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Opt-Out Report 2022

'Opt-out' towns are encouraging illegal marijuana sales

Local leaders are protecting illicit dealers, and most don't realize it.

By Bruce Barcott and Beau Whitney

America's legal cannabis states have a problem.

Too many local elected officials are supporting their town's illegal marijuana dealers. Most of those officials don't realize they're doing it.

In legal cannabis states like New Jersey, California, and New York, city and county council members are unwittingly launching economic protection programs for illegal weed dealers by "opting out" of legal, regulated sales. By opting out, they're voting to keep their local illegal marijuana markets flourishing.

Statewide marijuana legalization laws often allow local municipalities to regulate legal sales in ways appropriate for their communities. Instead of regulating, however, some leaders re-institute prohibition, banning all legal sales. They opt out of regulation entirely.

Now, new data analyzed by Leafly and Whitney Economics reveal the perils of opting out. Cannabis already circulates in every town in America. A local ban on legal stores effectively creates an economic protection zone for illegal street sellers. Adults who legally enjoy cannabis are forced to purchase sketchy, untested, illegal products in unsafe environments.

That's a public health concern for adult consumers as well as parents and teens. Products sold on the illicit market are unregulated and potentially toxic. The 2019 EVALI lung disease outbreak, which resulted in 2,800 hospitalizations and 68 deaths, was caused by tainted cannabis vape cartridges sold on the illicit market — not in legal, regulated stores. And illicit sellers offer those products to anyone regardless of age.

By opting out, local leaders:

- **Protect local illegal marijuana dealers**
- **Encourage adult consumers to purchase illegal products**
- **Put public health at risk by allowing the circulation of untested products**
- **Sustain illegal sales to local teens**
- **Turn away local jobs and tax revenue**
- **Waste taxpayer money**



The opt-in effect



Adults want to purchase and consume legally



State legalizes cannabis for adults



Local leaders regulate legal sales



Adults purchase from local licensed cannabis stores



Safe environments, convenience, and high-quality products convert illicit consumers into legal consumers



Local illicit sellers lose adult customers, see market dry up



Declining sales force illicit sellers to get out of the game



Fewer illicit sellers = fewer opportunities for underage marijuana purchase and use

The opt-out effect



Adults want to purchase and consume legally



State legalizes cannabis for adults



Local leaders refuse to regulate legal sales



Adults purchase from local illicit cannabis sellers



Local illicit sellers, protected from competition, see boost in sales



Booming sales encourage more illicit sellers to enter local market

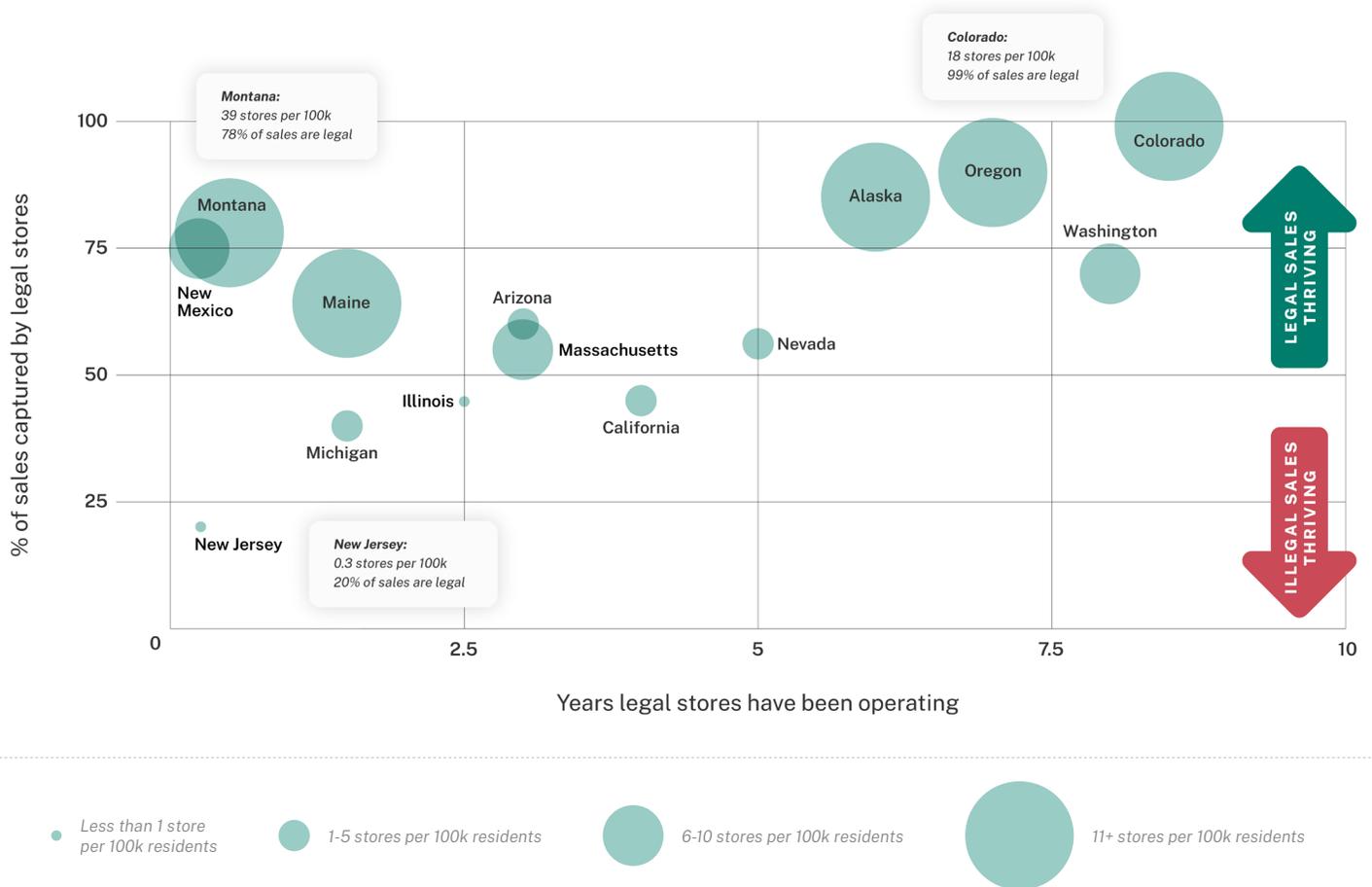


More unlicensed, potentially toxic products circulate in community



More illicit sellers = more opportunities for underage marijuana purchase and use

Legal regulated sales lead to fewer illegal street sales



The correlation between opt-out decisions and illegal marijuana sales can be seen in a new data visualization (above) created by Leafly and Whitney Economics. We gathered data on legal state-licensed cannabis sales, access to legal cannabis stores, legal market maturity, and each state’s true annual adult cannabis demand (legal + illegal sales) as calculated by Whitney Economics.

Time-plotting those factors revealed a consistent correlation between consumer access to legal cannabis stores and the curtailing of a state’s illegal marijuana market.

The takeaway was clear: The more legal regulated stores, the less illicit street sales.

States with the fewest legal cannabis stores per capita — like New Jersey, California, Illinois, and Michigan — were more likely to have the most robust illegal marijuana markets. States with the

most stores per capita — like Colorado, Oregon, and Alaska — were more likely to have put local illegal sellers out of business.

Those three early legalization states have effectively winnowed the illicit marijuana market down to a nub — more than 80% of all consumed cannabis comes from state-licensed retail stores. Other states, including California and Illinois, are still struggling to move adult consumers from the illegal to the legal market.

The correlation is especially pronounced within the three states that opened regulated adult-use stores in 2022. Montana opened more than 400 adult-use stores, while New Mexico opened nearly 120 — and quickly captured 75% or more of each state’s total cannabis demand. New Jersey opened only 26 legal stores — and captured less than 20% of the state’s total demand.

There's a strong correlation between legal cannabis stores per capita and legal market capture.

States with roughly 20 to 40 legal regulated stores per 100,000 residents, in general, have captured 80% to 90% of all cannabis sales in the legal market.

States with single-digit stores per 100,000 residents tend to struggle to capture legal sales, with the illicit market still accounting for 30% to 50% of sales.

States with less than one store per 100,000 residents remain dominated by the illegal street market.

Stores per capita as a key indicator of legal success

State	Stores per 100,000 residents	Number of stores	Residents per store	Legal sales %	Illegal sales %
Montana	39	434	2,534	78%	22%
Alaska	20	149	5,000	85%	15%
Oregon	19	809	5,162	90%	10%
Colorado	18	994	5,734	99%	1%
Maine	11	145	9,241	54%	46%
Washington	6	484	15,496	70%	30%
Massachusetts	6	402	17,097	55%	45%
New Mexico	6	132	15,909	75%	25%
Michigan	5	478	20,858	40%	60%
California	3	1,031	37,800	45%	55%
Nevada	3	99	30,303	56%	44%
Arizona	2	169	42,603	60%	40%
Illinois	0.8	110	115,454	45%	55%
New Jersey	0.3	26	358,000	20%	80%

Data includes legal adult-use and medical cannabis stores licensed and operating as of July 1, 2022.

Migrating illicit buyers into legal regulated stores

Time plays a role in the migration of cannabis consumers from the illicit market to the legal market. Out of convenience or loyalty, adult purchasers may stick with their illicit cannabis supplier for months or even years after the first legal stores open.

The data in our model indicates, however, that the migration of adult consumers from illegal to legal markets can be hastened with the timely licensing of a sufficient number of stores.

Initial prices in legal stores are higher than street prices, but over time legal supply increases to meet demand and the price of legal cannabis falls.

But adult consumers won't migrate to the legal cannabis market if they don't have convenient access to state-licensed stores. California's experience is the most dramatic example of this dynamic.

New Jersey and Montana offer a stark illustration of the opt-out effect. Both states began operating adult-use cannabis stores in 2022. In both states, existing medical marijuana dispensaries were eligible for the first adult-use licenses.

New Jersey offered its 9.3 million residents access to legal cannabis at only 26 retail stores. Montana offered its 1 million residents access at more than 400 retail stores. Montana offered 39 stores for every 100,000 residents. New Jersey offered 0.3 stores for every 100,000 residents.

The result: Within three months of its Jan. 1, 2022, adult-use market opening, Montana's legal stores had captured more than 75% of the state's total cannabis market demand (legal + illicit sales). With one store for every 2,500 residents, Montana eliminated three-quarters of the state's illicit marijuana market.

New Jersey, by contrast, offered its residents few legal options, with only one store for every 358,000 residents. At the three-month mark, New Jersey's legal market had captured less than 20% of the state's total marijuana sales. Illegal street sellers still command more than 80% of the Garden State's marijuana market.



Legal stores win over consumers with their wide product selection, high quality lab-tested goods, brand consistency, and a safe, friendly shopping environment.

Consumers are already buying — they just want to buy legally

Opt-out decisions are often based on the misconception that regulated cannabis stores introduce marijuana into a community. In fact, adults in every community purchase and enjoy cannabis, legal or not. State-regulated stores allow them to do so in legal, safe, professional environments that exclude minors.

Without legally regulated stores, opt-out communities discard all the tools needed to handle cannabis appropriately. As Rhode Island State Sen. Joshua Miller noted earlier this year: “Since Rhode Islanders can already access cannabis just across the state border or on the illicit market, we experience all the challenges without any of the safeguards or resources that our neighboring states have.”

The cumulative effect of these local opt-out decisions can be profound. After more than four years of regulated sales in California, illegal street sellers still satisfy 55% of the state’s adult marijuana demand. It’s no coincidence that 62% of California municipalities have opted out of regulated retail sales.

The opt-out problem now threatens the success of legal markets in New Jersey

and New York. In New Jersey, 71% of local municipalities have prohibited the sale of legal state-regulated cannabis. In New York, 50% of all municipalities have chosen to opt out.

Rhode Island legalized cannabis statewide in May. In November, voters in more than 30 municipalities will consider ballot measures that would allow or prohibit legal sales. Cannabis already circulates in those communities. Voters will decide whether it will be licensed and regulated, or sold without any safeguards whatsoever.

An observation made by one of the leaders of Washington State’s legalization campaign in 2012 still rings true today: When given a chance, most people prefer to follow the law. The experience of the past decade — in Washington, Colorado, and other states — has shown that consumers do prefer to buy legally. They just need to be given the opportunity.

Access alone doesn’t ensure the total elimination of illegal marijuana sales, of course. Appropriate cannabis tax rates also play a role, allowing legal stores to compete against untaxed illegal products. Reasonable marijuana taxes alone won’t do the job, though. No matter what the price or tax rate, adult cannabis consumers can’t buy what they can’t find.



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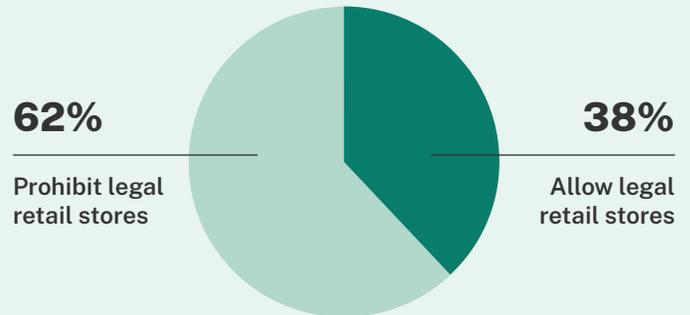
Prohibition revived at the local level

Over the past decade, 19 states have legalized cannabis for adult use. Retail cannabis stores now operate in 14 of those 19 states. As of July 1, 2022, 45% of Americans live in a legal adult-use state.

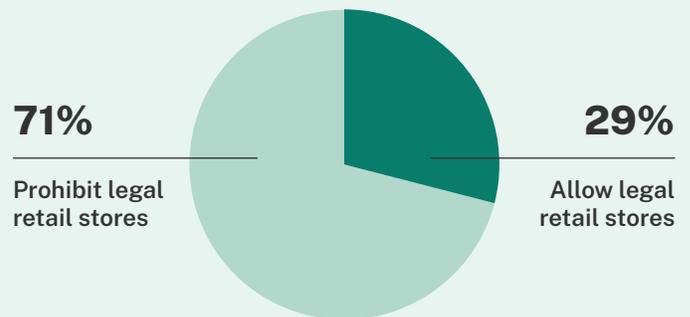
Many of those statewide legalization laws allow for a certain amount of local control. Counties, cities, and towns are allowed to set zoning limits on cannabis businesses. In some states this has resulted in a revival of prohibition at the local level, even in communities that overwhelmingly voted to end it at a statewide level.

Percentage of municipalities that opt out in three legal cannabis states

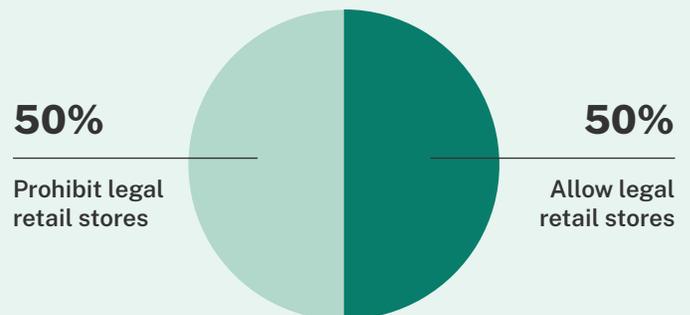
California



New Jersey



New York

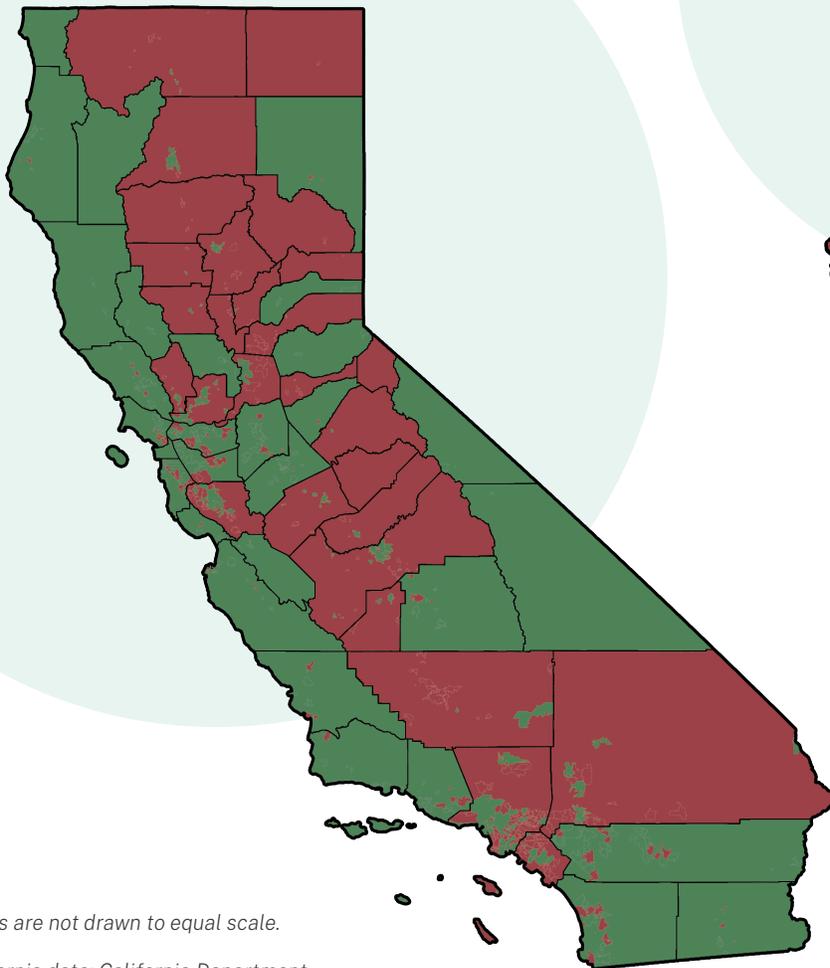


Banning regulated stores allows illegal marijuana markets to flourish

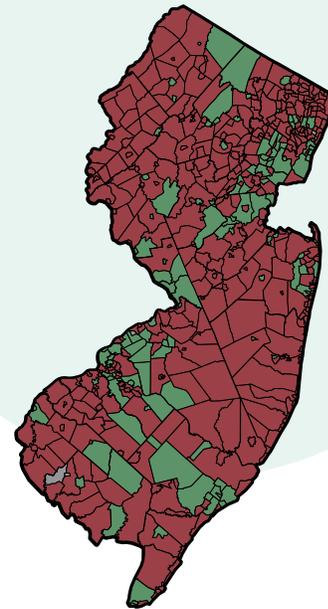
Voters passed legalization statewide in California and New Jersey. But local municipalities have re-imposed prohibition by banning cannabis stores. By doing so, they effectively create economic protection zones for illegal street sellers. These maps show where cannabis sales are regulated, and where they remain unregulated.

Map of municipalities that opt out of legal cannabis sales

California



New Jersey



-  Cannabis sales regulated and legal
-  Cannabis sales unregulated and illegal

**Maps are not drawn to equal scale.*

California data: California Department of Cannabis Control, July 2022.

New Jersey data: Susanne Cervenka and Mike Davis, Asbury Park Press, USA Today Network, April 2022.



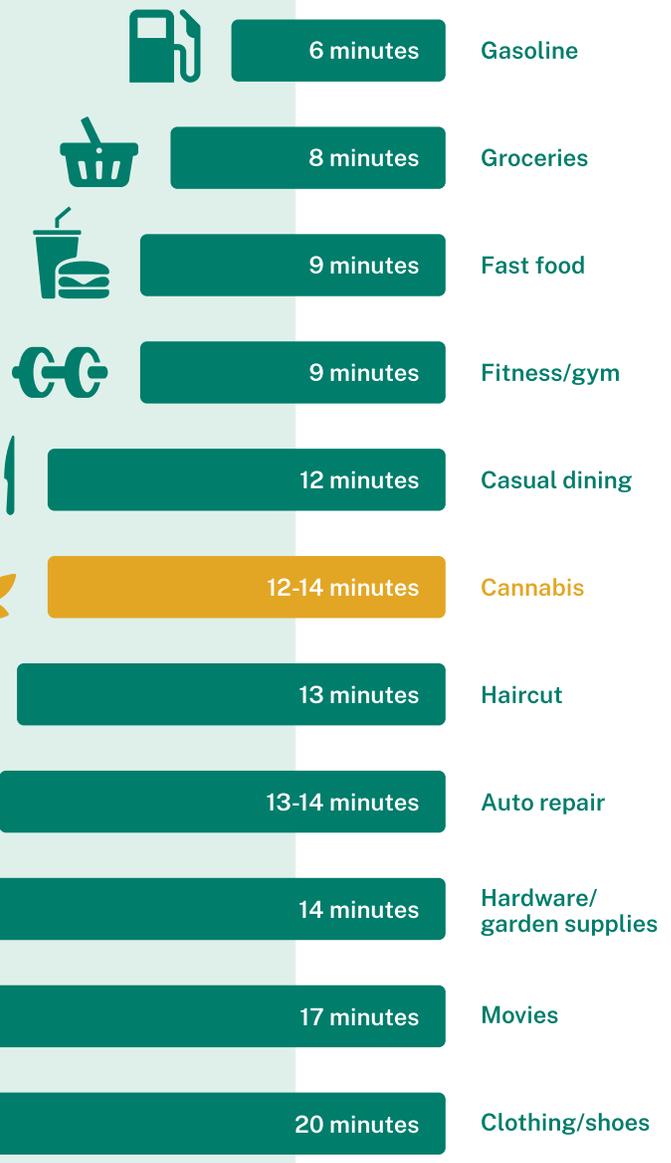
Mapping the customer reach of a legal cannabis store



How far will consumers travel to purchase cannabis legally?

A 2016 Access Development study found that 87% of consumers typically travel 15 minutes or less to make everyday purchases. The more frequent the purchases, the less time consumers are willing to travel.

According to data compiled by New Frontier Research, most cannabis consumers make a legal purchase roughly two to three times per month. That allows us to place cannabis somewhere in the range of casual dining and hardware/garden supplies in the table to the right. We estimate that cannabis consumers are willing to travel between 12 to 14 minutes from home to make a legal purchase.



New Jersey

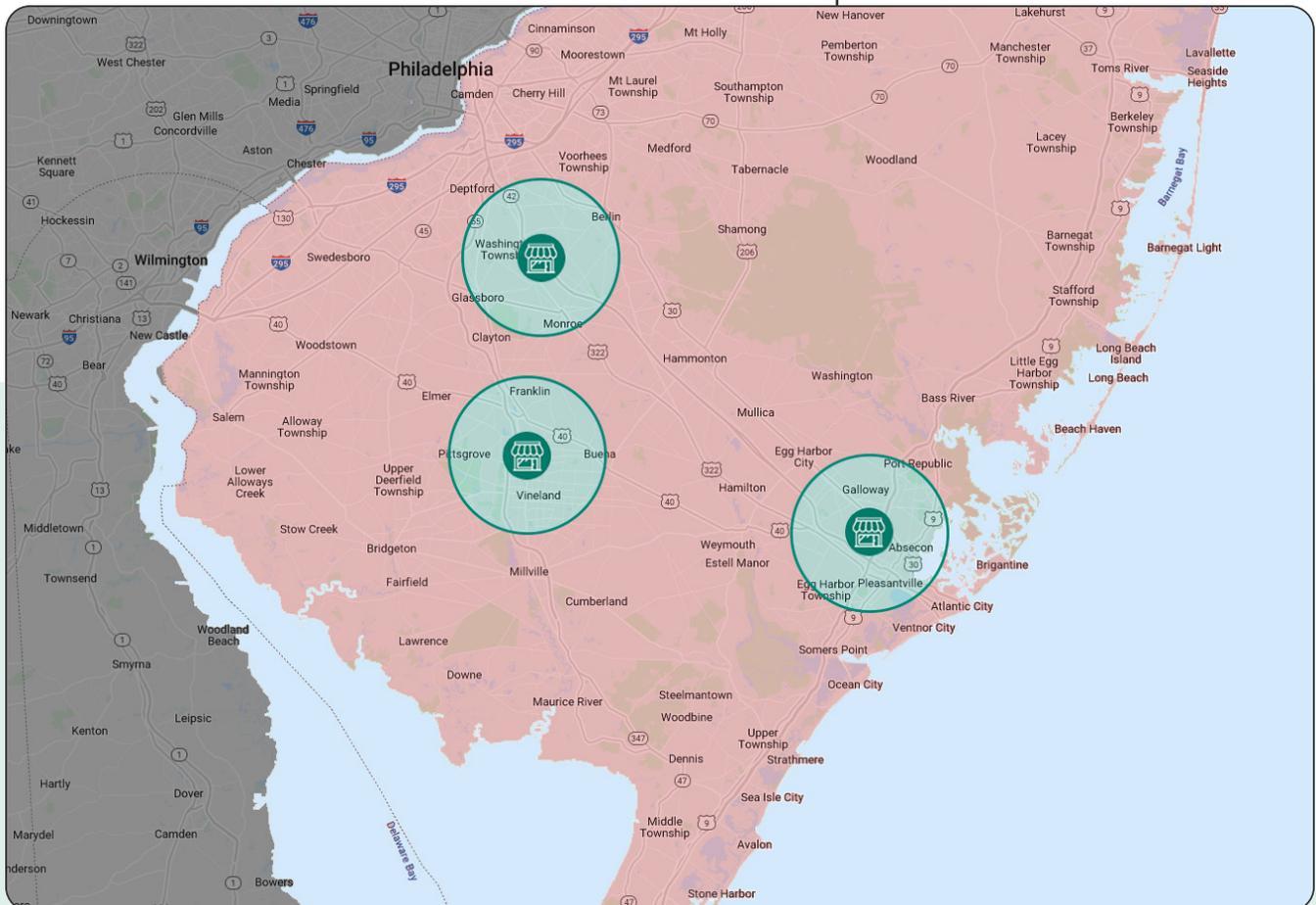
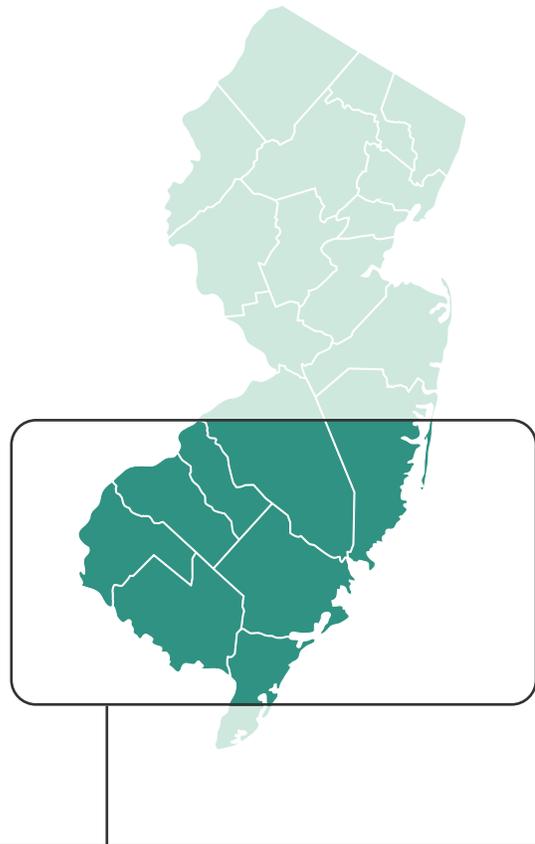
As of July 2022, only three adult-use cannabis stores served Southern New Jersey.

We plotted a 14-minute drive time radius around those three stores on the map below.

Because of speed limits and traffic, a 14-minute radius surrounding those three stores translates into about a six-mile radius circle. We plotted these on a map of Southern New Jersey below.

The three stores have an effective drawing area of roughly 330 square miles. That leaves more than 3,400 square miles underserved in Southern New Jersey by state-licensed cannabis stores.

Marijuana is already in Southern New Jersey. It's been circulating there for decades. By refusing to regulate cannabis in their counties and townships, local elected leaders have placed 90% of the region in an economic protection zone for illegal marijuana sellers.



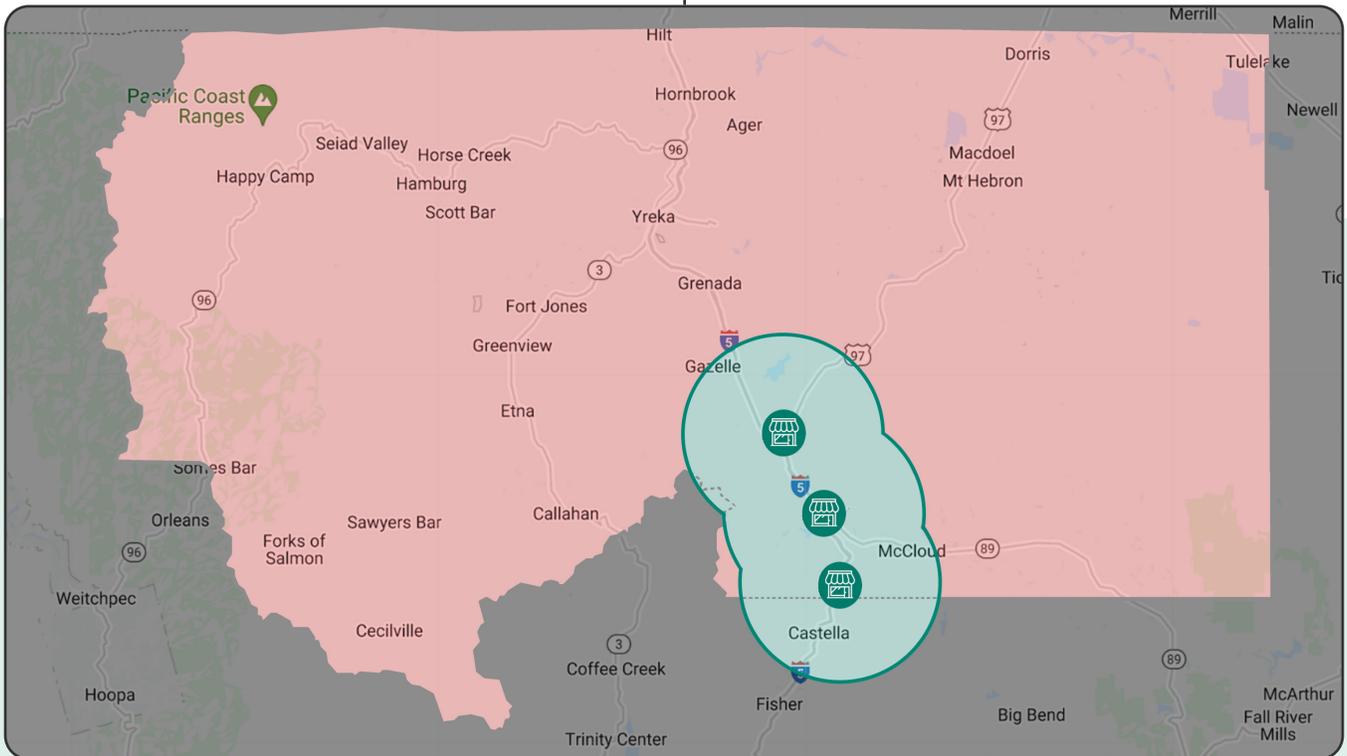
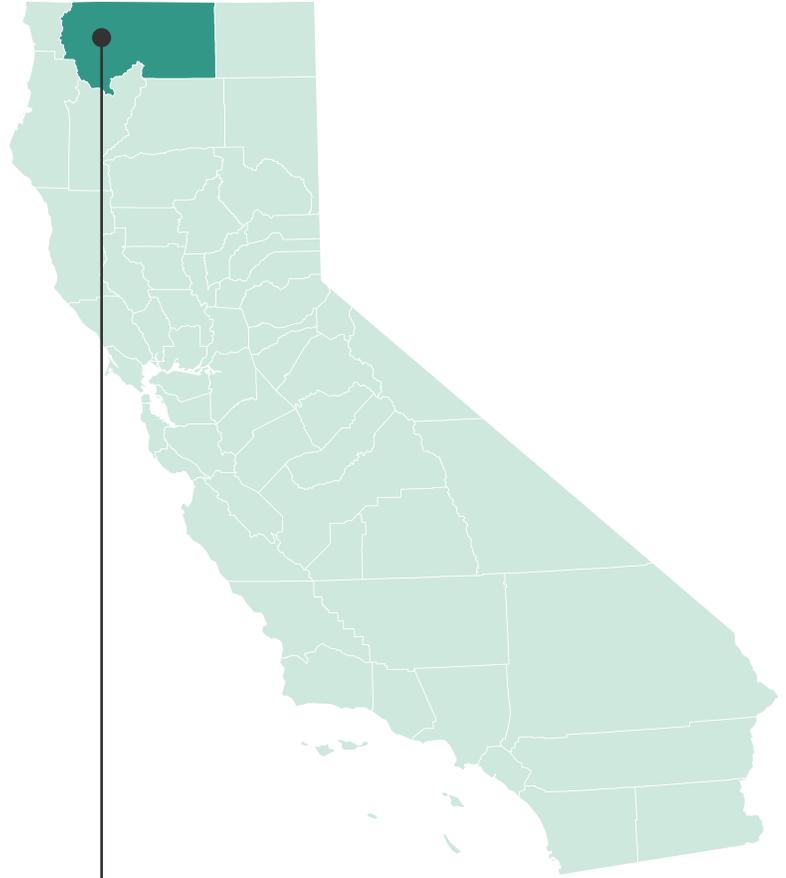
California

Siskiyou County, in Northern California, encompasses 6,347 square miles. The county's only regulated cannabis stores are in the towns of Weed, Mt. Shasta, and Dunsmuir.

A resident of Yreka, the Siskiyou County seat, must drive 60 miles round-trip to purchase legally at the nearest store in Weed. Some of the mountain towns in California's far northeastern corner are a three-hour roundtrip from the nearest legal store.

The cannabis stores in Siskiyou County have a consumer reach of roughly 940 square miles. That means the elected leaders of Siskiyou County have effectively declared 5,400 square miles – 85% of the county – an economic protection zone for unregulated and illegal marijuana sellers.

Here's what that looks like on a map of Siskiyou County:





Local regulation, not local prohibition, is the right way to handle cannabis

Illegal marijuana products are a risk to public health

Legal, state-licensed cannabis products are subject to strict regulations that safeguard public health. Those rules include mandatory lab testing for product purity and potency. They also limit the amount of THC per product as well as the amount of cannabis an adult may purchase during a 24-hour period. State-licensed products and stores must also abide by strict limits on advertising and promotions. Product transfers and sales are meticulously documented through track-and-trace systems, which are required by law.

These regulations ensure that state regulators, health officials, and retailers have the ability to find and halt sales, and recall products that may pose a hazard to consumers.

Here's how that works in real life. In January 2022, a common lab test (required by state law) caught a batch of California cannabis flower contaminated with mold. The California Department of Cannabis Control (DCC) quickly issued a mandatory recall

notice to retailers and consumers. Because of the state's rigorous track-and-trace requirements, the DCC notice contained the exact product strain, brand name, batch number, dates of sale, and photos of the jar in which it was sold. The DCC also posted exactly which licensed stores carried the product and recall batch.

None of that would have been possible without licensing and regulation.

Without lab testing and a recall mechanism, hazardous products circulate unchecked. In 2019, one of the earliest outbreaks of EVALI, the deadly vape lung disease, occurred in the rural California town of Hanford.

At the time, no legal cannabis stores were open or allowed in Hanford or the rest of surrounding Kings County. With no local legal options, residents resorted to purchasing cannabis vape cartridges on the illicit market. Illicit cartridges tainted with Vitamin E acetate ultimately sent seven local residents to the hospital. It took months to discover where the products originated and which ingredient was the culprit.



Teen marijuana use does not increase when state-regulated stores open

As more states legalize and regulate cannabis, more data are becoming available to track the effect of regulated sales on teen marijuana use. Studies in this area should be viewed with caution, as most rely on self-reported use in anonymous surveys, and truthfulness in self-reporting can be influenced by a fear of self-incrimination and punishment.

With that caveat, most research has not found a dramatic rise in teen cannabis use connected to the passage of legalization laws.¹ Instead, a preponderance of studies find a slight decrease in teen use following the adoption of adult-use legalization and the opening of state-licensed and regulated stores.

Nora Volkow, director of the National Institute on Drug Abuse (NIDA), noted in early 2022 that teen use had not increased even as more states have legalized. "One of the things that also certainly surprised me," Volkow said, "is [that] prevalence rates of marijuana use among teenagers, have been stable despite the legalization in many states."

¹ SAMHSA 2020 report: "National Survey on Drug Use and Health, Substate Age Group Tables," published Oct. 2021.



Minimum age marijuana laws are effective

State minimum-age laws act as a filter, cutting off access for minors. Street sellers may continue to offer cannabis, of course, but a successful legal market will dramatically shrink a street seller’s customer base.

That creates a natural economic incentive to abandon illegal selling and join the legal industry — or find another line of work entirely. A shrinking pool of street sellers results in fewer options for minors to obtain cannabis.

Independent studies have found minimum-age compliance at state-licensed cannabis stores to be nearly 100%, far higher than compliance at alcohol stores.² For cannabis stores, age compliance is in their economic self-interest. If those stores don’t verify every customer’s ID, they risk losing their licenses — which would shutter the store and result in the loss of millions of dollars.

Street sellers, by contrast, can return to business even after being arrested. Their ID check compliance is a steady 0%.



Stopped at the front door: Independent studies and agency enforcement operations have found ID-check compliance at legal cannabis stores to be at or near 100%.

² Lisa Blumerman, NORC Project #8519 (University of Chicago), “Examination of Current Minimum Legal Marijuana Use Age 21 Laws in California,” 2020.

Opting in creates local jobs and saves taxpayer dollars

Legal cannabis now supports 428,000 American jobs³. In 2021, legal adult-use cannabis sales generated \$3.7 billion in tax revenue, but not in cities and counties where those sales were banned.

Regulating legal sales creates local jobs and captures tax revenue that can be used for local programs and construction projects.

By prohibiting legal sales, opt-out towns double down on a losing Drug War strategy that harms local residents and wastes taxpayer dollars.

Two counties in California illustrate the stark outcomes involved in the choice between opting in and opting out.

In Southern California's San Bernardino County, elected officials banned all cannabis businesses. Instead of taxing and regulating the legal cannabis trade, county officials spent \$3 million and countless hours of law enforcement time finding, raiding, and arresting illegal cannabis growers.

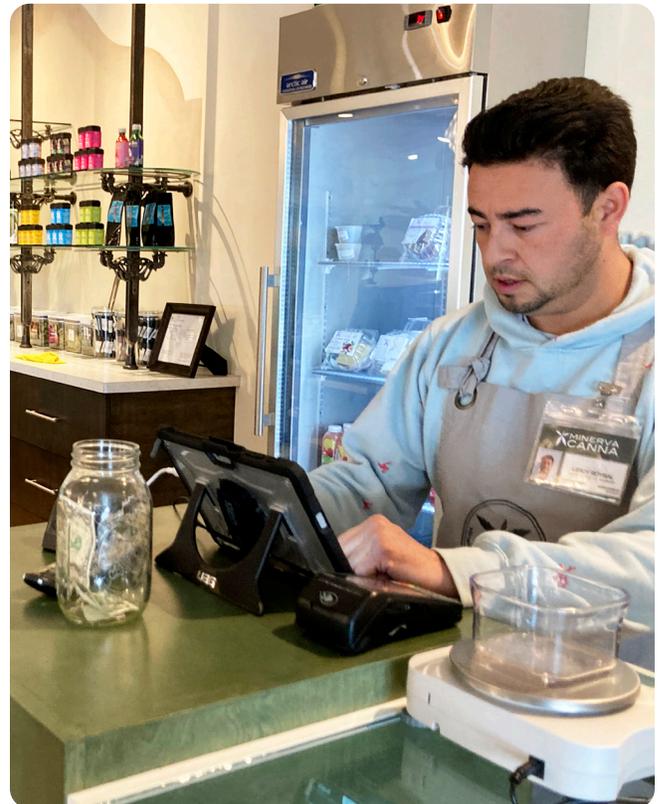
In the past year, the San Bernardino County Sheriff's Office has reported seizing and destroying nearly \$800 million worth of cannabis plants and products from illegal growers. That sounds like impressive work — until you consider the alternative.

With an appropriate cultivation tax of 1%, \$800 million in legal state-licensed cannabis plants would have brought San Bernardino County roughly \$8 million in recurring annual revenue. Hundreds of local jobs could have been created. Instead, county leaders chose to forego an \$8 million budget gain in favor of a \$3 million budget loss.



By contrast, California's Yolo County, east of Sacramento, chose to regulate and tax legal cannabis businesses. It's 1/20th the size of San Bernardino County, with 1/10th the population of San Bernardino County.

Hundreds of jobs have been created by Yolo County's regulated retail stores and licensed cannabis farms. The county brings in roughly \$1.5 million per year in local cannabis tax revenue. In 2021 that money helped fund local water infrastructure improvements, traffic bollards, fire response, a crisis nursery, mental health services, a recreational swimming pool, a levee project, the local sheriff's department, and the county cannabis regulation office itself.



³ Barcott and Whitney, "Leafly 2022 Jobs Report," Feb. 2022



Making change, moving forward, and opting in

Voters have discovered the disadvantages of opting out — and they’re fighting back.

“Voters have lost their patience,” says Hirsh Jain, a political consultant who tracks California cannabis campaigns. Jain recently told the state news service CalMatters: “They might be willing to cut their elected officials some slack, but after a while they’re going to take matters into their own hands.”

Local leaders are also reconsidering early opt-out decisions. Leaders in the town of Healdsburg, in Sonoma County’s wine country, are reconsidering their local adult-use ban after realizing that regulated cannabis sales would create local jobs and bring \$500,000 in annual tax revenue — with little to no downside. In November, Healdsburg voters will decide whether to regulate and gain \$500,000, or continue to protect local illicit marijuana dealers.

In New Jersey, some local leaders are also reconsidering earlier opt-out decisions. In Paramus, Mayor Richard LaBarbiera is working to reverse his city’s 2021 opt-out decision. He sees nearby Rochelle Park collecting 2% in local tax revenue from every sale at the thriving Ascend cannabis store and wonders why his town isn’t doing



the same. “To say ‘no’ to this type of windfall and not pass some of those gains on to taxpayers is reckless and irresponsible,” LaBarbiera has said. “It is a wasted fiscal opportunity for Paramus.”

Legal cannabis regulation works. It puts illegal marijuana dealers out of business and gives minors fewer opportunities to access weed. It protects public health by keeping tainted products out of circulation. It allows law-abiding adults to abide by the law, while creating local jobs and tax revenue.

Opting in: It’s the right thing to do.

Appendix

Notes on Methodology

The data in Leafly's 2022 Opt-In Report derives from a variety of public and private sources.

Unless otherwise noted, data cited by Leafly and Whitney Economics represents market conditions as of July 1, 2022. Cannabis sales figures and active license numbers are dynamic. We chose July 1, 2022, as a firm point-in-time mark to ensure data completeness from all states under review.

Number of legal cannabis stores per capita is derived using public licensing data released by state cannabis regulatory agencies. State population is current as of the 2020 US Census.

Percentage of cannabis sales captured by legal market was derived by comparing each legal state's annual cannabis sales with that state's Total Market Estimation.

Total Market Estimation (TME) is defined as the value of total cannabis sales in a calendar year, regardless of the legal status of the product. In this report, TME is based on a Whitney Economics model that assumes approximately one-third of the adult population has consumed cannabis at least once in the past year. Within that assumption are other proprietary calculations regarding consumer demographics, purchase frequency, average basket size, and other factors. This finding differs from other models — such as the annual SAMHSA National Survey on Drug Use and Health, and the annual University of Michigan's Monitoring the Future report — but after corroboration against several data sets and models, Whitney Economics believes its model is a more consistent top-line number for total consumer demand.

Further research

Underage marijuana use rates, post-legalization:

Examination of Current Minimum Legal Marijuana Use Age 21 Laws in California, Lisa Blumerman, NORC (University of Chicago), August 2020.

SAMHSA National Survey on Drug Use and Health, 2018-2020, published October 2021.

2021 Monitoring the Future Panel Study Annual Report, University of Michigan / NIDA, published December 2021.

Prevalence of Cannabis Use in Youths After Legalization in Washington State, Julia Dilley, JAMA Pediatrics, Dec. 19, 2018.

Age/ID compliance rates in legal states:

Washington State LCB checks: Cannabis compliance rates improved from 95% in 2019 to 96% in 2021, via *Patch.com* report.

Examination of Current Minimum Legal Marijuana Use Age 21 Laws in California, Lisa Blumerman, NORC (University of Chicago), August 2020.

Pseudo-Underage Assessment of Compliance With Identification Regulations at Retail Marijuana Outlets in Colorado, David Buller, Journal of Studies on Alcohol and Drugs, Oct. 31, 2016.

Recent Leafly Reports:

Leafly Jobs Report (2022)

Leafly Harvest Report (2021)

Seeds of Change: Strategies to create an equitable cannabis industry (2021)

Debunking Dispensary Myths (2019)

About the authors



Bruce Barcott is a Leafly Senior Editor and the executive producer of Leafly Reports, an ongoing series of in-depth studies on cannabis legalization and the cannabis industry. He is the author of *Weed the People: The Future of Marijuana Legalization in America* and Time Magazine's special issue, "Marijuana Goes Main Street."



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, investment, and business communities.

Edited by **Pat Goggins**

Research contributors: **Marissa Wenzke, David Downs, Max Savage Levenson**

Graphics coordinator: **Justin Sund**

Report designed by **Sasha Beck**

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