



EIGHTH  
REVOLUTION



ARCVIEW  
CONSULTING

# Cannabinoid MONTHLY PLAYBOOK

October 2022





# NOTICE

The information contained in this document is intended for the sole use of the designated recipients. This information cannot be shared. If you have received this information in error, any review, dissemination, distribution, or copying of this information is strictly prohibited and is an infringement of copyrights. Please notify us immediately if you have received this information from a source other than Eighth Revolution or The Arcview Group. Thank you in advance for supporting copyright laws and integrity in the industry.

**For questions or concerns,  
please contact**

[info@8threv.com](mailto:info@8threv.com)

[inquiries@arcviewconsulting.com](mailto:inquiries@arcviewconsulting.com)

516.653.2006

[arcviewgroup.com](https://arcviewgroup.com)

[eighthrevolution.com](https://eighthrevolution.com)

[arcviewconsulting.com](https://arcviewconsulting.com)

# TABLE OF CONTENTS

A Recap of the State of the Cannabis Industry	7
Guaranteeing Payments in Cannabis ft. Daniel Muller	8
Hiring in Cannabis ft. Karson Humiston	9
Election 2022 –Six states to decide on cannabis legalization	10
Jurisdiction Roundup	12
International Update	13

## MARKETS

Minor Cannabinoid Wholesale Pricing	14
Sector Market Analysis	15

## MISCELLANEOUS

Interstate Commerce By: Victoria Litman, LL.M., M.Div., Esq.	16
California Update, By Alex Halperin	19
The Dosing Project: Part IV – Community Reported Outcomes	20
Cannabis Legalization Must Address Monopoly Dangers By Shaleen Title and Matt Stoller	22
Hot In The News	23

# Dear Reader,

We want to thank you for your trust, and, most importantly, your time. With the endless number of resources at your disposal, we appreciate you leaning on us as your guide through the muddy waters of this industry's limitless news and intelligence.

In an industry that changes as aggressively as ours, we can't stress the importance of effective decision-making enough. Though the information in the report is never meant to dictate specific actions or guarantee certain outcomes, we hope that we're able to provide another voice in the room, one that illuminates, simplifies, and supports you.

If you find one area of information more helpful than others and want us to expand on the topic, please never hesitate to reach out. For any suggestions or questions, we can be reached directly at [info@8threv.com](mailto:info@8threv.com)

## Welcome to the Revolution

---



**Bryan Fields**

*Managing Director  
& Co-Founder  
Eighth Revolution*



**Kellen Finney**

*CSO & Co-Founder  
Eighth Revolution*



**David Abernathy**

*Principal  
Arcview Consulting*



**Jason Malcom**

*Principal  
Arcview Consulting*



# IN THIS ISSUE

## October 2022

### Croptober

Kellen Finney, Eighth Revolution

Fall is upon us, and with it comes harvest season for both the hemp and cannabis industries. The hemp CBD industry has slowly become a synthetic minor cannabinoids market, whereas the cannabis industry continues to be dominated by flower. Due to this changing environment, we have determined different information that could provide your organization with significantly more benefits. Over the course of the next three months, we will revamp our trends section to fit the changing environment. For instance, when looking at the derivatives market for the hemp industry, the proliferation of THC-O and HHC has skyrocketed. This is less than a year after Delta 8 was banned in several states. The cat and mouse game between struggling hemp manufacturers and regulators shows no sign of stopping as the myriad of new minors continues to make their way into new consumer products. Prices for both HHC and THC-O increased from last month, showing signs that the demand for these CBD synthetic derivatives is starting to rise. Only time will tell how the battle between manufacturers and regulators will play out in regards to the minor cannabinoid market.

### Big Tobacco: Enemy #1?

Bryan Fields, Eighth Revolution

The cannabis industry continues to fight on. Obstacles seem to exist at almost every turn, with a new threat looming closer and closer each month. Big tobacco likely prefers to fly under the radar as a current threat to the cannabis industry and its operators. Recently, they have come up in conversation more and more about their future aims to “rebrand” into the cannabis space. With fewer and fewer people consuming tobacco and more and more consuming cannabis, this was inevitable. A keen eye should continue to see how they look to pivot into the industry.

“

---

**“If you look at Coke and Pepsi, both companies have recently entered the alcohol industry — their risk-tolerance for regulated products is starting to turn.”**

---

A statement from Vivien Azer at the 2022 Benzinga Cannabis Capital Conference in Chicago

# A Recap of the State of the Cannabis Industry

---

Last month, I attended the Benzinga Capital Conference. If you have never attended, here's my summary of the event.

To start with, the conference is an elite networking event. While it has booths and a robust agenda, the most significant benefit of this event is the ability to connect face-to-face with the industry's decision-makers. Other shows like MJBIZCON are so much larger that you need to coordinate to meet with people. At the Benzinga conference, the opposite is true. The conference space is more confined, so almost everyone you try to connect with is in a much smaller place. One of the challenges, but certainly not a negative one, was the issue of being in two spaces at once. Running into one person and saying hello most often led to a few others stopping, making additional introductions and connections.

I tried to live tweet as much as I could. I would have liked to sit in on more panels, but relationships are key, and the cannabis industry is not an exception. The knowledge shared by the presenters was worth the price of admission alone. Whether you are for or against big MSOs, there is no denying that they are currently leading in the cannabis industry. The information that they share and the information that they don't is telling.

Why, though, Bryan? Isn't this just like other conferences? The answer is both yes and no.

Boris Jordan is a seasoned executive. It's not his first rodeo. When he makes statements about beverages or big tobacco, he's doing so intentionally. His peers are in the room, so the message resonates more deliberately. The why is the tricky point. He said, "personally, five to ten years out, I think Cannabis beverages will represent 50% of the industry." Curaleaf has a cannabis Infused Seltzer brand line called Endless Coast, only available in MA. Sure, that's a bold statement and got headlines about beverages, as well as raised awareness about their beverage line. Was that the only reason, or was he signaling to investors that this asset is undervalued? Reply and let me know what you think.

Regarding rescheduling, he suggested, "We've heard Senator Chuck Schumer say that he will do anything to keep tobacco companies out of cannabis, but I'll make a prediction: the minute that marijuana gets rescheduled, tobacco companies will be known as cannabis companies."

We had Shaleen Title on *The Dime*, and she broke down how powerful big tobacco is with its endless resources. She said, "They are eventually going to be very influential in cannabis legalization, and when you have unlimited resources, there's not a lot that can be done to stop you." Is this a signal to investors to ensure that cannabis companies are adequately armed to defend themselves?

Ultimately, the event's main takeaway was massive optimism in the cannabis space, but the expectation is that there will continue to be challenges and obstacles. A big focus for many companies is still the same message we have been screaming for two years: looking inward and fortifying current operations. Strengthening internal operations will help defend against margin compression and allow your team to solidify the process, which positively affects the balance sheet.

Also, I want to give a shout-out to Javier Hasse. I've been fortunate to be at hundreds of tradeshows, and his question to the head of the Canadian Securities Exchange about US cannabis stock was one of the best I have heard. Such questions are usually ignored but are critical to providing a chance to respond. Well done.



# LEADING THE **EVOLUTION** OF CANNABIS SCIENCE

**YOUR SOURCE FOR ALL THE PRODUCTS YOU NEED FOR  
EXTRACTION, RESEARCH, MANUFACTURING & TESTING**

**Unmatched Industry  
Specific Technical Expertise**

**Procurement  
Experts**

**High-quality  
Equipment and Supplies**

**Gold Standard  
Proficiency Test Program**



**EMERALD**  
S C I E N T I F I C

**Founded on the belief that quality cannabis science  
is at the core of human health and well-being.**

For nearly 10 years we have advocated for collaboration, transparency, and the evolution of the cannabis industry toward more reliable and sophisticated methods.

As our industry continues evolving, we remain focused on supporting that growth with continued elevation of testing standards, optimization of production processes, and collaborative sharing of scientific knowledge and results.



# The Dime



Listen Now

A weekly podcast covering the entire Cannabis Industry.

In the case of safe banking... that has to be a scenario where your team is played out and, over time, is likely to evolve as information slowly gets announced in anticipation. How does your team prepare for (hopefully soon) safe banking?

In our view, safe banking somewhat already exists. You just have to know where to look, and, [there are] some really good bankers out there, waving the flag on and banking for cannabis. Safe banking is necessary; the bigger banks should provide these types of services.

If [the] safe [banking legislation] passes, the big banks are going to take their time to develop the compliance protocols to make it happen. They're probably going to charge hefty fees for it, too. So hopefully, by that time, the folks that are providing services now can reduce their fees and then not continuously burden the cannabis Industry.

## Why does a guaranteed payment work? And how?

A guaranteed payment is being able to make sure funds flow to the operator no matter what. If you look at major card networks, they don't do that. They charge back to their clients. This has been a problem in widespread enterprise retail for many, many years- legal battles consisting of Amazon, Walmart, and a bunch of the major retailers, against the card networks.

The idea is [that] if you can guarantee the payment, you take on the risk you're charging for the service. That's actually valid; it's not just the idea of being able to process a card, but in fact, making sure [the] money lands safely [as well].

That's a service that we believe is worth paying for, the idea that it's basically [like] a toll on the highway. You want to be able to say, "Okay, well, if you're going to pay the toll, I guarantee you a safe passage from point A to point B." And that's what you're paying for versus just being able to drive on the road.



**Daniel Muller, Founder of AeroPay**

## Can the Cannabis Industry lead innovation for new standards in payment processing? If so, where?

Strong 'yes' to that. Absolutely. When you are so absent from what's considered standard or traditional solutions, you're forced into a mode where you either create or fail.



\*\*\* The following transcript is AI-generated and some words have been removed for spacing. Please listen to the episode for full context.



# The Dime



Listen Now

A weekly podcast covering the entire Cannabis Industry.

## How Vangst qualifies and simplifies the hiring process:

If a customer posts a job, they can require a badge. They can see if the candidate has the badge, and customers can actually do specific searches. A cannabis company could search for a budtender, MED badge in Colorado, and I could even go as far as saying, "I want to search for someone with Flowhub experience, metrics experience, and LeafLink experience," and we'll serve up that supply of candidates.

That's how Vangst is building our moat, which is to have the largest supply of credentialed candidates ready to come to your job. The difference between posting a job on Vangst versus Indeed is that on Indeed, you might get 900 candidates. They might not have the badge. They might not have the training. They might not have the skills you need. But if you post on Vangst, you can have these very deep, industry-specific skills.

## Understanding the role and the pain the candidates will solve:

We really try to dig in with them (the client) and understand what is the pain today, and what are you trying to get, as a business, because of this person. What is this person going to do down to the day-to-day to achieve your goal? How are you going to measure this person? What does success look like three months from now?

## How Vangst works to identify the true need and align with the organization:

"We need a VP of sales." But, when you really drill in, they don't need a VP of sales. They need sales. They need people to pound the pavement and sell their product. They need the owner to hire three salespeople for the same price that they would get for that VP.



**Karson Humiston, Founder of Vangst**

They need to manage those three salespeople to go sell. If they spend the money on a VP, they are going to get there and say, "You want me to go sell this product? I'm the VP. I need to hire 10 people, and I need Salesforce and HubSpot, and I need a data analyst. I'm the VP. I need a team."

## Growing as a founder:

I would say getting very clear on what the business means and asking oneself if the lack of that person is truly what's holding one back from growth. I think that would prevent a lot of hiring mistakes and unnecessary hiring.



\*\*\* The following transcript is AI-generated and some words have been removed for spacing. Please listen to the episode for full context.



## Election 2022 – Voters in six states to decide on cannabis legalization this November.

By Marc Brandl

---

A new wave of cannabis markets could open in the Midwest this November. Voters in four Midwestern states plus Arkansas and Maryland will decide whether to expand their medical markets to anyone over the age of 21.



**Oklahoma** already has a nearly \$1 B annual market in medical cannabis, with 9.3% of the population as registered patients. With a population of only 2.4 million over the age of 21, how much will the market expand?

There are several legal challenges against the OK ballot initiative that may prevent OK voters from choosing if they want a legal adult recreational market. These have not been resolved as of press time.

**Missouri** just began its legal medical cannabis market journey in 2020 after voters in 2018 approved Amendment 2 with 65.5% support. Legal sales through a limited number of dispensaries began in October of 2020, and sales and the number of dispensaries have expanded rapidly since then.

Hungry for more, Missouri voters will get to vote on an adult recreational Amendment 3 barely two years after legal, medical cannabis sales began. If approved, this would be the quickest turnover of a state from approval of medical cannabis to full legalization. The Show Me state is on track for \$400 million in sales this year. Implementation of the adult market would project total annual sales to ~approximately 1 billion by 2025.

## Election 2022 – Voters in six states to decide on cannabis legalization this November.

By Marc Brandl

---

**Arkansas** voters will get to decide on Issue 4 in November which would, “authorize the possession, personal use, and consumption of cannabis by adults in Arkansas sold by licensed adult use dispensaries and provide for the regulation of those facilities.” Arkansas currently has a limited license medical cannabis market with total sales since 2019 at over \$630 million. Recent polling shows support for Issue 4 at 59%.

**Maryland** Constitutional Amendment Question 4 - A marijuana legalization referendum will be on the ballot in Maryland after state lawmakers voted in April to put the question before voters this fall. In addition to cannabis legalization, prior marijuana-related convictions will also be expunged. Polling in Maryland mirrors Arkansas, with a recently published poll showing 59% support among likely voters. 1.69% of the population are currently registered cannabis patients, with about \$600 million in annual sales. Approval in November would see Maryland become a multi-billion market by 2025.

**North Dakota** voters have a chance to approve marijuana legalization on the ballot this November. If approved, North Dakota would become a limited license state with only 18 retail licenses and seven cultivators. There would be no special cannabis tax placed on wholesale or retail sales, instead license renewal fees would be set at \$90,000 per year with a \$110,000 initial registration fee. The program would be implemented by the state Health and Human Services Department. The current medical market is one of the smallest in the US, with about \$20 million in sales in the fiscal year 2022 which ended in June.

**Nebraska** fell short of valid signatures for a medical cannabis initiative in 2022, with activists saying they'll try again through the legislature and another initiative effort in 2024.

If all the initiatives pass in November, there will be 24 states plus DC with adult recreational cannabis markets. Will further success in November and positive action from several state legislatures in the next year be enough to finally push Congress to act on comprehensive cannabis reform or a version of the critical SAFE Banking Act written about here several times before?

# Jurisdiction Roundup

Powered By 

The Fyllo Regulatory Database creates unparalleled visibility at every level of government across the United States with access to more than 800,000+ files and entries addressing cannabis regulations. Today's leading MSOs, SSOs and law firms rely on Fyllo to accelerate research, track licensing opportunities and make better decisions. To learn more or schedule a demo, please visit [hellofyllo.com](https://hellofyllo.com).



## Federal

Rep. Jared Huffman (D-CA) and Rep. Earl Blumenauer (D-OR) have introduced a bill that would allow small cannabis businesses to sell directly to out-of-state customers once federally legalized. The Small and Homestead Independent Producers (SHIP) Act is designed to let companies currently subject to rigorous state regulations compete with multi-state operators. Under the legislation, independent producers would be allowed to use the US Postal Service or private commercial couriers to ship within their own state or to other states where cannabis is legal. If approved, the measure would take effect on the date that cannabis is officially de-scheduled and federal criminal penalties are eliminated.



## Arkansas

The Arkansas Secretary of State, John Thurston, has ruled that a November ballot initiative to legalize recreational cannabis is insufficient. Although the initiative's campaign met the necessary signature requirements to qualify, the Board of Election Commissioners did not certify the measure's title and that was the justification for Thurston's decision. The state Supreme Court may now make its own determination regarding the petition, which is currently on the ballot conditionally. A recent poll from Talk Business & Politics-Hendrix College indicates that nearly 60% of eligible Arkansas voters favor the measure.



## Oklahoma

The state Supreme Court has ruled against the Oklahomans for Sensible Marijuana Laws campaign, Yes On 820, to legalize recreational cannabis. Their measure will no longer appear on this November's ballot. In a 9-0 ruling, the court said that the petition did not meet the required deadline to qualify for the election. However, campaign officials blame the state for an abnormally long signature certification period that leads to delays. It is possible that Gov. Kevin Stitt could call a special election but more likely that Oklahomans will have to wait until 2024 to vote on State Question 820.

# INTERNATIONAL UPDATE

## Canda

Medical Cannabis Company  
Khiron Launching New Products  
In Europe

## Germany

Linder promises cannabis  
legalization for 2023

## South Africa

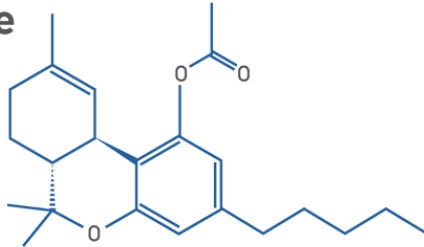
Europe's Call for Medical Cannabis  
Sees South Africa Firm Thrive

## Minor Cannabinoid Wholesale Pricing

### THC-O-Acetate Distillate

September 22  
\$ 875.00 / kg

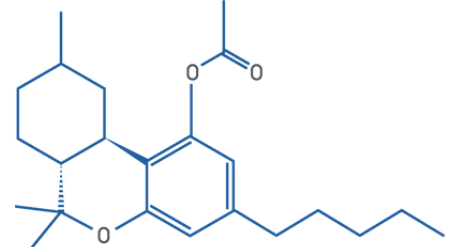
October 22  
\$ 890.00 / kg



### HHC-Acetate Distillate

September 22  
\$ 1,130.00 / kg

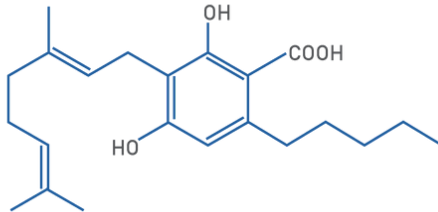
October 22  
\$ 1,592.86 / kg



### CBGA Isolate

September 22  
\$ 3,391.67 / kg

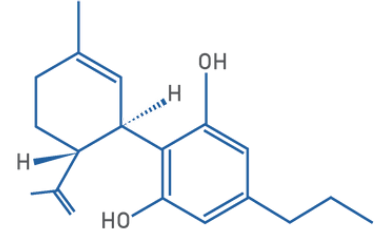
October 22  
\$ 3,130.00 / kg



### CBDV Distillate

September 22  
\$ 2,000.00 / kg

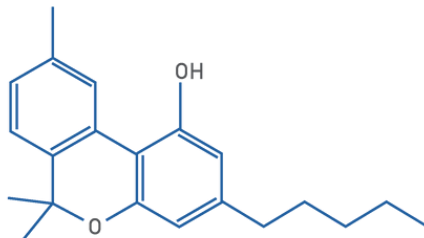
October 22  
\$ 1,162.00 / kg



### CBN Isolate

September 22  
\$ 2,400.00 / kg

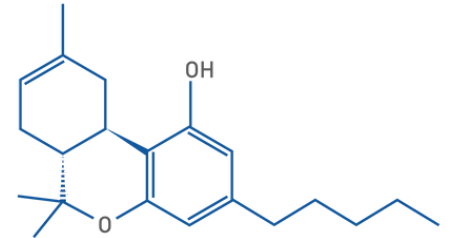
October 22  
\$ 2,507.50 / kg



### Delta-8 THC Distillate

August 22  
\$ 484.50 / kg

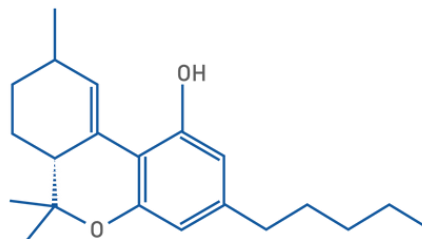
September 22  
\$ 484.00 / kg




### Delta-10 THC Distillate

August 22  
\$ 1,622.00 / kg\*

September 22  
\$ 1,431.00 / kg




## SECTOR ANALYSIS\*

	INDICES	3 MONTH%	6 MONTH %
	S&P 500	6.53%	-7.71%
	DOW JONES	0.34%	-11.37%
	NASDAQ	1.43%	-20.07%
	GLOBAL CANNABIS	-17.01%	-50.84%
	AMERICAN CANNABIS	-3.31%	-40.37%



**If you look at Coke and Pepsi, both companies have recently entered the alcohol industry – their risk-tolerance for regulated products is starting to turn,” Azer said at the 2022 Benzinga Cannabis Capital Conference in Chicago on Tuesday**

\*This text expresses the sole opinion of the writer. The thoughts expressed are independently formed and the writer is not compensated by any third party.

	SECTOR	3 MONTH	6 MONTH
	HEALTHCARE	5.28%	-2.51%
	TECHNOLOGY Sector	5.24%	-18.68%
	INDUSTRIALS	7.72%	-11.64%
	FINANCIALS	6.26%	-12.4%
	CONSUMER CYCLICAL	14.01%	-13.8%
	CONSUMER NON-CYCLICAL	3.46%	-5.69%
	BASIC	-4.79%	-17.7%
	ENERGY	9.44%	7.82%
	UTILITIES	14.17%	4.99%
	ALTERNATIVE HARVEST ETF (MJ)	-15.13%	-50.19%
	MULTI-STATE OPERATORS (MSOS)	-9.88%	-48.89%

\*Information retrieved from NCV and E\*trade.



## Interstate Commerce in Cannabis

By: Victoria Litman, LL.M., M.Div., Esq.

---

Interstate commerce in cannabis is a hot topic right now. One of the biggest reasons why is because for many mature markets, and especially in California where the price is plummeting, there is oversupply. There is also significant demand for quality cannabis in states where it remains illegal or where the market has been slow to stand up. Given this reality, it is commonly accepted that there is significant unauthorized interstate commerce already occurring despite state laws that prohibit legal exports. But there is also a growing effort to create legal interstate commerce. This article provides a brief overview of the relevant legal principles and outlines the variety of current approaches being taken to create a legal interstate market in cannabis.

### Who Regulates Commerce and How?

*Congress* Our dual system of government was formed because of a federalist compromise. To get all the states to agree to be a part of the United States, the Constitution only allows the federal congress to act through its enumerated powers including its Commerce Clause ("CC") power. Under the CC, Congress generally has the power to regulate the channels and instrumentalities of interstate commerce such as highways and cars. It has also been interpreted that Congress can regulate activities that substantially affect interstate commerce. Whether those activities have had to be economic or to involve interstate commerce has depended on the Court's makeup and subject matter. For example, in 2005, the court found that medical cannabis grown in compliance with state law, a non-economic intrastate activity, fell within Congress' CC powers. More recently, in 2012, the Supreme Court found that healthcare, an economic and interstate activity, did not fall within Congress' CC powers but did uphold it under the taxing clause. It should not be assumed that the current Court would uphold a sweeping federal law regulating cannabis.

*States* Through the 10th Amendment to the Constitution, States have a general police power to act in the public welfare which includes regulating aspects of commerce. States differ but generally pass laws through their legislature or through a ballot initiative. The 10th Amendment has been interpreted to mean that the federal government cannot force or commandeer the states to act or prevent them from acting. This has been interpreted to mean that the federal government cannot force states to participate in administering a federal program although they can condition the receipt of federal funds. More recently, in 2018, the Court interpreted the 10th Amendment to limit the federal government's ability to prevent states from legalizing sports betting.

*Courts* When Congress passes a law that directly conflicts with a state law, the federal law is supposed to supersede and preempt the state law under the Supremacy Clause. The Dormant Commerce Clause or DCC has been implied over time by courts as an additional check on states' powers so that they cannot impermissibly burden protected commerce even if there is

## Interstate Commerce in Cannabis

By: Victoria Litman, LL.M., M.Div., Esq.

---

not a federal law which directly addresses the specific issue. Over time, the DCC has been applied to strike down residency requirements for licensing, laws which limit the ability for an operator to conduct activities in efficient ways in favor of local interests, and tax laws which discriminate against out of staters. Some have proposed “suspending the DCC” by copying language used to regulate insurance. These proposals have ignored the DCC’s unique application to state tax laws and the fact that insurance has retaliatory taxes which had developed over decades when Congress acted to limit the application of the DCC through the McCarran-Ferguson Act. These proposals also rely on the idea that legalization will “unleash the DCC” and invalidate many cannabis regulations even though court are already applying the DCC and the DCC would not necessarily invalidate many states cannabis laws. It is worth emphasizing that suspending the DCC would be detrimental to the area of state tax laws, especially when there is legal interstate commerce.

### Current Approaches to Making Interstate Commerce Legal

The long and short of the prior section is that the regulation of commerce is done by Congress, States, and through the Courts. Consequently, there are ongoing attempts in all three arenas to move forward interstate commerce in cannabis. At the federal level, there have been a variety of pieces of legislation introduced over the last year with varying impacts on the landscape of interstate commerce especially in terms of a federal tax rate and FDA jurisdiction over state based medical marijuana programs. Most recently on September 12th, the “Small and Homestead Independent Producers Act of 2022” or SHIP Act was introduced. The law’s implementation would be triggered by another law which descheduled marijuana at the federal level. With the intention of supporting small businesses and craft cannabis, it would permit qualifying small operators to engage in legal interstate commerce direct to consumers between two states where the activity is legal. Although a notable idea, there are a lot of unknowns as to implementation.

At the state level, there is a growing appetite for state initiated and regulated interstate activity. On September 18th Governor Newsom of California signed a bill that will allow interstate commerce between California and other legal states given federal assurance that this activity would not elevate the risk of federal enforcement. Oregon has had a similar law on the books since 2019. On the consumer state side, New Jersey has filed a similar bill as California. There are a lot of open questions as to how regulatory compliance would happen under interstate compacts. The extent to which a state can regulate activity in the state that has upstream interstate impacts is being heard by the Supreme Court on October 11th in a case titled *National Pork Producers Council v. Ross*. In short, the question is whether a law passed by California, regulating the treatment of pigs sold as pork in the state is subject to the DCC and is overly burdensome. California has so far successfully argued that under the 10th Amendment, they have the power to regulate activity within their state even if it has substantial interstate impacts.

The Supreme Court’s decision in that case could have huge impacts on the future of cannabis commerce, especially because courts have already been applying the DCC to state laws

## Interstate Commerce in Cannabis

By: Victoria Litman, LL.M., M.Div., Esq.

---

regulating cannabis. Most recently, in August an opinion from the 1st Circuit Court of Appeals predictably held that Maine's residency requirements for medical marijuana licenses violated the DCC. A petition for rehearing was denied on September 21st. Scholars and advocates agree that the reasoning used by the 1st Circuit opens the door for similar arguments to be made about other state laws that burden interstate commerce such as bans on state exports. Whether this is a positive or negative depends on who you ask.

### Conclusion

My goal with this article is to elevate the conversation by providing tools for industry stakeholders to better understand the legal mechanisms at play and with a succinct overview of this exciting and constantly changing landscape. There is no one clear path to interstate commerce but there is considerable movement on all three fronts because there is a real need for interstate commerce. Which approaches are successful and how quickly legal interstate commerce can occur depends on coordination between stakeholders. The future of a successful national marketplace for cannabis depends on all of us.

**Victoria Litman** is a cannabis and psychedelic tax lawyer with an emphasis in tax exempt organizations at Parlatore Law Group. As a Graduate Tax Scholar, she earned honors from Georgetown Law where she completed a Master's in Tax Law and focused her studies at the intersections of drug law, constitutional law, and tax law. A long-time medical cannabis patient, Victoria brings a deep and personal understanding of the cannabis plant and its use to her legal practice and advocacy. You can find her sharing her ideas on twitter @victorialitman and LinkedIn.

## California Update

By Alex Halperin, Editor and Publisher

---

While California's market remains challenging for many operators, the year's legislative session ended with Gov. Gavin Newsom signing a slew of industry supported legislation designed to normalize the plant and the business surrounding it.

Of these the most closely watched lays the foundation for interstate trade. The bill, the nation's second after New Jersey, allows the state to make trade agreements with other states, subject to testing, labeling and other requirements. Though interstate trade likely remains a few years off, and could have unpredictable results, the industry generally applauded the law for creating new markets for California products and potentially influencing federal reforms

Additional new laws signed by Newsom include:

- A clarification that insurers can offer coverage for cannabis businesses
- A requirement that child welfare workers consider cannabis use by parents the same way they consider drinking and prescription drugs in how they resolve custody disputes.
- Protections for workers who smoke off the clock.
- A ban on doctors discriminating against patients for using MED
- Permission for delivery services to operate in cities which don't allow cannabis retail and for temporary retail permits on premises which also have alcohol permits. Both of these have the potential to relieve the state's dispensary shortage relative to other markets

PLUS: Veterinarians [can now prescribe MED.](#)

For more insights into the California market, subscribe to the free [free WeedWeek newsletter.](#)



# The Dosing Project

---

## Part IV – Community Reported Outcomes

### *Validating Cannabis Effects*

According to a report on the Health Effects of Cannabis (2017 National Academies of Science), Cannabis use has steadily increased over the last twenty years. From many sectors of the population, data on Cannabis use is accumulating. Yet, predictive analysis of Cannabis products has proven elusive. The holy grail of Cannabis retail sales is letting the consumer know what to expect from a particular variety of flower or ingested product. As a solution the Dosing Project sources data from Community Reported Outcomes (CRO) to predict Cannabis effects.

Randomized controlled trials (RCT) require standardized, stable products to be tested against other standardized products. The chemically variable Cannabis is not well suited for RCT. Standardized Cannabis products are rarely consumed by communities. Therefore, RCTs involving Cannabis lack external validity. As well, RCTs are intensive, expensive interventions.

As a solution, the [CESC's Dosing Project](#) attests to the real-world effects of Cannabis products through non-interventional study. The approach reduces costs and increases the speed at which evidence is generated. Additionally, the Dosing Project serves as a precursor to RCT when more specific drug development is indicated.

In earlier analysis, distinct ratios of Cannabis terpene content were used to categorize Type I Cannabis into subtypes ([See The Dosing Project, Part III – Cannabinoid Playbook](#)). Cannabis plant aroma and terpene content led to the discovery of two surrogate terpene markers. Subsequently, the Dosing Project turned to open-sourced community reviews from an online Leafly survey. The data from Alethia et al (2019)<sup>1</sup> characterized over eight hundred Cannabis samples by evaluating the relationship between their effects, perceptual profiles, and chemical compositions. The authors concluded, "While cannabinoid content was variable even within individual sample, terpene profiles matched the perceptual characterizations made by the users and could be used to predict associations between different psychoactive effects."

We explored the aggregate of sample results and consumer survey data to quantify the extent that surrogate terpene markers (specifically, the Beta-Pinene: Limonene Ratio Group) might predict effect. In the graph below, the relative outcome of descriptors garnered from the data describes the effect of High Beta-pinene: Limonene Ratio Group Cannabis.

# The Dosing Project

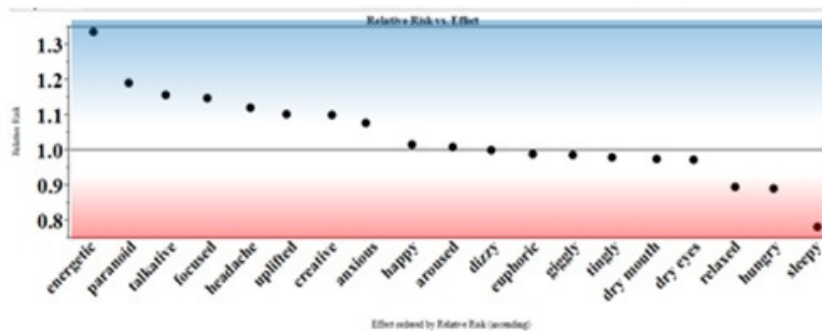
## Part IV – Community Reported Outcomes

### *Validating Cannabis Effects*

### Type I Inhaled Cannabis Flower Effects

### Ordered by Relative Outcome

For BPIN / LIM Ratio-Groups **HI** & **LO**



Based on the analysis, energetic, paranoid, and talkative are common descriptors when smoking High Beta-pinene: Limonene Ratio Group Cannabis, whereas relaxed, hungry, and sleepy are associated with smoking Low Beta-pinene: Limonene Ratio Group Cannabis. As a result, we describe an association between word descriptors and Cannabis terpene content. Our initial conclusion that surrogate terpene markers predict the effects from inhaled Cannabis flowers is supported.

The analysis of Community Reported Outcome (CRO) proves useful when Cannabis products are accessible yet require validation. CRO enables product characterization and can be interpreted to predict Cannabis effects. CRO analysis saves time and expense, serving as precursor to traditional Randomized Controlled Trials.

SAFE Banking may soon be available for the Cannabis Industry.

The [CESC](#) mitigates risks by validating your Cannabis products for banking compliance and scientific underwriting.

The [CESC](#) is a non-profit organization that relies on community support for its ongoing investigations.

[DONATE to Cannabis Science](#)

For more information visit the [CESC](#) at [www.thecesc.org](http://www.thecesc.org).

[1 Over eight hundred cannabis strains characterized by the relationship between their psychoactive effects, perceptual profiles, and chemical compositions](#) Laura Alethia de la Fuente, Federico Zamberlan, Andres Sanchez, Facundo Carrillo, Enzo Tagliazucchi, Carla Pallavicini (2019).



## Cannabis Legalization Must Address Monopoly Dangers

By Shaleen Title and Matt Stoller (September 21, 2022)

This year, as a majority of voters in both parties continue to favor cannabis legalization, more people in the U.S. reported smoking marijuana than tobacco cigarettes.[1] With public support still growing, it's only a matter of time before the federal government finally repeals its prohibition of the drug.

Such a change should be exciting to anyone who wants a more just, humane society. But a dangerous trend lurks behind the good news: Big Tobacco, among other powerful industry groups, is now lobbying for control over the legal cannabis market. The reasons why should worry us.

How marijuana legalization happens and the regulatory structure that emerges is, in many respects, a more important question than if it should happen. Done properly, and to foster community health, legalization could end a pointless crusade against a plant and all the people who use and sell it, and all its attendant costs.

But if we hand control of the process to conglomerates like Amazon.com Inc or the tobacco giant Altria Group Inc., the change could usher in harmful use and a resulting backlash that erases the hard-won victories of social justice and public health advocates.

As policymakers prepare to open the door to a national marijuana market, they must beware of monopolies — and structure the industry accordingly.

Consider the history of another major mind-altering product: alcohol. In 1919, the U.S. government banned the sale and possession of alcohol due to moral concerns and an epidemic of alcoholism. Little more than a decade later, confronted with crime and corruption that resulted from Prohibition, the nation reversed course, and Prohibition was repealed.

But the reversal didn't return alcohol laws to the pre-1919 status quo. Instead, new policies allowed individual states tight regulation over the industry. Most prevented vertical integration, separating retailers, distributors and producers from one another to prevent consolidation, promote open markets and maintain more effective regulatory control over businesses.

Such a framework prevented the emergence of dominant alcohol conglomerates, fostered local control, kept use relatively low and all but eliminated organized crime activity.

After years of corporate lobbying, these protections have ebbed in much of the world; the alcohol industry has reconsolidated, and problematic alcohol use has, in turn, increased. In the U.K., which gradually deregulated its alcohol markets, prices dropped dramatically, and deaths from alcoholism spiked.[2]

Still, alcohol regulation in the U.S. can illustrate novel approaches to avoid monopolies and uplift small businesses. [3] Some states allow exemptions for small beer suppliers to directly reach customers through tasting rooms and direct sales at festivals, for example, and some also allow small wineries to ship directly to consumers around the country, as the recently introduced Small and Homestead Independent Producers Act would allow small cannabis farmers to do.[4]

We can see parallels in our approach to cannabis today. Because of federal prohibition, marijuana is only regulated at a state level.

Read the rest of the article here: <https://www.parabolacenter.com/cannabis-legalization-must-address-monopoly-dangers/>



*Shaleen Title*



*Matt Stoller*

# HOT IN THE NEWS

October 2022

**1** Maryland is likely to legalize recreational cannabis this November. This group is leaving nothing to chance.

**2** Cannabis companies are reeling from the market downturn, and they're slashing jobs and reining in spending to survive

**3** Female-led cannabis companies receive 'fraction of capital' of male counterparts: Wana Brands CEO

**4** The Messy Breakup Behind the Hottest Instagram in Weed

**5** Alabama gets 221 requests for cannabis business applications in only 2 weeks

**6** Idaho outlawing pet CBD products starting Nov. 1

**7** Arkansas Poll Shows Growing Majority Support For Marijuana Legalization Ballot Initiative As Top Republicans Urge 'No' Vote

**8** California Governor Signs 10 Marijuana Bills, Including Interstate Commerce, Employment Protections And Record Sealing



# DISCLAIMER

The information contained in this document should not be relied on as the basis for any decision or action. It is general advice only and you should exercise your own independent skill and judgment. In some cases, the material in this document may incorporate or summarize information or recommendations of third parties or comprise materials contributed by third parties (*'third party material'*). Such third-party material is assembled in good faith but does not necessarily reflect the considered views of Eighth Revolution or indicate a commitment to a particular course of action.

---

We make every effort to ensure that links included in this document are kept up-to-date. The accuracy of the links is dependent upon the owners of those sites letting us know of any changes. If you find a link that does not work, please contact us by emailing [info@8threv.com](mailto:info@8threv.com).

To the extent permitted by law, Eighth Revolution and its employees and agents are not liable for any loss or damage arising from the use of, or reliance on, the material contained in this document whether or not caused by a negligent act or omission.

You obtain access to this document at your own risk, and Eighth Revolution accepts no responsibility for any interference, loss, damage, or disruption to your own computer system which arises in connection with your use of the document or any linked website. You must take your own precautions to ensure that the process which you employ to obtain access to this document does not expose you to the risk of viruses, malicious computer code, or other forms of interference which may damage your own computer system.

info@8threv.com  
(516) 653-2006  
[www.eighthrevolution.com](http://www.eighthrevolution.com)