: \$90k – \$140k

Grow Manager: \$60k – \$80k

Grower / Horticulturalist: \$14 – \$31 / hour

Trimmer: \$14 – \$27 / hour

Extraction

Extraction Manager: \$60k – \$100k

Quality Manager: \$55k – \$120k

Chemist: \$75k – \$110k

Extraction Technician: \$15 – \$32 / hour

Manufacturing

Director of Manufacturing: \$100k – \$140k

Production Supervisor: \$50k – \$75k

Edibles Specialist: \$15 – \$25 / hour

Production Technician: \$15 – \$25 / hour

Retail

Director of Retail: \$80k – \$120k

Store Manager: \$70k – \$90k

Inventory Manager: \$40k – \$80k

Assistant Manager: \$45k – \$75k

Budtender: \$14 – \$22 / hour

Delivery

Delivery Manager: \$50k – \$80k

Dispatch Agent: \$19 – \$25 / hour

Warehouse Associate: \$14 – \$20 / hour

Delivery Driver: \$15 – \$22 / hour

*Salary data via the [Vangst 2024 Cannabis Industry Salary Guide](#)



What's Next: A look ahead at 2024

By Beau Whitney, *Whitney Economics*

The U.S. cannabis industry experienced a solid 10.3% year over year growth rate in 2023 coming off a sluggish 4.5% growth rate the year before. Although many industries would be overjoyed to have such growth, a 10% gain is modest in the cannabis world. When we look under the hood, the U.S. market shows some interesting nuances right now.

Mature markets may continue to fluctuate in revenue and profitability

Out of the 38 markets in the U.S. that provide legal medical or adult-use access, 10 states experienced negative growth last year. Due to oversupply and falling prices, some states saw an increase of unit volumes while revenue declined. Other states struggled to capture new legal customers from the unlicensed market. Those oversupply issues aren't going away anytime soon — and neither are the resulting revenue challenges.

Growth is being driven by new state markets

Of the seven states that experienced significant growth, only one — Michigan — could be considered a mature market. Missouri continues its impressive run, experiencing nearly a \$1 billion increase in annual revenue from 2022. New Jersey, Connecticut, New York, Maryland and Rhode Island saw strong gains as well. We expect this trend to continue: A slowing of negative growth in mature states, with new markets pushing gains in cannabis jobs nationally.

Macroeconomic conditions suppressed growth in the cannabis industry

High interest rates, reduced access to capital, and lack of federal cannabis reform all put a damper on expansion and job demand. As we predicted last year, a tougher financial market

limited the ability of new license holders to open their doors. This hurt newer and emerging markets the most.

Cash flow constraints and lack of profitability are forcing consolidation, driving smaller operators out

A recent Whitney Economics report found that the U.S. legal cannabis market had a total of \$3.8 billion in delinquent payments. That's nearly 2 months' worth of 2023 total retail sales. Running a company for a full year on 10 months' worth of revenue is unsustainable. For small businesses the ability to operate in this low-margin environment is untenable, and they are disproportionately suffering the brunt of this issue. Many state cannabis regulators are actually incentivizing these late payments by not holding licensees accountable for lack of payments. Two positive examples: Washington State, which requires cash on delivery; and New York, which now considers payment history in an operator's licensing status.



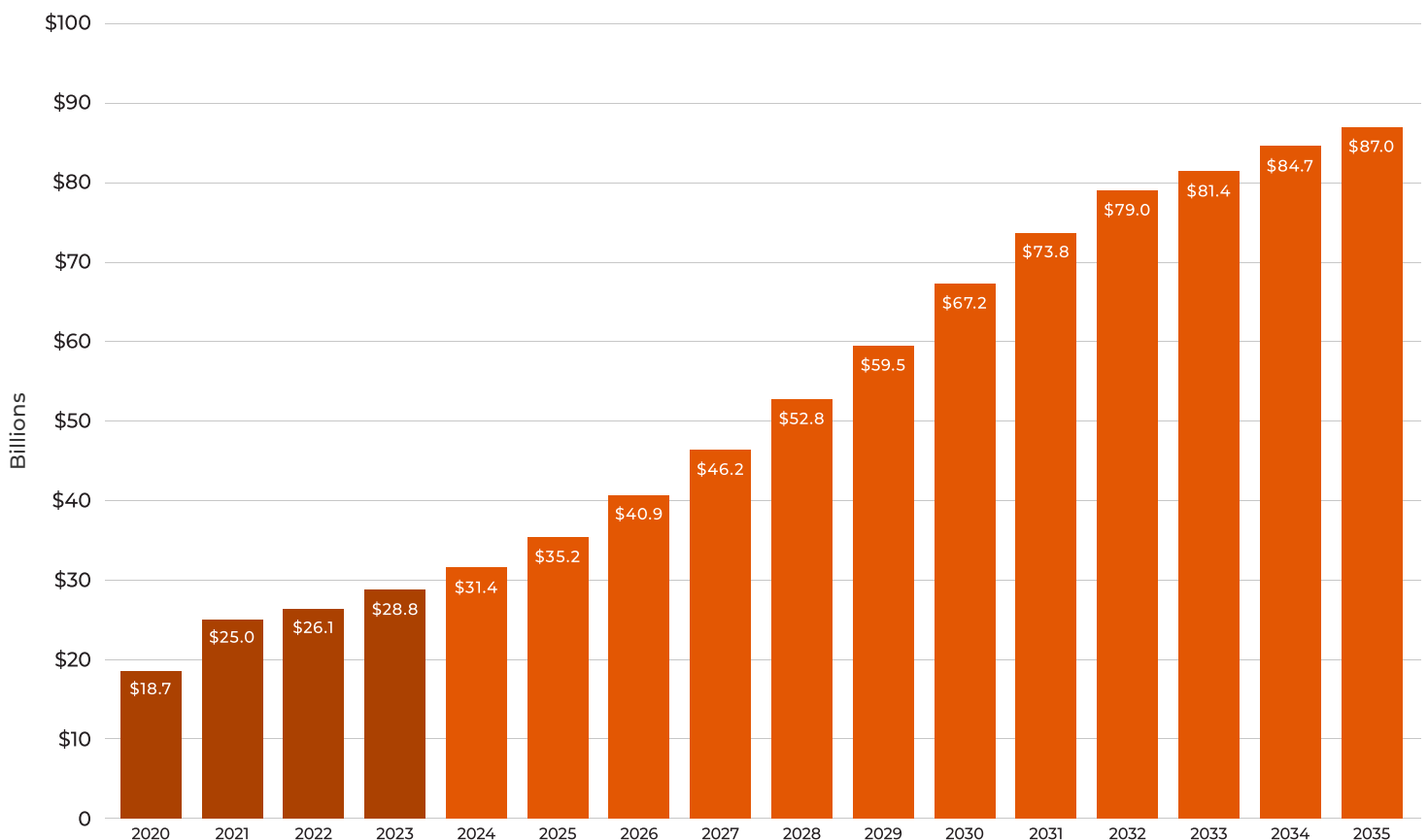
Time for regulators to learn and adapt

Many of the issues affecting the industry could be easily remedied through state and federal reform. State regulators could drive more accountability on payments through warnings, license suspensions, or denied license renewals. State oversupply troubles could be solved by balancing grow licenses (read: decrease) with retail licenses (read: increase). Federal policy makers could help by breaking through the logjam of legislation related to banking, taxes, and interstate commerce.

Despite the challenges, growth should continue through 2030

In 2023 our legal revenue forecast of \$29.2 billion came in at \$28.8 billion (98.3% accuracy). This year we're looking for 9.1% growth, with sales increasing to \$31.4 billion. By 2030, we predict this will grow to \$67.2 billion as more states legalize and more consumers participate. That growth will create more jobs, more wages, more taxes, and more ancillary support. Despite the challenges, this seems like a good problem to have as an industry.

Whitney Economics U.S. Legal Cannabis Forecast (2020–2035)



Methodology

The Vangst Jobs Report is an annual survey of employment in America's legal cannabis industry. Vangst and Whitney Economics have partnered to produce a state-by-state tally of jobs supported by legal cannabis.

We count cannabis jobs because federal labor agencies don't. The federal prohibition of cannabis forces the U.S. Department of Labor's Bureau of Labor Statistics to pretend that hundreds of thousands of American cannabis workers don't exist.

We count cannabis jobs because cannabis jobs count.

The Jobs Report incorporates state sales revenue data, cannabis employment studies, state economic forecasts, industry surveys, cannabis worker card data, medical marijuana patient counts, harvest reports, and private investment information to calculate the number of full-time equivalent (FTE) jobs supported by legal cannabis.

The resulting data offers a glimpse into the health of each state's cannabis industry, and the importance of legal cannabis — America's sixth most valuable cash crop — to the national economy.



About the authors

Vangst is the cannabis industry's hiring platform. Vangst helps cannabis companies find the talent they need to grow their business. From on-demand gig workers to trained and credentialed full-time employees, Vangst has built the industry's go-to talent marketplace for all cannabis hiring. Vangst is proud to work with 1,200+ of the cannabis industry's leading businesses.

Bruce Barcott is an award-winning writer, editor, and executive producer of policy reports and data-based investigations. A former Guggenheim Fellow in nonfiction, he is the author of *Weed the People: The Future of Legal Marijuana in America* and the *Time* special issue, "Marijuana Goes Main Street." His features and investigations have appeared in *The New York Times Magazine*, *The Atlantic*, *Rolling Stone*, *Harper's* and other national publications.

Beau Whitney is the founder and Chief Economist at Whitney Economics, a global leader in cannabis and hemp business consulting, data, and economic research. His work applying economic principles to create actionable operational and policy recommendations has been recognized by governments and throughout the economic world.



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