



The Green Regulatory Arbitrage:

A Case for Investing in US Multi-State Vertically-Integrated Cannabis Companies

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September 6, 2018

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I. EXECUTIVE SUMMARY

We will witness history, a once-in-a-lifetime type event. The long overdue end of cannabis Prohibition in the United States. From an investment perspective, nothing compares.

The demand curve is known – some \$55 billion annual US demand (80 percent still in the black market).¹ Cannabis will not fall out of favor, like Facebook, Twitter, or Tesla might. Cannabis has been used for millennia; a deceptively simple plant, with no known alternatives.

Eighty-one years after the Marihuana Tax Act of 1937 banned the sale and use of marijuana, the US is finally moving closer to ending the senseless Prohibition policy—a policy that has: (a) caused immeasurable pain and suffering simply for handling a plant in its natural form, and (b) squandered untold billions in lost tax revenues and policing and imprisonment costs.

At long last, reason is prevailing. Soon, cannabis Prohibition will no longer leave a trail of destruction. It will no more prevent 21st century research of a plant that can transform modern healthcare. The long-demonized cannabis plant, instead of being illicit and stigmatized, will be invaluable for medicine, wellness, and relaxation.

Today, cannabis remains a Schedule 1 substance under the US Controlled Substances Act (CSA). Schedule 1 is reserved for drugs with “no currently accepted medical use and a high potential for abuse.”² Federal law prohibits any interstate commerce in cannabis. The burgeoning US cannabis industry operates under myriad federal-law related impediments and burdens.

Yet, despite federal illegality, state laws range from near complete normalization of the industry in West Coast states, Colorado, and soon Massachusetts, to burgeoning medical cannabis regimes in large East Coast and Midwest states which may soon also legalize adult-use cannabis.

Change is coming quickly. Increasing bipartisan federal and state-level political support for cannabis legalization reflects rapidly evolving public opinion. Americans now nearly universally support legalizing medical cannabis. Two-thirds of the US public supports adult-use legalization. From all angles—Congressional leaders, state and county officials and representatives, party caucus platforms, the banking and alcohol industries, veterans, minorities, orthopedists, professional sports players, millions of medical cannabis patients, and surgeons—the message is clear: it is time for the US Congress to move forward from the long-failed policies of cannabis Prohibition, and instead allow states to regulate cannabis as a normal industry.

Rationality is resonating. The US need only look as far as Canada for an example of how a progressive government is successfully implementing federal legalization. The enormous tax

¹ <https://mjbizdaily.com/chart-putting-the-55-billion-us-retail-cannabis-market-in-perspective/>;
<https://mgretailer.com/acreage-holdings-closes-119-million-private-round/>

² <https://www.dea.gov/druginfo/ds.shtml>.

revenues, policing savings, and many thousands of new jobs that states like California, Colorado, and Nevada are generating are irrefutable facts being studied by legislatures across the country.

It is no longer a question of whether cannabis will remain a federally-illegal Schedule 1 substance, but for how much longer. No one knows the precise timeline. But, no question, the US cannabis industry will be a federally-sanctioned, normalized industry within a few years.

The state-legal US cannabis industry is already significant. In 2017, before California opened its fifth-largest-in-the-world economy to adult-use cannabis in January 2018, the US industry neared \$9 billion in sales.³ But the legal industry is just getting started. It will take time for the total estimated present \$50-55 billion US retail cannabis demand⁴ to shift to the legal market. Most of it will. The US cannabis industry is projected to reach more than \$23 billion by 2022, with more than 467,000 full-time jobs.⁵ In three years, seven states are projected to have at least \$1 billion cannabis markets.⁶ By 2026, the legal US cannabis industry is projected to reach \$50 billion,⁷ and will exceed those projections with quicker legalization.

Many facets comprise the cannabis industry. Cannabis continues to reveal proven medicinal properties for: relieving pain and inflammation, addressing sleep disorders, providing relief from cancer and leukemia symptoms and their treatment side effects, addressing epilepsy and other neurological disorders, reducing opioid dependency, and treating post-traumatic stress disorder, among many other common 21st century problems.

Cannabis is increasingly seen as a better alternative to alcohol, a sports aid, a skincare product, and beneficial for pets. New methods of consumption and formulations are constantly emerging and improving, including oils, tinctures, edibles, beverages, sublingual, and topical deliveries.

Numerous ancillary verticals are rapidly expanding, such as compliance, mission-specific software, testing laboratories, cash processing, human resources, lighting, and AI-assisted cultivation, to name a few. An ultramodern industry is coming into existence with purpose-designed products, technologies, and applications, driven by innovation and market demand.

But federal cannabis Prohibition has created a non-negotiable barrier to entry in the US for most institutional investment and well-capitalized alcohol, pharmaceutical, and other related-industry companies. The majority of the present investment in the US cannabis industry is by family offices, high net-worth individuals, and a few private equity funds. That will change.

³ <https://money.cnn.com/2018/01/31/news/marijuana-state-of-the-union/>

⁴ <https://mjbizdaily.com/chart-putting-the-55-billion-us-retail-cannabis-market-in-perspective/>

⁵ <https://globenewswire.com/news-release/2018/06/28/1531033/0/en/NEW-REPORT-Legal-Marijuana-Markets-Projected-to-Reach-23-4-Billion-Employ-Nearly-a-Half-Million-Americans-by-2022-Effective-End-of-Federal-Prohibition-is-in-Sight.html>

⁶ https://www.civilized.life/articles/states-generate-billion-dollar-marijuana-markets-2022/amp.html?twitter_impression=true

⁷ <https://www.marketwatch.com/story/marijuana-industry-could-be-worth-50-billion-annually-by-2026-2017-04-20>

In the lead-up to federal legalization, and in the days after Prohibition ends, large investment capital pools will flow into the US cannabis industry. Contingent deals already negotiated between Fortune 100 companies and large cannabis companies will be finalized. The 2-year charts for the five largest Canadian licensed cannabis producers (LPs) (ranging from 190 percent to 2400-percent share price increases) demonstrate the growth potential.

One segment of the US cannabis industry is particularly well-positioned to benefit from the tens of billions of dollars in sales shifting to the legal market: large, well-capitalized multi-state, vertically-integrated operators in restricted licensing states. These companies own cultivation facilities, extraction/processing facilities, and dispensaries in highly-populated affluent cities.

Operations in multiple states allows for brand positioning, best practices optimization, and centralized support. Vertical integration protects against falling dry leaf prices, providing value-add along the product value chain. State licenses are an insurmountable barrier to competition.

With the end of Prohibition, the host of burdens and constraints imposed by federal illegality, including restricted access to capital markets and grossly burdensome taxation will end, exponentially raising margins and valuations. As institutional capital and related-industry investment enters the industry, large multi-state companies are positioned for rapid growth. Capital will flow to the most well-capitalized, diversified, professional companies. Corona-brewer Constellation Brands' \$4 billion USD (\$5 billion CAD) investment into Canopy Growth on August 16, 2018, after netting \$700 million USD on a \$186 million investment in October 2017, portends the future for strong US cannabis companies.

Prohibition has created a chasm between the transformative benefits of cannabis, and the knowledge many have about the plant. As that ends too, investors will participate in large number. Early participants could see large returns, exceeding the Canadian LP 2-year returns.

Investing in the US cannabis industry requires careful diligence. Some companies will thrive, many will not. Great online resources and industry events allow an in-depth look at the industry and the companies involved. Meet the people, there are stellar executives and professionals.

Many of the topics covered here are complex and deserve more analysis. This Paper aims to balance a beyond surface-level analysis of an unprecedented regulatory arbitrage opportunity with broad coverage of a range of federal and state issues and industry developments.

The US cannabis industry is situated at a fascinating convergence of reforming law, developing politics, growing complex markets, and monumental medical discoveries. Approaching the industry from any one of these angles without considering all them would be incomplete.

Against the whole background—how cannabis Prohibition came about, the landscape of US federal and state law, national and local legislative developments, evolving politics and alliances, and the business and promise of cannabis—the investment thesis emerges.

II. PROHIBITION - HOW CANNABIS BECAME ILLEGAL

The history of cannabis Prohibition is as interesting as it is appalling.

In the late 19th Century, Americans were very familiar with “cannabis” because it was present in almost all tinctures and medicines available at the time.⁸

Written records of cannabis use date back as early as 2727 B.C. to the Chinese Emperor Shen Nung.⁹ Ancient Greeks and Romans were familiar with cannabis; in the Middle East, cannabis use spread throughout the Islamic empire to North Africa.¹⁰ In 1545, cannabis spread to the western hemisphere where Spaniards imported it to Chile.¹¹ In North America, cannabis, in the form of hemp, was grown on many plantations for use in rope, clothing and paper.¹² Four of the founding fathers, including George Washington and Thomas Jefferson, who smuggled seeds from China to France, then brought them to the US, grew cannabis.¹³

In 1838, legal hashish smoking parlors existed in every major American City, including New York, Boston, Philadelphia, Chicago, St. Louis, and New Orleans.¹⁴ Over 500 hashish parlors operated in New York City at the time, and even 40 years later during alcohol prohibition hash parlors still outnumbered the infamous speakeasies the era was known for.¹⁵

The demonization of the cannabis plant began as a method of demonizing an influx of Mexican immigrants to Texas and Louisiana in the early 1900s after the Mexican Revolution.¹⁶ The media began to play on fears that the public had about these new citizens by falsely spreading claims about the “disruptive Mexicans” with their dangerous native behaviors including “marihuana” use. The rest of the nation did not know that this “marihuana” was a plant they already had in

⁸ *Id.*

⁹ <https://www.deamuseum.org/ccp/cannabis/history.html>

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.* Marijuana and hemp varieties are of the same genus, *Cannabis*, and the same species, *Cannabis Sativa*. The term cannabis (or marijuana) is used when describing a *Cannabis Sativa* plant that is bred for its potent, resinous glands (known as trichomes) which contain THC, the cannabinoid most known for its psychoactive properties. Hemp, on the other hand, is used to describe a *Cannabis Sativa* plant that contains only trace amounts of THC. Hemp is a high-growing plant, typically bred for industrial uses such as oils and topical ointments, as well as fiber for clothing, construction, and much more. See <https://www.medicaljane.com/2015/01/14/the-differences-between-hemp-and-cannabis/>.

¹³ <https://culturemagazine.com/4-founding-fathers-that-grew-cannabis/> While there are implied references to the Founders smoking the plant for its psychoactive properties, the records (some of questionable veracity) usually refer to their smoking and cultivation of hemp. See, e.g., <https://www.monticello.org/site/jefferson/some-my-finest-hours-have-been-spent-my-back-veranda-smoking-hemp-spurious-quotation> (Thomas Jefferson: “Some of my finest hours have been spent on my back veranda, smoking hemp;” George Washington: “Began to separate the Male from the Female hemp at Do. &—rather too late.”)

¹⁴ <http://www.hempshopper.com/en/19th-century/91-1876>

¹⁵ *Id.*

¹⁶ <http://www.drugpolicy.org/blog/how-did-marijuana-become-illegal-first-place>

their medicine cabinet, called cannabis.¹⁷ Now there would be an excuse to search, detain and deport Mexican immigrants: marihuana.

Controlling people by controlling their customs was quite successful; it became a national strategy for keeping certain populations under the watch and control of the government.¹⁸ During hearings on marijuana law in the 1930s, claims were made about marijuana's ability to cause men of color to become violent and solicit sex from white women. This kind of imagery became the backdrop for the Marihuana Tax Act of 1937 banning all commerce in and use of cannabis.¹⁹

The Marihuana Tax Act was eventually found to unconstitutional, but in 1970 it was replaced with the Controlled Substances Act (CSA). The CSA established Schedules for ranking substances according to their dangerousness and potential for addiction. Cannabis was placed in the most restrictive category, Schedule I, supposedly as a placeholder while President Nixon commissioned a report to give a final recommendation.²⁰ The non-psychoactive hemp plant was dragged along with it as a cannabis variety. The Schafer Commission, as it was called, declared that cannabis should not be in Schedule I and even doubted designating cannabis as illicit.²¹ However, Nixon discounted the Commission's recommendations.

It is a historical fact that the CSA as it pertains to cannabis was enacted and subsequently implemented not to stop the spread of a dangerous drug, but instead to suppress the rights of African Americans and Vietnam War protesters.²² In the words of one of Nixon's top policy advisors and domestic policy chief John Ehrlichman:

The Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and black people. You understand what I'm saying? We knew we couldn't make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin. And then criminalizing both heavily, we could disrupt those communities. We could arrest their leaders. raid their homes, break up their meetings, and vilify them night after night on the evening news. Did we know we were lying about the drugs? Of course we did.²³

¹⁷ <http://www.drugpolicy.org/blog/how-did-marijuana-become-illegal-first-place>

¹⁸ *Id.*

¹⁹ *Id.* Congress ignored testimony from the American Medical Association (AMA) that the AMA knew of no danger from the medical use of cannabis. *Id.* <https://www.thomhartmann.com/users/ddc/blog/2017/06/dea-quietly-changing-rules-3>

²⁰ *Id.*

²¹ <http://www.druglibrary.org/schaffer/library/studies/nc/ncmenu.htm>

²² <https://www.thecannabist.co/2017/07/25/marijuana-schedule-i-lawsuit-unconstitutional/84473/>

²³ <https://www.cnn.com/2016/03/23/politics/john-ehrllichman-richard-nixon-drug-war-blacks-hippie/index.html>

This kind of policy-making resulted in the designation of cannabis, right alongside heroin, as a Schedule 1 drug, reserved for substances with no medical use and a high potential for abuse.²⁴ Later administrations such as the Reagan presidency prided themselves as tough on drugs, especially crack cocaine, without nuanced thinking about cannabis and all the missed cures for modern ailments, lost tax revenues, wasted policing expenditures, and costs of imprisoning millions for a victimless crime bringing devastation to generations of families across the nation.

The failed drug war costs more than \$50 billion every year.²⁵ In 2016, more than one-third of the 1,572,579 arrests for drug law violations were for mere possession of marijuana (574,641 arrests, constituting 89 percent of the total 653,249 marijuana-related arrests).²⁶ In 2016, more than 2,157,000 Americans were incarcerated in federal, state, and local prisons and jails, the highest incarceration rate in the world.²⁷ Police arrest more people for marijuana violations in the US than for all violent crimes combined.²⁸ An ACLU study found that between 2001 and 2010, police made over 7 million arrests for marijuana-related activity - one every 37 seconds.²⁹

Studies have shown that nationwide cannabis legalization could, along with adding \$6 billion in federal tax revenue and creating 782,000 new jobs, save \$7.7 billion annually in federal enforcement costs - a \$13.7 billion net increase.³⁰ In addition to saving wasteful police spending on enforcement, processing, and imprisonment, legalization frees up police departments to focus on other crimes. After Colorado and Washington voted to legalize adult-use cannabis, police clearance rates—the number of crimes that resulted in an arrest divided by the total number of reported crimes—increased in both states.³¹

Yet, cannabis Prohibition, while grounded in overt racism and without rational basis, and causing far greater harm than the plant it targets, remains the law of the land.

²⁴ Under current US drug policy, all cannabis varieties, including hemp, are considered Schedule I controlled substances under the Controlled Substances Act (21 U.S.C. §§801 et seq.; Title 21 CFR Part 1308.11). See <https://hempindustrydaily.com/hemp-industry-loses-dea-appeal-as-federal-appeals-court-says-cbd-a-controlled-substance/>

²⁵ <http://www.drugpolicy.org/issues/drug-war-statistics>

²⁶ *Id.*

²⁷ *Id.*

²⁸ <http://thehill.com/opinion/criminal-justice/398069-Data-confirm-that-marijuana-decriminalization-is-long-overdue>

²⁹ *Id.*

³⁰ <https://www.cnn.com/2018/07/20/opinions/legalize-marijuana-all-50-states-ryan/index.html>

³¹ <https://www.marijuanamoment.net/legalizing-marijuana-helps-police-solve-other-crimes-new-study-shows/>

III. THE LEGAL LANDSCAPE

A. Federal Law And Its Impact On The Cannabis Industry

1. Cannabis Is A Schedule 1 Substance

Under federal law, cannabis is a Schedule 1 drug as designated by the CSA. Schedule I drugs, substances, or chemicals are defined as having no currently accepted medical use and a high potential for abuse.³² Some examples of other Schedule I drugs are heroin, lysergic acid diethylamide (LSD), and 3,4-methylenedioxymethamphetamine (ecstasy), while cocaine and methamphetamine are Schedule 2 drugs.³³

Under federal law, marijuana possession is a criminal offense.³⁴ Federal law is applicable to federal property, which includes the Capitol grounds and the mall within DC, as well as all national parks and military property, and other land under federal control.³⁵ Possession of marijuana is punishable by up to one year in jail and a minimum fine of \$1,000.³⁶ Manufacture or distribution of less than 50 plants or 50 kilograms of marijuana is punishable by up to five years in prison and a fine of up to \$250,000.³⁷ Federal law also applies to offenses relating to cannabis involving interstate and international commerce, precluding any interstate commerce in cannabis even between two neighboring states in which cannabis is legal.³⁸

Federal employees may not use cannabis, students could lose federal financial aid for cannabis charges, firearm license applicants could be rejected, veterans do not receive coverage or recommendations for medical cannabis, and residents of federally subsidized housing could lose benefits for using it.³⁹ Doctors may not “prescribe” cannabis for medical use under federal law, though they can “recommend” its use under the First Amendment.⁴⁰

There has not been a complete absence of federal-level recognition of the lack of rational basis for cannabis Prohibition. For example, in 1988, after a two-year rescheduling hearing, the Drug Enforcement Administration (DEA)’s Chief Administrative Law Judge, the late Francis Young,

³² <https://www.dea.gov/druginfo/ds.shtml>

³³ *Id.* Schedule II drugs are defined as drugs with a high potential for abuse, with use potentially leading to severe psychological or physical dependence. These drugs are also considered dangerous. Some examples of Schedule II drugs are: Vicodin, cocaine, methamphetamine, methadone, Dilaudid, Demerol, oxycodone (OxyContin), fentanyl, Dexedrine, Adderall, and Ritalin. *Id.*

³⁴ For more information on the laws and penalties see <http://norml.org/laws/item/federal-penalties-2>.

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ <https://www.colorado.gov/pacific/marijuana/federal-implications>

⁴⁰ https://www.safeaccessnow.org/federal_marijuana_law

recommended rescheduling cannabis. He found that cannabis was “one of the safest therapeutic agents known to man.”⁴¹

But significant progress on cannabis Prohibition policy first came only in 2013, after decades. On August 29, 2013, Deputy Attorney General James M. Cole issued the “Cole Memo.”⁴² Under the Cole Memo, the Department of Justice (DOJ) stated it would not prosecute individuals and companies complying with state legalization programs. The DOJ would, instead, focus on categories of activities outside of state-legal programs including: Distribution of marijuana to minors, marijuana proceeds funding criminal enterprises, transport of marijuana to other states, growing marijuana on public lands, and possession on federal property.⁴³

Many credit the Cole Memo for laying the foundation for the burgeoning US cannabis industry by not distinguishing adult-use and medical cannabis. But the Cole Memo was not legislation.

December 16, 2014 marked the first significant change in federal law affecting the legal standing of cannabis since 1970.⁴⁴ Congress finally called a ceasefire in the federal war on medical cannabis, approving a budget amendment that prohibits DOJ funds from being used to prevent states from implementing medical cannabis laws. This amendment became known as the Rohrabacher-Farr amendment. Every year since, Congress has passed versions of it.

The most recent approval of the updated now-called Rohrabacher-Blumenauer Amendment came on March 23, 2018, when President Trump signed the FY 2018 Appropriations spending bill.⁴⁵ This development was crucial for the US cannabis industry. On January 4, 2018, just four days following legalization of adult-use cannabis in California, Attorney General Jeff Sessions had rescinded the Cole Memo, directing US Attorneys “to use previously established prosecutorial principles that provide them all the necessary tools to disrupt criminal organizations, tackle the growing drug crisis, and thwart violent crime across our country.”⁴⁶

Though the US cannabis industry feared Sessions’ purported new policy, the DOJ has not taken a single reported criminal action in 2018 against the legal cannabis industry. The DOJ’s lack of

⁴¹ https://www.huffingtonpost.com/entry/an-open-letter-to-jeff-sessions-from-a-doctor-concerned_us_589934eee4b02bbb1816bf03

⁴² https://www.thompsoncoburn.com/docs/default-source/blog-documents/cole-memo.pdf?sfvrsn=7cff44ea_0. The first concrete step toward easing the effect of Prohibition began with the Ogden Memo, in 1999, which stated that with the exception of large, for-profit commercial operators, the DOJ should not prioritize prosecution of medical marijuana operators in “clear and unambiguous compliance” with state laws. The Ogden Memo was followed by the first Cole Memo in 2011, which basically repealed the Ogden Memo by stating that compliance with state medical marijuana laws should not matter to US prosecutors, and that all operators were fair game for prosecution. That set in place the events leading to the Cole Memo in 2013. <https://abovethelaw.com/2018/01/reading-the-pot-leaves-what-the-sessions-memo-means-for-marijuana-in-the-u-s/>

⁴³ *Id.*

⁴⁴ https://www.safeaccessnow.org/federal_marijuana_law

⁴⁵ <https://www.thompsoncoburn.com/insights/blogs/tracking-cannabis/post/2018-03-28/rohrbacher-blumenauer-amendment-included-in-omnibus-fy-2018-spending-bill>

⁴⁶ <https://www.justice.gov/opa/pr/justice-department-issues-memo-marijuana-enforcement>

action against the industry was not surprising to close observers. At a speech at Georgetown Law School on March 10, 2018, Sessions said that federal law enforcement lacks the resources to take on ‘routine cases’ and would continue to focus on drug gangs, larger conspiracies, and cultivation on federal lands.⁴⁷ John Boehner, former Speaker of the House of Representatives and Acreage Holdings board member said: “I see no risk at all in the feds getting involved from a law-enforcement standpoint at this point, none at all.”⁴⁸

Despite the protections afforded to medical cannabis by the Rohrabacher Amendment and the DOJ’s policy of black-market prosecution only, the scheduling of cannabis as a Schedule 1 substance causes a host of challenges and impediments for the nascent US cannabis industry.

2. Access To Capital Markets Restricted

Canadian cannabis companies Canopy Growth Corporation (NYSE:CGC), Cronos Group (NSDQ:CRON) and Tilray (NSDQ:TLRY) are all listed on US exchanges. Tilray became the first true cannabis company to go public on a major US exchange on July 19, 2018. Its share prices rose 76 percent during the first two trading days and as of August 31, 2018 was up 284 percent from the IPO price. These companies have no US cannabis operations.

Due to the federal illegality of cannabis, access to the US public capital markets on major exchanges is precluded for any cannabis company with US operations.⁴⁹ This has required US cannabis companies with operations in the US to list in Canada to access capital markets.⁵⁰ Some have listed on the OTC markets.

In Canada, the Toronto Stock Exchange (TSX) has said that US cannabis companies cannot meet listing requirements because they violate federal law in their home country.⁵¹ In October 2017, the TSX warned that listed Canadian cannabis companies with US business interests could face a delisting review,⁵² forcing one of the major Canadian licensed producers Aphria (TSX:APH) and others to divest from direct involvement in US cannabis business.⁵³

Because of the restricted access to capital markets, large US cannabis companies list on the Canadian Securities Exchange (CSE).⁵⁴ The CSE is sometimes referred to as the “cannabis stock exchange” because at least 76 of its 379 companies are in cannabis. Richard Carleton, CEO of

⁴⁷ <https://abovethelaw.com/2018/03/update-sessions-shines-some-light-on-doj-marijuana-enforcement/?rf=1>

⁴⁸ <http://www.wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁴⁹ <https://www.thestreet.com/investing/the-largest-cannabis-company-in-the-us-just-listed-on-a-canadian-exchange-14605772>

⁵⁰ <https://money.cnn.com/2018/06/01/news/companies/cannabis-canada-wall-street/index.html>

⁵¹ <https://www.cnn.com/2018/03/02/canadian-cannabis-companys-nasdaq-listing-bodes-well-for-the-industry.html>

⁵² <https://business.financialpost.com/investing/canadian-listed-marijuana-companies-with-u-s-operations-warned-of-delisting>

⁵³ <https://www.theglobeandmail.com/report-on-business/aphria-to-cut-down-us-cannabis-exposure-amid-tsx-delisting-review/article37300476/>

⁵⁴ <https://thecse.com/>

the CSE, said the CSE lists companies “operating within the boundaries of what is a tightly regulated state framework.”⁵⁵

Nevertheless, it is only the US federal status of cannabis that is closing the major US exchange doors to US cannabis companies, not cannabis itself. Canopy CEO Bruce Linton, commenting on Canopy’s NYSE listing the previous week, said the Exchange welcomed the world’s largest cannabis company but Canopy was not allowed to ring the bell: “It’s like being a girlfriend, but not a friend.”⁵⁶ Regarding Cronos’ NASDAQ listing on February 27, 2018, Hadley Ford, CEO of iAnthus Capital (CSE:IAN; OTC:ITHUF), a US cannabis company listed on the CSE, said: “It is a significant signal that a major US exchange does not have an issue with cannabis, but rather the U.S. federal status.”⁵⁷ Tilray’s CEO Brendon Kennedy said of the company’s July 19, 2018 historic NASDAQ IPO: “I think the [IPO interest] signifies a shift in perception . . . This is just the beginning, we take a very long term global view and we wanted to get this milestone as a validation for not only us but the entire sector.”⁵⁸ He said: “One of the things I am really proud of in the IPO is that 70 percent of the investors are in the US and most had never invested in this industry before.”⁵⁹

3. Banking Services Limited

In addition to restricted access to US capital markets, the availability of banking services for the cannabis industry, while growing recently via regional and local banks, is also restricted.

Some cannabis business are forced to operate on a cash-only basis, making them targets for robberies, and imposing additional security and cash-transportation costs.⁶⁰ Stories abound of cannabis businesses, like the one in Denver, generating \$250,000 to \$350,000 in monthly sales, 18 months after legalization, having to stash satchels with tens of thousands of dollars, before a local credit union seized the opportunity to provide banking services.⁶¹ No other industry in the US faces this challenge.

US Treasury Department guidance requires banks to file “suspicious activity” reports even in states where cannabis-related activity has been legalized.⁶² Nationally, as of April 2018, more than 360 banks and credit unions worked with cannabis-related businesses, filing more than 2,000 suspicious activity reports a month - a figure that has doubled in the past year.⁶³ Banks are

⁵⁵ <https://money.cnn.com/2018/06/01/news/companies/cannabis-canada-wall-street/index.html>

⁵⁶ <https://www.greenmarketreport.com/new-yorks-cannabis-conference-gets-stronger-every-year/>

⁵⁷ <https://www.cnn.com/2018/03/02/canadian-cannabis-companys-nasdaq-listing-bodes-well-for-the-industry.html>

⁵⁸ <https://www.marketwatch.com/story/tilray-ipo-is-validation-for-pot-companies-ceo-says-2018-07-19>

⁵⁹ <https://www.thestreet.com/investing/stocks/tilray-is-the-ultimate-cannabis-stock-says-cowen-14681266>

⁶⁰ *Id.*

⁶¹ <https://www.nytimes.com/2018/01/04/magazine/where-pot-entrepreneurs-go-when-the-banks-just-say-no.html>

⁶² <https://www.brookings.edu/research/banking-regulations-create-mess-for-marijuana-industry-banks-and-law-enforcement/>

⁶³ *Id.*

often mandated to file reports from anyone depositing funds “derived from illegal activity.”⁶⁴ Banks that accept cannabis industry money run the risk of running afoul of US money laundering and other laws.⁶⁵ Compliance costs are passed on to business, customers, and taxpayers.⁶⁶

4. Tax Burdens

Federal illegality also imposes enormous burdens and costs on the cannabis industry through taxation. Section 280E of the Internal Revenue Code⁶⁷ forbids businesses from deducting otherwise ordinary business expenses from gross income associated with the “trafficking” of Schedule I or II substances, as defined by the Controlled Substances Act.⁶⁸ The IRS has applied Section 280E to state-legal cannabis businesses.⁶⁹

Because Section 280E prohibits any tax deductions besides cost of goods sold, cannabis businesses pay much more in federal taxes than any other businesses.⁷⁰ They cannot deduct salaries, rent, marketing and advertising and all secondary costs.⁷¹ The impact is less severe on cultivators, who can deduct costs like electricity, labor, fertilizer, and water, but 280E acutely affects processors/extractors and dispensaries.⁷²

Some dispensaries have established ancillary education centers and associated corporate entities for tax purposes,⁷³ but the costs and burdens imposed are draconian, especially for smaller operators. For some direct, plant-touching cannabis businesses, effective income tax rates frequently can reach 70 to 80 percent,⁷⁴ in some cases even 90 percent or more.⁷⁵ Though normal tax deductions are precluded, the IRS is ensuring that cannabis businesses have reported all of their income, focusing on filings for deposits over \$10,000 in cash.⁷⁶

5. Interstate And International Commerce Restrictions

The inability to move cannabis across state lines, even between two legal states, or to import cannabis, also creates challenges unique to the industry.⁷⁷ Inefficiencies abound when all cannabis sold in a state must be grown in that state, and vice versa. It makes little economic

⁶⁴ *Id.*

⁶⁵ <https://www.forbes.com/sites/tomangell/2018/06/14/more-banks-working-with-marijuana-businesses-despite-federal-moves/#504279321b1b>

⁶⁶ *Id.*

⁶⁷ 26 U.S.C. § 280E.

⁶⁸ <https://thecannabisindustry.org/uploads/2015-280E-White-Paper.pdf>

⁶⁹ *Id.*

⁷⁰ *Id.* See also <http://marijuanaretailreport.com/irs-code-section-280e-means-cannabusinesses/>

⁷¹ <https://www.ustaxcourt.gov/inophistoric/champ.tc.wpd.pdf>

⁷² <https://scottrobertslaw.com/how-to-increase-profits-at-a-marijuana-dispensary-280e-considerations/>

⁷³ *Id.*; <https://www.accountingweb.com/tax/business-tax/marijuana-and-taxes-is-there-a-way-around-section-280e>

⁷⁴ <https://herb.co/marijuana/news/trump-supports-states-act-legalize-cannabis/>

⁷⁵ <https://www.vox.com/2014/11/17/7210705/marijuana-legalization-280E>

⁷⁶ <http://marijuanaretailreport.com/irs-code-section-280e-means-cannabusinesses/>

⁷⁷ <https://www.leafly.com/news/cannabis-101/can-you-transport-cannabis-between-two-legal-states>

sense for cannabis to be grown in the Northeast, or even in the US at all (rather than Colombia or Africa). State borders create tremendous divergence for cannabis prices across the United States, with cannabis costs differing by more than 100 percent depending on location.⁷⁸

For cannabis patients and consumers, the inability to legally travel with cannabis between states, even two legal states, poses a host of problems and challenges. Stories are commonplace of families moving between states because of the inability to access or transport medical cannabis from out-of-state.⁷⁹

6. Insurance Options Limited

Some mainstream insurers are willing to underwrite certain segments of the industry and captive insurance companies exist for the industry, but finding insurance covering cannabis cultivation and inventories can be challenging in some jurisdictions. The insurance quandary similarly applies to coverage for medical cannabis. Insurance companies operate in a grey area of potentially violating federal law if they pay claims for damaged or stolen cannabis, or provide medical cannabis coverage.⁸⁰ Cannabis users in some legal-cannabis jurisdictions applying for life insurance coverage can be charged premiums faced by tobacco consumers,⁸¹ though even the staunchest opponents of cannabis do not argue that cannabis poses equal health risks.

7. Medical Research And Clinical Trials Stymied

The Schedule 1 classification of cannabis also makes it extremely difficult to obtain and use cannabis for federally-sanctioned or funded clinical research in the US. Prospective cannabis researchers must first obtain approval from the DEA, Food and Drug Administration (FDA), and the National Institute on Drug Abuse (NIDA).⁸²

Because of the dim prospects of obtaining such approval, currently the only source of legal cannabis for federal research purposes is through a contract established during the 1970s between NIDA and the University of Mississippi.⁸³ The university provides only five strains, all of which contain far less THC and CBD content than industry standards, with three strains

⁷⁸ “2018 Cannabis Price Index,” <http://weedindex.io/>

⁷⁹ <https://www.nbcnews.com/business/consumer/marijuana-refugees-looking-new-homes-pot-legal-states-n22781>; <https://www.kshb.com/news/local-news/lenexa-family-moving-to-colorado-for-access-to-medical-marijuana-for-6-year-old-with-epilepsy>; <https://www.usatoday.com/story/news/nation/2014/02/17/moving-medical-marijuana-epilepsy-children/5255323/>

⁸⁰ <https://www.americamagazine.org/politics-society/2018/01/16/five-things-you-should-know-about-federal-and-state-marijuana-laws>

⁸¹ <https://www.ocregister.com/2017/02/07/even-though-marijuana-is-legal-here-are-9-ways-federal-law-affects-california-pot-users-businesses/>

⁸² <https://www.usnews.com/news/best-countries/articles/2017-04-11/israel-is-a-global-leader-in-marijuana-research>

⁸³ <https://wcet.com/future-cannabis-clinical-research-medicine/>

having no detectable CBD content (CBD is the cannabis component most often associated with medicinal uses, explained below).⁸⁴

In June 2017, a pair of German scientists identified 140 controlled clinical trials worldwide since 1975 assessing the safety and efficacy of either whole-plant cannabis or specific cannabinoids, including 35 controlled studies, involving 2,046 subjects, assessing the use of cannabis in pain management.⁸⁵ Much of the research on medical cannabis has been conducted in Israel.⁸⁶

The benefits and potential of cannabis for medical treatment in the US is based largely on anecdotal reports or observational studies – and that cache of information is rapidly growing.⁸⁷ But illegality has stymied the medical community’s ability to conduct the type of research that the scientific community considers the gold standard in guiding medical practice.⁸⁸

8. Professional Services Harder To Find

While the cannabis industry attracts more mainstream professionals every day,⁸⁹ the industry still sometimes faces challenges finding top professional service firms willing to publicly work with the industry due to federal illegality. Many big law firms, accounting firms, public relations firms, and others still hesitate to associate with a federally illegal activity. In the same vein, some consumers and patients, even in legal-cannabis states, may be reluctant to purchase adult-use or even medical cannabis because of federal illegality.

9. Real Estate Challenges

The growing cannabis market in legalized adult-use states has created a corresponding uptick in real estate values in certain areas, including places like Lynwood, California where industrial real estate property values have nearly tripled in two years.⁹⁰ Still, in some jurisdictions the federal illegality of cannabis and zoning restrictions make it difficult for plant-touching cannabis businesses to find suitable real estate and landlords.⁹¹

⁸⁴ *Id.*

⁸⁵ <http://norml.org/news/2017/06/08/review-identifies-140-controlled-clinical-trials-related-to-cannabis>

⁸⁶ <https://www.usnews.com/news/best-countries/articles/2017-04-11/israel-is-a-global-leader-in-marijuana-research>

⁸⁷ *Id.*

⁸⁸ <https://www.brookings.edu/research/ending-the-u-s-governments-war-on-medical-marijuana-research/>

⁸⁹ <https://www.newcannabisventures.com/how-professionals-are-moving-past-stigma-and-forging-careers-in-the-u-s-cannabis-industry/>

⁹⁰ <http://www.latimes.com/business/la-fi-cannabis-real-estate-20180331-story.html>

⁹¹ https://therealdeal.com/issues_articles/in-need-of-more-than-just-seed-money/; <https://www.quora.com/Why-is-it-so-hard-to-find-landlords-to-rent-to-marijuana-dispensaries>

B. The States - Legalization And Regulation

Despite the restrictions and burdens created by federal illegality, a tightly-regulated state-sanctioned cannabis industry is growing rapidly in many states across the United States.

“Laboratories of democracy” is a phrase popularized by US Supreme Court Justice Louis Brandies in a 1932 decision to describe how a “state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”⁹² The concept of states spurred into novel experiments by citizens’ choices is perfectly demonstrated by the divergent approaches to legalization of cannabis.

1. Nine States And DC: Adult-Use Legalization

Adult-use cannabis is legal in nine states and DC:

- ✓ Colorado (Population 5.6M; Legalized as of January 2014);⁹³
- ✓ Washington (Population 7.4M; Legalized as November 2014);⁹⁴
- ✓ Alaska (Population .7M; Legalized as of February 2015);⁹⁵ and
- ✓ DC (Population .7M; Legalized as February 2015).⁹⁶
- ✓ Oregon (Population 4.1M; Legalized as of July 2015);⁹⁷
- ✓ Maine (Population 1.3M; Legalized as of November 2016);⁹⁸
- ✓ Nevada (Population 3M; Legalized as of January 2017);⁹⁹
- ✓ California (Population 39.5M; Legalized as of January 2018);¹⁰⁰
- ✓ Vermont (Population .6M; Legalized as of July 2018);¹⁰¹ and
- ✓ Massachusetts (Population 6.9M; Legalized as of July 2018).¹⁰²

⁹² *New State Ice Co. v. Liebmann*, 282 U.S. 262 (1932).

⁹³ Colorado Constitution, Article 18, section 16, https://ballotpedia.org/Article_XVIII,_Colorado_Constitution

⁹⁴ Washington Initiative 502, <https://sos.wa.gov/assets/elections/initiatives/i502.pdf>

⁹⁵ An Act to tax and regulate the production, sale, and use of marijuana (Alaska Measure 2), https://www.commerce.alaska.gov/web/portals/9/pub/mcb/statutesandregulations/mj_ballotmeasure2.pdf.

⁹⁶ Legalization of Possession of Minimal Amounts of Marijuana for Personal Use Act of 2014 (Initiative 71), <http://dcmj.org/ballot-initiative/>.

⁹⁷ Oregon Ballot Measure 91, <https://www.oregon.gov/olcc/marijuana/Documents/Measure91.pdf>

⁹⁸ An Act to Legalize Marijuana, http://lldc.mainelegislature.org/Open/Laws/2015/2015_IB_c005.pdf

⁹⁹ Nevada Marijuana Legalization Initiative (Question 2), <https://www.nvsos.gov/sos/home/showdocument?id=4434>

¹⁰⁰ The Adult Use of Marijuana Act (AUMA) (Proposition 64), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB64

¹⁰¹ An act relating to eliminating penalties for possession of limited amounts of marijuana by adults 21 years of age or older, <https://legislature.vermont.gov/assets/Documents/2018/Docs/BILLS/S-0022/S-0022%20As%20Passed%20by%20Both%20House%20and%20Senate%20Unofficial.pdf>

¹⁰² Massachusetts Question 4 (2016 Marijuana Legalization Initiative), <https://www.weednews.co/full-text-of-massachusetts-question-4-2016-marijuana-legalization-initiative/>. See also <http://www.governing.com/gov-data/state-marijuana-laws-map-medical-recreational.html>.

Legend:

- States with Legal Medical Marijuana
- States with Legal Medical & Recreational Marijuana

Map showing the following states:

- States with Legal Medical Marijuana (Light Green):** MT, ND, MN, WI, MI, OH, WV, VA, NC, SC, GA, FL, AR, OK, NM, AZ, CO, KS, NE, IA, MO, TN, MS, AL, LA, TX, HI.
- States with Legal Medical & Recreational Marijuana (Dark Green):** WA, OR, CA, NV, ID, WY, UT, AZ, AK, ME, NH, VT, CT, RI, MA, NJ, DE, MD, DC.

In all ten jurisdictions, medical cannabis is readily available. Registered medical cannabis patients in just those states and DC total 1.55 million individuals.¹⁰³

- Arizona (Ballot Measure 8, 1998);
- Arkansas (Ballot Measure Issue 6, 2016);
- Connecticut (House Bill 5389, 2012);
- Delaware (Senate Bill 17, 2011);
- Florida (Ballot Amendment 2, 2016);
- Hawaii (Senate Bill 862, 2000);
- Illinois (House Bill 1, 2013);

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- Maryland (House Bill 881, 2014);
- Michigan (Proposal 1, 2008);
- Minnesota (Senate Bill 2470, 2014);
- Montana (Initiative 148, 2004);
- New Hampshire (House Bill 573, 2013);
- New Jersey (Senate Bill 119, 2010);
- New York (Assembly Bill 6357, 2014);
- North Dakota (Ballot Measure 5, 2016);
- Ohio (House Bill 523, 2016);
- Oklahoma (Ballot Question 788, 2018);
- Oregon (Ballot Measure 67, 1998);
- Pennsylvania (Senate Bill 3, 2016);
- Rhode Island (Senate Bill 0710, 2006);
- West Virginia (Senate Bill 386, 2017).¹⁰⁴

The latest state to legalize medical cannabis was Oklahoma in July 2018 which is launching a robust program with many qualifying conditions.¹⁰⁵

The list of 30 states in total plus DC that have legalized medical cannabis but not adult-use cannabis does not include an additional 16 states that: (a) limit medical cannabis use to the non-psychoactive cannabinoid constituent of cannabis CBD; (b) require physicians to “prescribe” cannabis (an illegal act under federal law) rather than “recommend” cannabis (free speech); or (c) states that have passed “affirmative defense” laws in which arrested cannabis users may assert medical use as a defense.¹⁰⁶ Only four states—Idaho, Kansas, Nebraska and South Dakota—have no medical cannabis law.¹⁰⁷ Ninety-five percent of the US population live in states where some form of medical cannabis is legal.¹⁰⁸

¹⁰⁴ <https://medicalmarijuana.procon.org/view.resource.php?resourceID=000881>

¹⁰⁵ <http://www.startribune.com/oklahoma-health-department-revised-medical-marijuana-rules/489359341/>

¹⁰⁶ <https://medicalmarijuana.procon.org/view.resource.php?resourceID=000881>

¹⁰⁷ See <https://www.americamagazine.org/politics-society/2018/01/16/five-things-you-should-know-about-federal-and-state-marijuana-laws>

¹⁰⁸ <https://news.medicalmarijuanainc.com/95-u-s-population-lives-states-marijuana-legal-finds-report/>

IV. THE INEVITABILITY OF FEDERAL LEGALIZATION

One way or another, it is a certainty that cannabis will be federally legalized, through federal recognition of states' rights, by removal of cannabis from the list of scheduled substances (descheduling) or rescheduling, decriminalization, or some combination of such measures.¹⁰⁹

Precisely when this will occur is unknown. The midterm elections in November 2018 will certainly raise the profile of the issue, as will the soon-to-begin campaign for the 2020 presidential election. One thing is certain: a combination of forces, from numerous angles, will eventually compel Congress to end cannabis Prohibition.

A. Dramatic Shift In Public Opinion

No other issue has seen the kind of dramatic shift in public perception and opinion in as short a time period as the legalization of cannabis.

Support for medical cannabis legalization is nearly universal. According to a Quinnipiac poll released in August 2017, ninety-four percent of US adults—including 96 percent of independents, 95 percent of Democrats and 90 percent of Republicans—support “allowing adults to legally use marijuana for medical purposes if their doctor prescribes it.”¹¹⁰ There are few if any other issues that so many Americans agree upon.

Support for adult-use legalization, according to surveys from Gallop conducted in October 2017, was at 64 percent, up from 31 percent in 2000 and 12 percent in 1969.¹¹¹ A Pew Research Center survey in the same month found that 61 percent favored federal legalization.¹¹² Other polls found similar levels of support in recent years.¹¹³ 75 percent oppose enforcing federal laws against marijuana in states that have legalized medical or adult-use.¹¹⁴ A CBS News survey in April 2018 found that 61 percent thought legalizing cannabis should be left up to the states.¹¹⁵ Even a skewed poll conducted by one of the few anti-cannabis groups, Smart Approaches to Marijuana (SAM), found that only 16 percent favored keeping current federal marijuana law in place.¹¹⁶

Majorities of Millennials (70 percent), Gen Xers (66 percent), and Baby Boomers (56 percent) think cannabis should be legal.¹¹⁷ Only among the Silent Generation (born 1926-1945) does a

¹⁰⁹ <http://thehill.com/blogs/congress-blog/politics/397575-congress-must-catch-up-to-voters-on-marijuana-issue>

¹¹⁰ <https://www.cnn.com/2018/01/04/politics/marijuana-legalization-by-the-numbers/index.html>;
<https://www.thecannabist.co/2017/08/08/marijuana-legalization-opinion-poll-americans/85562/>

¹¹¹ <https://news.gallup.com/poll/221018/record-high-support-legalizing-marijuana.aspx>

¹¹² <http://www.pewresearch.org/fact-tank/2018/01/05/americans-support-marijuana-legalization/>

¹¹³ <https://www.vox.com/cards/marijuana-legalization/-popular-opinion-changing-marijuana-legalization>;
<https://www.thecannabist.co/2017/08/08/marijuana-legalization-opinion-poll-americans/85562/>

¹¹⁴ <https://www.cnn.com/2018/01/04/politics/marijuana-legalization-by-the-numbers/index.html>

¹¹⁵ <https://www.usnews.com/news/politics/articles/2018-04-20/poll-majority-of-americans-support-legal-marijuana>

¹¹⁶ <https://www.vox.com/policy-and-politics/2018/1/18/16905794/marijuana-legalization-polls>

¹¹⁷ <http://www.pewresearch.org/fact-tank/2018/01/05/americans-support-marijuana-legalization/>

greater share oppose (58 percent) than favor (35 percent) cannabis legalization.¹¹⁸ Nearly seven-in-ten Democrats say cannabis should be legal, as do 65 percent of independents.¹¹⁹ Republicans younger than 40 favor legalizing cannabis use, 62 percent to 38 percent, Republicans ages 40 to 64 are divided (48 percent say it should be legal, 49 percent illegal), only Republicans 65 and older oppose legalization, by more than two-to-one (67 percent to 30 percent).¹²⁰

The change to the law on same-sex marriage is a recent example of how overwhelming public opinion, especially among younger voters, can drive unprecedented law reform.

B. Federal Legislative Efforts Garnering Broader Support

Recent significant developments toward new federal legislation on cannabis reflect the quickly-shifting public opinion. Previously-silent legislators across the political spectrum are taking strong public positions in favor of cannabis law reform. As more influential legislators increasingly support proposed reforms, federal progress cannot be too far away.

1. Marijuana Justice Act

On August 1, 2017, Senator Cory Booker (D-NJ) and Representative Barbara Lee (D-CA) announced the introduction of comprehensive cannabis legislation reform, called the Marijuana Justice Act.¹²¹ This marked the first time that companion legislation has been introduced in both Congressional chambers to remove cannabis from the CSA.¹²²

The bills, S.1689 and H.R. 4815, would (1) remove marijuana from the US Controlled Substances Act, thereby ending the federal criminalization of cannabis; (2) incentivize states to mitigate existing and ongoing racial disparities in state-level marijuana arrests; (3) expunge federal convictions specific to marijuana possession; (4) allow individuals currently serving time in federal prison for marijuana-related violations to petition the court for resentencing; (5) and create a community reinvestment fund to invest in communities most impacted by the failed War on Drugs.¹²³ Current co-sponsors of the Senate bill include Senators Gillibrand (D-NY), Sanders (I-VT), Warren (D-MA), Harris (D-CA), Wyden (D-OR), and Merkley (D-OR).¹²⁴ The companion House Bill, H.R. 4815, has 39 co-sponsors.¹²⁵

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ <https://www.businessinsider.com/cory-booker-introduced-a-bill-to-end-the-federal-ban-on-marijuana-2017-8>

¹²² <http://norml.org/action-center/item/the-marijuana-justice-act-of-2017-introduced>

¹²³ *Id.*

¹²⁴ <https://www.congress.gov/bill/115th-congress/senate-bill/1689/cosponsors>

¹²⁵ <https://www.congress.gov/bill/115th-congress/house-bill/4815/cosponsors>

2. STATES Act

On June 7, 2018, Senators Cory Gardner (R-CO) and Elizabeth Warren (D-MA) introduced the Strengthening the Tenth Amendment Through Entrusting States Act (STATES) Act, S.3023.¹²⁶ Co-sponsors include Senators Rand (R-KY), Murkowski (R-AK), Sullivan (R-AK), Flake (R-AZ), Masto (D-NV), Booker (D-NJ), Bennet (D-CO), and Klobuchar (D-MN).¹²⁷

Representatives Earl Blumenauer (D-OR) and David Joyce (R-OH) introduced a companion bill in the House, H.R. 6043, which has 23 co-sponsors.¹²⁸ The bill does not seek to legalize cannabis, but instead proposes an amendment to the CSA, protecting cannabis users so long as they comply with local state or tribal laws. The bill also states that compliant cannabis transactions are not considered trafficking, and removes industrial hemp from the list of substances prohibited under the CSA.¹²⁹

3. Marijuana Freedom And Opportunity Act, And Others

The third, and perhaps most significant proposed legislation, came from Senate Minority Leader Chuck Schumer (D-NY), co-sponsored by Bernie Sanders (I-VT). On June 27, 2018, Senator Schumer introduced the Marijuana Freedom and Opportunity Act, S. 3174,¹³⁰ which he had first spoken about on April 20, 2018 (the unofficial annual cannabis holiday).¹³¹

The proposed legislation would, among other things, decriminalize marijuana at the federal level by removing it from the list of scheduled substances under the CSA, maintain federal law enforcement's authority to prevent marijuana trafficking from states that have legalized marijuana to those that have not, and incentivize state-level criminal record sealing and expungement programs.¹³² Senate co-sponsors include Senators Duckworth (D-IL), Sanders (I-VT), Kaine (D-VA), Merkley (D-OR), Wyden (D-OR), Bennet (D-CO), and Warren (D-MA).

A fourth bill introduced on July 26, 2018 by several congressmen, called the "Fairness in Federal Drug Testing Under State Laws Act," H.R. 6589,¹³³ would shield a federal worker "whose residence is in a State where that individual's private use of marijuana is not prohibited" from being denied employment or being "subject to any other adverse personnel action" as a result of

¹²⁶ <https://www.warren.senate.gov/imo/media/doc/2018.06.05%20-%20warren-gardner%20STATES%20Act.pdf>

¹²⁷ <https://www.congress.gov/bill/115th-congress/senate-bill/3032/cosponsors>

¹²⁸ https://www.washingtonpost.com/news/powerpost/wp/2018/06/07/republican-senator-confident-trump-will-back-bill-to-protect-states-rights-on-marijuana/?utm_term=.0110f4c010e0

¹²⁹ <https://www.cnbc.com/2018/06/07/senators-gardner-and-warren-release-bipartisan-marijuana-bill.html>

¹³⁰ <https://www.democrats.senate.gov/newsroom/press-releases/schumer-introduces-marijuana-freedom-and-opportunity-act-new-legislation-would-decriminalize-marijuana-at-federal-level>;
<https://www.congress.gov/bill/115th-congress/senate-bill/3174/text>

¹³¹ <https://www.cnbc.com/2018/04/20/chuck-schumer-announces-plan-to-decriminalize-marijuana.html>

¹³² <https://www.democrats.senate.gov/newsroom/press-releases/schumer-introduces-marijuana-freedom-and-opportunity-act-new-legislation-would-decriminalize-marijuana-at-federal-level>

¹³³ <https://www.marijuanamoment.net/employment-rights-for-marijuana-consumers-would-be-protected-under-new-bill/>

a positive marijuana test, except if there is “probable cause to believe that the individual is under the influence of marijuana” at the workplace. This bill has particular significance for veterans who comprise about one-third of the U.S. government’s workforce.¹³⁴

There are several additional pending bills, such as the Regulate Marijuana Like Alcohol Act (H.R. 1841), directing the DOJ to remove cannabis from the CSA.¹³⁵

Whether any of these bills, or some modified version of a combination of all of them, becomes law, is uncertain. But the broader bipartisan support for these legislative efforts is indicative of the direction Congressional cannabis legislation will take in the near term. The sheer number of pro-Cannabis bills during this Congressional session also shows the increasing momentum. As of July 2, 2018, 41 pro-cannabis bills had been introduced in the 115th session of Congress (beginning January 3, 2017), nearly equal to the total number of pro-cannabis bills introduced between 1999 and 2015.¹³⁶

4. The Prohibitionist Chairman Of The House Rules Committee

Attorney General Jeff Sessions said: “Good people don’t smoke marijuana,” and “People need to take some aspirin sometimes and tough it out a little.”¹³⁷ He has even opposed medical cannabis research, prompting a strong letter to him from Senators Orrin Hatch (R-UT) and Kamala Harris (D-CA), citing calls for expanded medical cannabis research from President Trump’s Surgeon General, the Secretary of Veterans Affairs (VA), the FDA, the Center for Disease Control (CDC), the National Highway Safety Administration, the National Institute of Health, the National Cancer Institute, the National Academies of Sciences, and NIDA.¹³⁸

But the job of the Attorney General, misguided as his personal opinions may be, is to enforce the law. As Sessions said during his confirmation hearings, “If that’s [cannabis prohibition] something [that] is not desired any longer, Congress should pass a law to change the rule.”¹³⁹

While the Attorney General only enforces the law, the single largest impediment to progress on federal cannabis legislation is another Sessions, Representative Pete Sessions (R-TX), the Prohibitionist from Texas.¹⁴⁰ In his capacity as chairman of the House Rules Committee, Sessions has enormous power over which measures make it to the floor for consideration.¹⁴¹ He

¹³⁴ <https://www.marijuanamoment.net/congressman-pushes-federal-employment-protections-for-marijuana-consumers/>

¹³⁵ <https://rosen.house.gov/media/press-releases/rosen-signs-bipartisan-legislation-regulate-marijuana-alcohol-remove-schedule-i>

¹³⁶ <https://mjbizdaily.com/chart-marijuana-policy-reform-at-standstill-despite-record-number-of-bills-before-congress/>

¹³⁷ <http://orbitt.net/category/articles-2015/page/78/>

¹³⁸ <https://www.hatch.senate.gov/public/index.cfm/2018/4/hatch-harris-call-on-sessions-doj-to-stop-blocking-medical-marijuana-research>

¹³⁹ <https://cannabisnow.com/stop-blaming-jeff-sessions-americas-anti-pot-drug-policy/>

¹⁴⁰ <https://www.marijuanamoment.net/man-reason-congress-cant-vote-marijuana-anymore/>

¹⁴¹ *Id.*

declares on his House Rules Committee biography that his position allows him “to influence every piece of legislation before it reaches the House floor . . .”¹⁴²

The full US House of Representatives has not voted on a single cannabis legislation amendment since 2016. That is largely because of Pete Sessions.¹⁴³ For two years, despite dozens of efforts from large groups of bipartisan representatives, Sessions’ House Rules Committee panel has consistently blocked all cannabis proposals from advancing.¹⁴⁴ Sessions has made few statements explaining his actions and refuses to engage the media. He said: “I referred to marijuana as merchants, this is a merchants of addiction, they are making it more powerful and more powerful and more powerful...When I went to high school...in 1973, I graduated, marijuana, on average, is 300 times more powerful.”¹⁴⁵

May 2016 was the last time the House of Representatives was allowed to vote on cannabis. During that vote, it approved by a 233 to 189 margin a measure to allow veterans to receive medical cannabis recommendations from VA doctors.¹⁴⁶ But the measure was stripped from the final legislation.¹⁴⁷ Since May 2016, Sessions’ panel has blocked 35 cannabis-related amendments from reaching the House floor for votes.¹⁴⁸

Rep. Sessions’ most recent interference came on July 16, 2018. Large bipartisan groups of lawmakers cosponsored two new cannabis measures, to attach to legislation to fund parts of the federal government through FY 2019.¹⁴⁹ One measure would have allowed Washington, DC to legally tax and regulate retail sales in the District, and the other measure would have prevented federal regulators from penalizing federal banks for working with the legal cannabis industry.¹⁵⁰

Congressman Denny Heck (D-WA) said in testimony about the banking amendment: “Our federal laws are outdated. The people in this country want the law to treat marijuana as we do alcohol . . . These large sums of cash make dispensaries an obvious target for robberies.”¹⁵¹ Rep. Heck recounted the story of Travis Mason, a 24-year-old Marine veteran who was killed during a 2016 robbery at a Colorado dispensary where he was serving as a security guard. “He managed to survive his service in the United States Marine Corps, but he didn’t survive his job guarding a

¹⁴² <https://herb.co/marijuana/news/pete-sessions-marijuana-bills-house/>

¹⁴³ <https://www.marijuanamoment.net/man-reason-congress-cant-vote-marijuana-anymore/>

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ <https://www.marijuanamoment.net/analysis-gop-congress-has-blocked-dozens-of-marijuana-amendments/>

¹⁴⁷ <https://www.occnnewsaper.com/veteran-equal-access-amendment-blocked-by-house-rules-committee/>

¹⁴⁸ <https://www.marijuanamoment.net/congressional-committee-blocks-marijuana-votes-again/>

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

store here at home.” As one former California police officer involved in cannabis security said: “Real lives are in danger because there’s so much cash in play here.”¹⁵²

During the week of July 16, 2018, the House Rules Committee considered 276 measures.¹⁵³ The cannabis banking measure had the most cosponsors, 22, more than any of the other 275 measures.¹⁵⁴ Sessions’ Committee cleared 87 amendments for House floor consideration, but not the cannabis measure.¹⁵⁵

Sessions’ obstructionism as Rules Committee Chairman continued even after the Republican Party of Texas, a month earlier, at their June 16, 2018 Convention voted to approve platform planks calling for a change in cannabis’ classification by the federal government and decriminalization.¹⁵⁶ Rep. Sessions’ agenda is not aligned with his constituent Texans - 61 percent support legalizing adult-use cannabis.¹⁵⁷

Sessions’ July 16, 2018 blocking of the banking amendment followed his similar actions a month earlier on June 6, 2018 when he blocked the Veterans Access amendment (voted on and overwhelmingly approved in May 2016), for the second time (he first blocked it in 2017).¹⁵⁸ The amendment submitted by Rep. Earl Blumenauer (D-OR), with 17 bipartisan co-sponsors, would have facilitated qualified veterans access to state-legal medical cannabis.¹⁵⁹

Congressman Blumenauer reacted: “For the second year, Pete Sessions has shown that he does not care about the health and well-being of our veterans—who are speaking out across the country. All they want is fair and equal treatment, and the ability to consult with their own physician on all treatment options. By blocking this vote, Chairman Sessions has turned his back on our wounded warriors, commonsense, and the will of the American people. He should be ashamed.”¹⁶⁰

But Sessions, like all members of the House, is up for reelection in November. The Cook Political Report which tracks congressional races, moved his seat—Texas’s 32nd congressional district—from being rated “Lean Republican” to the closer “Toss Up” status last month.¹⁶¹ In 2016, Hillary Clinton won the district.¹⁶² Sessions’ Democrat challenger Colin Allred has

¹⁵² www.latimes.com/business/la-fi-cannabis-banking-20170707-story.html

¹⁵³ <https://www.marijuanamoment.net/congressional-committee-blocks-marijuana-votes-again/>

¹⁵⁴ *Id.*

¹⁵⁵ *Id.*

¹⁵⁶ <https://www.forbes.com/sites/tomangell/2018/06/17/texas-republican-party-endorses-marijuana-decriminalization/#71175d7b5236>

¹⁵⁷ <https://www.forbes.com/sites/kriskrane/2018/07/11/why-president-trump-could-be-marijuanas-savior/#6baa5ee320a0>

¹⁵⁸ <https://www.occn newspaper.com/veteran-equal-access-amendment-blocked-by-house-rules-committee/>

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ <https://www.marijuanamoment.net/man-reason-congress-cant-vote-marijuana-anymore/>

¹⁶² *Id.*

outraised him by a substantial amount.¹⁶³ Cannabis reform advocates are targeting Sessions for defeat in 2018. Congressman Blumenauer started a PAC and pledged to fund in-district billboards spotlighting Sessions' anti-cannabis tactics.¹⁶⁴

C. FDA Approval Of GW's Cannabis-Based Epilepsy Drug

While Rep. Pete Sessions has single-handedly stymied Congressional progress, there is some progress in the executive branch.

On April 19, 2018, the FDA's Peripheral and Central Nervous System Advisory Committee voted unanimously (13 to 0) to support the approval of GW Pharmaceuticals' (NSDQ:GWPH) cannabidiol product, Epidiolex.¹⁶⁵ The committee supported the proposed indication for Epidiolex: the treatment of seizures associated with Dravet and Lennox-Gastaut syndromes, two rare and severe forms of epilepsy.¹⁶⁶ Both conditions can cause patients to have multiple seizures a day, and have been linked to cognitive deterioration.¹⁶⁷ GW's New Drug Application for Epidiolex received priority review status from the FDA.¹⁶⁸

On June 25, 2018, the FDA officially approved Epidiolex for the proposed indications.¹⁶⁹ According to the FDA's press release: "This is the first FDA-approved drug that contains a purified drug substance derived from marijuana. It is also the first FDA approval of a drug for the treatment of patients with Dravet syndrome."¹⁷⁰ FDA Commissioner Dr. Scott Gottlieb said: "This approval serves as a reminder that advancing sound development programs that properly evaluate active ingredients contained in marijuana can lead to important medical therapies. And, the FDA is committed to this kind of careful scientific research and drug development."¹⁷¹

By solving a lot of problems and obstacles on the path to FDA approval, GW has paved the way for companies like Zynerva Pharmaceuticals (NSDQ:ZYNE) and Insys Therapeutics (NSDQ:INSY), which are developing their own cannabinoid-based drugs, to seek FDA approval.¹⁷²

The difficulties in researching cannabis in the US are such that prior to GW's Epidiolex only one cannabis-based drug has been approved by the FDA. In 1985, the FDA approved dronabinol, a synthetic form of THC, to treat nausea and vomiting brought on by

¹⁶³ <https://www.texasobserver.org/is-the-realm-of-possibility-expanding-for-texas-democrats-running-for-congress/>

¹⁶⁴ <https://www.marijuanamoment.net/analysis-gop-congress-has-blocked-dozens-of-marijuana-amendments/>

¹⁶⁵ <https://wcct.com/future-cannabis-clinical-research-medicine/>

¹⁶⁶ <https://www.thestreet.com/investing/stocks/fda-approval-cbd-14634760>

¹⁶⁷ *Id.*

¹⁶⁸ <https://wcct.com/future-cannabis-clinical-research-medicine/>

¹⁶⁹ <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm611046.htm>

¹⁷⁰ *Id.*

¹⁷¹ *Id.*

¹⁷² <https://www.thestreet.com/investing/stocks/fda-approval-cbd-14634760>

chemotherapy. The drug, sold as Marinol, was later approved for a second use, as an appetite stimulant for patients suffering from AIDS-related anorexia.¹⁷³

Epidiolex must still be approved by the DEA before it can be prescribed to patients, a process called rescheduling which can take up to 90 days. GW's Steve Schultz thinks Epidiolex will be reclassified to the "unrestricted end of the schedule spectrum."¹⁷⁴ Epidiolex's move to a lower drug class would signify a change in how the US executive branch views CBD and the benefits of the cannabis derivative.¹⁷⁵ Some think the DEA will have to reschedule cannabis or CBD for GW to sell Epidiolex, but this is not the case.¹⁷⁶ The DEA can reschedule only the Epidiolex product without rescheduling cannabis or CBD.¹⁷⁷

The FDA's approval of a cannabis-based drug is highly significant. According to Kris Krane, president of 4Front Ventures and expert on cannabis legalization policy:¹⁷⁸ "It's a real recognition by the federal government for the first time that there are medicinal benefits deemed in a cannabis plant . . . It's making it more and more difficult for the federal government to leave marijuana as a Schedule I substance...when [the FDA has] now approved one of the main compounds in marijuana for medical prescriptions."¹⁷⁹

According to John Hudak, senior fellow at the Brookings Institute: "The approval of Epidiolex . . . flies in the face of decades of political rhetoric, public policy and the legal standards underpinning cannabis prohibition In approving Epidiolex, the FDA has signaled to the rest of the government — specifically the DEA — that cannabis-based medicines can have medical value and can be regulated for safe medical use in this country."¹⁸⁰

¹⁷³ <https://merryjane.com/news/big-pharma-is-investing-in-medical-marijuana-research-despite-u-s-law>

¹⁷⁴ <https://www.thestreet.com/investing/stocks/fda-approval-cbd-14634760>

¹⁷⁵ *Id.*

¹⁷⁶ <https://www.newcannabisventures.com/why-gw-pharma-stock-has-stalled-and-12-stories-from-new-cannabis-ventures/>

¹⁷⁷ Aside from Congress passing legislation amending the CSA and descheduling or rescheduling cannabis, the CSA has two built-in means by which a substance like cannabis or its CBD constituent can be rescheduled. Under 21 U.S.C §§ 811-812, the Attorney General of the United States, after the DEA/FDA has made a determination, may reschedule. To date, no Attorney General has exercised that power. The other means under the CSA to reschedule cannabis is for an "aggrieved party" to petition the DEA/FDA, seeking reclassification based upon scientific or other evidence of claims which would advance their interests. The petition process is inordinately prolonged, up to a decade, and futile without Congress acting. https://www.forbes.com/sites/sarabrittanysonmerset/2018/08/12/can-article-v-federally-legalize-cannabis/amp/?_twitter_impression=true

¹⁷⁸ <https://www.bostonglobe.com/business/2016/12/02/five-things-you-should-know-about-kris-krane/v9qReJ4UUPrAUdvLOh8UgO/story.html>; See also <https://4frontventures.com/team.html>

¹⁷⁹ <https://www.thestreet.com/investing/stocks/fda-approval-cbd-14634760>

¹⁸⁰ https://www.washingtonpost.com/opinions/the-fda-just-opened-the-door-to-transforming-marijuana-policy/2018/06/26/aeb9b628-7978-11e8-aece-4d04c8ac6158_story.html?utm_term=.130643a67828

Separately, on July 5, 2018, the FDA denied a request from an anti-legalization group to place marijuana and its derivatives on a list of restricted substances that are not “generally recognized as safe and effective.”¹⁸¹

D. Second Circuit Court Of Appeals: *Washington v. Sessions*

Cannabis law reform in the legislative and administrative branches of government is in sight, but long-overdue progress may also come from the third branch of government which often drives major social changes: the judicial branch.

On July 24, 2017, former NFL player Marvin Washington, two children using medical cannabis, an Iraq War vet with post-traumatic stress disorder, and a social justice nonprofit organization filed a lawsuit in New York’s federal court, the Southern District of New York, challenging the constitutionality of the CSA with regard to marijuana (S.D.N.Y. No. 17-cv-05625).¹⁸² Attorney General Jeff Sessions and DEA administrator Charles Rosenberg were named as defendants.¹⁸³

One of the children plaintiffs Alexis Bortell, 11 (now 12), uses medical cannabis to treat intractable epilepsy. She claimed the CSA restricts her ability to travel freely with her medicine and the federal illegality of cannabis forbids her from fully accessing the benefits due to her as the child of a military veteran, including health insurance.¹⁸⁴ Her parents — both military veterans (her father is 100% disabled)—moved their family from Texas to Larkspur, Colorado to access cannabis.¹⁸⁵ According to the Complaint:

At the age of seven, Alexis began experiencing seizures, and was eventually diagnosed with a condition known as “intractable epilepsy.”

Alexis often suffered from multiple seizures per day, and spent most of her school-day afternoons in the nurse's office. After two years of doctor visits, tests, urgent trips to the emergency room, and pill after pill, all with their assortment of negative side effects, her family exhausted traditional pharmaceutical options to stop what Alexis referred to as the “seizure monster.” At that point, they turned to the last known option available: whole-plant Cannabis containing high concentrations of THC.

Since being on whole-plant medical Cannabis, Alexis has gone more than two years seizure-free, without taking any other medication to control her seizures. Without her use of whole-plant medical Cannabis, Alexis would likely have no quality of life, and instead be resigned to spending her days

¹⁸¹ <https://www.forbes.com/sites/tomangell/2018/07/05/fda-rejects-petition-to-further-restrict-marijuana/#65cafc607eea>

¹⁸² <https://www.thecannabist.co/2017/07/25/marijuana-schedule-i-lawsuit-unconstitutional/84473/>

¹⁸³ *Id.*

¹⁸⁴ <https://www.thecannabist.co/2018/02/26/marijuana-schedule-i-lawsuit-dismissed/100033/>

¹⁸⁵ *Id.*

at home inside or worse, in a hospital bed, as medical care-givers surround her with offers of palliative care which fail to provide any actual palliative relief.¹⁸⁶



(Alexis, and her father, Dean Bortell, as the two wait to testify during a Colorado House committee hearing on cannabis legislation on March 6, 2017 in Denver.)¹⁸⁷

The other child Plaintiff in the lawsuit is Jagger Cotte, aged 6. His parents were also forced to move from Georgia to Colorado, to obtain medical cannabis. According to the Complaint:

Jagger suffers from a rare, congenital disease known as "Leigh's Disease," which disables and then kills approximately 95% of people afflicted with it (if diagnosed before age 2) by the time that they reach the age of four.

Consistent with his diagnosis and prognosis, Jagger, beginning at age one, became a hospice patient, unable to speak, walk, masticate food, and/or otherwise handle any activities of daily living. Worse, Jagger began experiencing near-constant pain, shrieking in agony as he tried to get through each day.

As Sebastien and his wife prepared for what they expected would be their son's inevitable demise, they turned to Cannabis with high concentrations of THC, in the hope of reducing his pain and prolonging his life. Since he began treating with medical Cannabis with high concentrations of THC, Jagger has stopped screaming in pain, has been able to interact with his parents, and has prolonged his life by more than two years.¹⁸⁸

Judge Alvin K. Hellerstein dismissed the case on February 26, 2018,¹⁸⁹ taking pains to “emphasize that this decision is not on the merits of plaintiffs’ claim[s],” the Plaintiff’ attorney

¹⁸⁶ <https://mjbizdaily.com/wp-content/uploads/2017/07/ECF-Version-of-Complaint.pdf> (¶¶31-50, internal numbering and selected sentences omitted.)

¹⁸⁷ <https://www.thecannabist.co/2017/07/25/marijuana-schedule-i-lawsuit-unconstitutional/84473/>

¹⁸⁸ <https://mjbizdaily.com/wp-content/uploads/2017/07/ECF-Version-of-Complaint.pdf> (¶¶76-83, internal numbering and selected sentences omitted.)

¹⁸⁹ <https://www.scribd.com/document/372470304/Federal-Judge-Dismisses-Marijuana-Lawsuit>

Michael S. Hiller said.¹⁹⁰ During the February 14 oral argument, Judge Hellerstein commented to Hiller: “How could anyone say that your clients’ lives have not been saved by marijuana?”¹⁹¹

Nevertheless, Judge Hellerstein ruled that the Plaintiffs were required to exhaust administrative remedies including petitioning the DEA to reschedule cannabis. Hiller said: “Resigning the plaintiffs to the petitioning administrative process is tantamount to a death sentence for those patients who need cannabis to live. The time has come for the courts to abandon decades-old precedent, notched with obsolete legal technicalities, and catch up with modern science and contemporary principles of constitutional law.”¹⁹²

On June 1, 2018, the Plaintiffs appealed to the United States Court of Appeals for the Second Circuit, the most influential federal circuit appeals court, one step below the Supreme Court.¹⁹³

Hiller believes that a futility argument should overcome the administrative process requirement. He said that Judge Hellerstein did not appear to address the Plaintiffs’ argument that the petitioning administrative process generally consumes an “average of nine years to complete,” and is “overseen by a biased decision-maker (defendant Jeff Sessions), who has pre-determined to reject the evidence before it has even been presented.”¹⁹⁴ He further said: “This case will continue to move forward. Notwithstanding the outcome today, we remain confident that the final disposition of this case will include a finding that the classification of cannabis under the Controlled Substances Act is unconstitutional – freeing millions of Americans to safely treat their conditions with a plant that maintains their health and their lives.”¹⁹⁵

The Second Circuit appeal will probably take 6 to 12 months to resolve, but with any outcome, the *Washington v. Sessions* case will likely be in front of the Supreme Court within 18 months. On May 14, 2018, the Supreme Court decisively (by a margin of 7-2) sided with states’ rights in a sports gambling case that legal experts say sets a strong precedent for cannabis legalization.¹⁹⁶

E. The Midterm Elections And The Trump Card

Elected officials who oppose cannabis legalization do so at their own political peril. Being a cannabis Prohibitionist is “politically untenable.”¹⁹⁷ In the lead-up to the Midterm elections in November 2018, in a host of gubernatorial races, and in the run-up to the 2020 presidential

¹⁹⁰ <https://www.thecannabist.co/2018/02/26/marijuana-schedule-i-lawsuit-dismissed/100033/>

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ <https://drive.google.com/file/d/0B1yZA08IU9JdYWVNSEJhamVaMjRqdXpDUDR3dDlvUndlQzVz/view>

¹⁹⁴ <https://www.dailymarijuanaobserver.com/single-post/2018/02/28/Plaintiffs-to-Appeal-Dismissal-of-Federal-Cannabis-Lawsuit>

¹⁹⁵ *Id.*

¹⁹⁶ <https://www.cannalawblog.com/u-s-supreme-court-sets-a-great-precedent-for-cannabis/>

¹⁹⁷ <https://www.thestreet.com/politics/if-we-got-boehner-we-can-get-anyone-washington-growing-role-in-legal-weed-14610294>

elections, cannabis legalization will be an important issue. And for the first time in history, a majority of Republicans support adult-use legalization of cannabis.¹⁹⁸

Political Strategist Celinda Lake looked at the top battleground districts across the US and found that 60 percent of likely voters in those districts, across the political spectrum, favor the legalization of cannabis.¹⁹⁹ Support for medical cannabis legalization is much higher.²⁰⁰ Perhaps most telling in these battleground districts is that nearly half say they would be more likely to vote for a candidate running for elected office if he or she supports legalization. According to National Association For Reform Of Marijuana Laws (NORML) Executive Director Erik Altieri: “Marijuana legalization is going to be a lead issue in the 2018 elections. Advocating for an end to our decades-long, failed prohibition is not only good policy, but good politics.”²⁰¹

Of the five Republican states that will vote on cannabis legalization during the Fall midterms, Michigan, Utah, Oklahoma, Missouri, and North Dakota, four of the states supported Trump by double digits in 2016 (in North Dakota 63/27 favored Trump/Clinton).²⁰² In Michigan, voters will decide on an adult-use cannabis ballot measure, with polls indicating voter-support of nearly 60 percent.²⁰³ In Utah, voters will decide on a ballot measure to legalize medical cannabis - in that overwhelmingly Republican state, 76 percent of voters support medical cannabis.²⁰⁴ In Oklahoma, a petition to place adult-use legalization on the November ballot accumulated more than 100,000 signatures but fell some 20,000 short for a vote.²⁰⁵ In Missouri, four ballot measures have been proposed – three of which are medical and one adult-use. Organizers in support of adult-use legalization have submitted their signatures and are waiting for state election officials’ approval to add the question to the ballot.²⁰⁶

From a cannabis law reform perspective, the senate races in Texas and California will be important in terms of the opportunity to replace anti-cannabis senator Ted Cruz, facing a challenging campaign, and long-time non-supporter California senator Dianne Feinstein.²⁰⁷ In the House, Representative Andy Harris (R-MD), who worked to obstruct Washington, DC from

¹⁹⁸ <https://herb.co/marijuana/news/republican-states-cannabis-legalization-battleground/>

¹⁹⁹ <http://thehill.com/blogs/congress-blog/politics/397575-congress-must-catch-up-to-voters-on-marijuana-issue?amp=1>

²⁰⁰ *Id.*; <https://www.marijuanamoment.net/voters-in-key-congressional-districts-support-marijuana-legalization-poll-says/>

²⁰¹ <https://cannabisnow.com/marijuana-midterm-elections/>

²⁰² <https://herb.co/marijuana/news/republican-states-cannabis-legalization-battleground/>; https://en.wikipedia.org/wiki/United_States_presidential_elections_in_North_Dakota

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ <https://www.kjrh.com/news/local-news/petition-to-get-recreational-marijuana-vote-on-oklahoma-november-ballot-nearing-signature-goal>

²⁰⁶ <https://herb.co/marijuana/news/republican-states-cannabis-legalization-battleground/>

²⁰⁷ <https://cannabisnow.com/marijuana-midterm-elections/> Recently, Senator Feinstein said she no longer opposes legalization. <https://www.washingtonpost.com/news/powerpost/wp/2018/05/01/sen-dianne-feinstein-says-she-no-longer-opposes-legal-marijuana/>

regulating the sale of cannabis despite it being legal to possess, will be facing a serious challenge.²⁰⁸ Republican Congressman Paul Gosar (R-AZ), who has interfered with legalization progress in Arizona including making false claims about states that have legalized cannabis,²⁰⁹ is facing a difficult re-election campaign.²¹⁰ Others who have delayed progress at the federal level are retiring, including House Judiciary Chairman Bob Goodlatte (R-VA), who along with House Rules Chairman Pete Sessions (R-TX) has long refused to give bills a single hearing.²¹¹

Democratic primary voters will overwhelmingly reject anti-cannabis candidates. As prominent Florida attorney and cannabis activist John Morgan put it: For Democratic primary voters, opposing flat-out legalization of cannabis is on the same scale as being against same-sex marriage: “You’re dead. You’re DOA.”²¹² With the majority of Republicans nationwide supporting legalization, including 60 percent in battleground states,²¹³ it would be politically risky for a candidate from either party to oppose legalization.

Republican or Democratic, many voters are single-issue voters regarding marijuana legalization.²¹⁴ In Washington State, the Secretary of State credited the ballot measure concerning the legalization of cannabis, Initiative 502, for encouraging voter turnout of 81 percent, the highest in the nation.²¹⁵ In Washington, voters aged 18 to 29 increased their share of the electorate from 10 to 22 percent between 2008 and 2012—more than doubling, and voters 18 to 24, increased their participation from five to 13 percent—a 160 percent increase.²¹⁶ In Colorado, voter turnout changed dramatically between 2008 and 2012 with marijuana legalization on the ballot. In 2008, 18 to 29-year olds made up 14 percent of the electorate; that number increased to 20 percent in 2012.²¹⁷ There are scores of ardent supporters of cannabis legalization, and while many people may still be ambivalent or unaware, there is little passion on the side of opposing cannabis legalization.

²⁰⁸ *Id.*

²⁰⁹ <http://norml.org/congressional-scorecard/us-house-of-representatives>; <https://herb.co/marijuana/news/anti-cannabis-politicians-midterms-2018/>

²¹⁰ https://www.washingtonpost.com/powerpost/arizona-voters-to-pick-new-member-of-congress-to-replace-trent-franks/2018/04/24/08fd2e84-4734-11e8-827e-190efaf1flee_story.html?utm_term=.3a756051abe0

²¹¹ <https://cannabisnow.com/marijuana-midterm-elections/>

²¹² <https://www.bradenton.com/latest-news/article212324854.html>

²¹³ <https://herb.co/marijuana/news/republican-states-cannabis-legalization-battleground/>; <http://thehill.com/blogs/congress-blog/politics/397575-congress-must-catch-up-to-voters-on-marijuana-issue?amp=1>

²¹⁴ <https://www.nytimes.com/2018/06/25/us/politics/colorado-cannabis-governor.html>. Rumors began circulating in April about a plan where Republican lawmakers in Michigan would legislatively adopt legalization language into law just to stop the ‘Green Wave’ of single-issue cannabis voters from flooding the polls in November.

<https://www.weednews.co/michigans-cannabis-power-base-influences-state-politics/>

²¹⁵ <https://www.sos.wa.gov/office/news-releases.aspx#/news/1065>

²¹⁶ <https://www.brookings.edu/blog/fixgov/2016/10/28/cannabis-coattails/>

²¹⁷ *Id.*

In addition to the November 2018 Midterms, many believe that if not passed before then, cannabis legalization will feature in the 2020 presidential elections.²¹⁸ Every potential Democrat 2020 contender (except perhaps Biden) has strongly supported adult-use legalization - including Senators Gillibrand, Harris, Cory, Sanders, and others.²¹⁹

President Trump has never publicly opposed cannabis legalization. In fact, he has issued numerous statements and signals suggesting he would support it. In an article titled “Why President Trump Is Positioned To Be Marijuana’s Great Savior & How The Democrats Blew It,” 4Front Ventures co-founder Kris Krane posits that “President Trump, whether premeditated or not, is putting himself in a position to make history by becoming the U.S. president who reversed a nearly century-long policy of marijuana prohibition and, in so doing, reap the political spoils of taking on the mantle of ‘the legalization president.’”²²⁰ According to former Governor of Massachusetts and Libertarian Party Vice Presidential candidate Bill Weld (who joined the Board of Acreage Holdings in April 2018): “I would think it’s excellent politics for President Trump. He did say during the campaign in 2016, adult recreation, full adult legalization, is a states’ rights issue — and that goes down very well with Republicans.”²²¹

As Mr. Krane explains, in the 2016 election Democrats had an opportunity to own the cannabis legalization issue, especially in a campaign in which millennial voters showed record levels of dissatisfaction with the major-party candidates.²²² Hillary Clinton could have chosen to go further than President Obama and support an end to federal cannabis prohibition, as some Democratic party political strategists were urging at the time.²²³ Yet, just as Democratic leaders had for years, she chose the “politically safe” route and only endorsed medical marijuana, while calling on the federal government to study the legalization programs in Colorado and Washington.²²⁴

According to Mr. Krane, Clinton lost what was perhaps the Democrats’ last opportunity to reap the political spoils of being the party to embrace legalization: “This has opened up a huge opportunity for President Trump to own this issue in a way that no president ever has, eliminating any chance Democrats may have had to earn the political gains of embracing legalization. The Democrats have potentially ceded these benefits to the president, who could potentially use them with staggering effectiveness during his reelection campaign.”²²⁵ Mr. Krane

²¹⁸ <https://www.politico.com/story/2017/08/13/marijuana-legalization-2020-elections-241576>

²¹⁹ <https://www.cnn.com/2018/04/20/politics/democrats-marijuana-legalization/index.html>

²²⁰ <https://www.forbes.com/sites/kriskrane/2018/07/11/why-president-trump-could-be-marijuanas-savior/#157b2c5c20a0>

²²¹ <https://www.cnbc.com/2018/04/20/descheduling-marijuana-is-excellent-politics-for-president-trump-bill-weld.html>

²²² <https://www.forbes.com/sites/kriskrane/2018/07/11/why-president-trump-could-be-marijuanas-savior/#330b3a2120a0>

²²³ *Id.*

²²⁴ *Id.*

²²⁵ *Id.*

says that with 2020 Democratic hopefuls now competing amongst themselves to be seen as the most pro-legalization, President Trump could neutralize this issue politically for the Democrats by fully embracing legalization prior to the 2020 elections.²²⁶

President Trump has on several indications publicly indicated his support for deferring to the states on cannabis legalization, a position consistent with all of the proposed federal legalization legislation. In October 2015, early in his campaign, Trump discussed the issue at a campaign rally: “The marijuana thing is such a big thing. I think medical should happen—right? Don’t we agree? I think so. ... I think that should be a state issue, state-by-state.”²²⁷ During the 2016 campaign, a Colorado reporter asked Trump whether he would enforce the federal ban on cannabis in states that had legalized. He said: “I wouldn’t do that, no...I think it’s up to the states yeah, I’m a states person. I think it should be up to the states absolutely.”²²⁸ Speaker Boehner said: “The President believes we ought to allow the states to do what they’re doing.”²²⁹

On April 11, 2018, for the first time since the 2016 campaign, President Trump confirmed that he would support states’ rights to regulate cannabis. In a conversation between the president and the Senator Cory Gardner (R-CO), Trump told Gardner: “You have my support for a legislative solution that will allow a states’ rights approach.”²³⁰ Speaking of their conversation, Senator Gardner said: “Since the campaign, President Trump has consistently supported states’ rights to decide for themselves how best to approach marijuana. Late Wednesday, I received a commitment from the President that the Department of Justice’s rescission of the Cole memo will not impact Colorado’s legal marijuana industry. President Trump has assured me that he will support a federalism-based legislative solution to fix this states’ rights issue once and for all.”²³¹ Senator Gardner concluded: “We have the President’s support. You have 30-some states that have addressed this issue in one way or another.”²³² White House press secretary Sarah Huckabee Sanders confirmed that Trump and Gardner spoke about the issue and said: “We’re always consulting Congress about issues, including states’ rights, of which the president is a firm believer.”²³³

On June 8, 2019, the day after Senators Cory Gardner (R-CO) and Elizabeth Warren (D-MA) introduced the STATES Act, when Trump was asked by reporters if he supports it, he said: “I really do, I support Senator Gardner, I know exactly what he’s doing. We’re looking at it, but I probably will end up supporting that, yes.”²³⁴

²²⁶ *Id.*

²²⁷ *Id.*

²²⁸ <https://herb.co/marijuana/news/trump-support-cole-memo-legalize-cannabis/>

²²⁹ <http://wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

²³⁰ <https://www.denverpost.com/2018/04/13/trump-gardner-colorado-marijuana-industry-not-targeted/>

²³¹ <https://www.nbcnews.com/storyline/legal-pot/senator-says-trump-pledged-legal-pot-business-won-t-be-n865951>

²³² <https://www.denverpost.com/2018/04/13/trump-gardner-colorado-marijuana-industry-not-targeted/>

²³³ *Id.*

²³⁴ <https://herb.co/marijuana/news/trump-supports-states-act-legalize-cannabis/>

There is little risk, but tremendous upside for Trump to publicly proclaim support for legalization. Cannabis is a bi-partisan issue now, not only amongst the electorate but also increasingly amongst elected officials. Long-time Republican Speaker Boehner said: “anything in the cannabis area is not partisan at all.”²³⁵ Republican governors Brian Sandoval (NV), Jan Brewer (AZ), and Charlie Baker (MA) have dutifully implemented their states’ cannabis programs after initially opposing the ballot initiatives.²³⁶ And Republican Phil Scott of Vermont became the first governor in the country to sign an adult-use legalization bill into law.²³⁷

President Trump inspires passionate followers and detractors, but most agree that he is politically savvy.²³⁸ A New York real estate magnate with no history in formal politics does not become President without being politically astute. Everyone agrees that Trump is unpredictable. It would be unwise to bet against Trump seizing cannabis legalization as the ultimate Republican coup in the impending run-up to the 2020 election.

F. Spurred On By Northeast And Midwest States

Driven by overwhelming public opinion, the end of cannabis Prohibition may come from Congress, from the DEA rescheduling cannabis, or from the Supreme Court. Midterm congressional elections and the presidential elections will undoubtedly be catalysts too. However, developments in individual states will be the ultimate driver to federal legalization.

With 30 states and DC embracing medical cannabis, and 9 states and DC permitting adult-use, the addition of more states with medical and adult-use legalization will ultimately create a tipping point compelling Congress to act. The last few months have seen a flurry of legalization activity in some of the most influential states in the nation. The combination of sorely-needed tax revenue for empty state coffers, along with tremendous savings in policing and imprisonment costs, has gotten the attention of state legislators and leaders across the country. Unprecedented developments are occurring on almost a daily basis in New York, New Jersey, Illinois, Michigan, Pennsylvania, Florida, and many other highly-populated, important states.

1. New York

Policy developments and cultural changes in the financial capital of the world profoundly influence domestic policy.

New York was one of the first states in the nation to decriminalize the possession of marijuana — in 1977.²³⁹ Yet, as Marijuana Policy Project explains, 40 years later there is still a giant

²³⁵ <http://wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

²³⁶ <https://www.forbes.com/sites/kriskrane/2018/07/11/why-president-trump-could-be-marijuanas-savior/#330b3a2120a0>

²³⁷ *Id.*

²³⁸ <https://www.forbes.com/sites/luisakroll/2015/09/29/the-art-of-the-trump-just-how-did-someone-so-crazy-become-so-rich/#63f8ba672b22>

²³⁹ <https://www.mpp.org/states/new-york/>

loophole in the law, which has caused thousands more arrests, and all of the collateral consequences that come with them. The “public view” exception to the decriminalization law has been widely abused by police officers, who order people, mostly non-white minorities, to empty their pockets and then arrest them for possessing marijuana in public view.²⁴⁰ Over 18,000 people were still arrested for marijuana possession in 2016, in New York City alone.²⁴¹ Yet, these arrests have done nothing to stem the flow of marijuana in New York which has a very robust and sophisticated illicit cannabis market.²⁴²

In 2017, New Yorkers consumed 77.4 tons of cannabis (the equivalent of about 77 million joints), more than any other city in the world, and the competition is not even close.²⁴³ The second-most cannabis consuming US city was Los Angeles, with 36.6 tons consumed last year.²⁴⁴ New Yorkers spend an estimated \$3 billion per year on cannabis in the illicit market.²⁴⁵ A Quinnipiac poll released in May 2018 found that 63 percent of New York voters, and 71 percent of the state’s Democrats, support adult-use legalization.²⁴⁶

Suddenly, during the past nine months, legalization developments in New York State are happening at a rapid pace.

On January 16, 2018, Governor Cuomo first announced in his annual budget address that the state would study legalizing of cannabis,²⁴⁷ pointing to neighboring states Vermont and Massachusetts.²⁴⁸

Cuomo, with deep donor ties to the pharmaceutical industry²⁴⁹ has been historically opposed to New York’s nascent medical cannabis industry.²⁵⁰ In April 2013, he said: “We’re looking at it, but at this point I don’t support medical marijuana.”²⁵¹ In December 2013, he called a proposed bill to legalize adult-use cannabis a “non-starter.”²⁵² Finally, in January 2014, he pledged to

²⁴⁰ *Id.*

²⁴¹ *Id.*

²⁴² <https://nypost.com/2018/05/05/inside-new-yorks-hottest-illegal-weed-speakeasy/>

²⁴³ <https://www.nbcnewyork.com/news/local/new-yorkers-smoke-more-pot-than-any-other-city-in-the-world-474743973.html>

²⁴⁴ *Id.*

²⁴⁵ <http://www.drugpolicy.org/press-release/2018/01/governor-cuomo-calls-study-regulating-and-taxing-marijuana-adult-use-new-york>

²⁴⁶ <https://www.marijuanamoment.net/new-york-voters-strongly-support-legalizing-marijuana-poll-shows/>

²⁴⁷ <http://www.drugpolicy.org/press-release/2018/01/governor-cuomo-calls-study-regulating-and-taxing-marijuana-adult-use-new-york>

²⁴⁸ <https://www.democratandchronicle.com/story/news/politics/albany/2018/05/25/andrew-cuomo-marijuana-timeline/632312002/>

²⁴⁹ <https://www.nytimes.com/2018/01/17/nyregion/cuomo-fundraising-election.html>

²⁵⁰ <https://www.politico.com/states/new-york/albany/story/2017/02/cuomo-says-he-remains-opposed-to-recreational-marijuana-109436>

²⁵¹ <https://www.democratandchronicle.com/story/news/politics/albany/2018/05/25/andrew-cuomo-marijuana-timeline/632312002/>

²⁵² *Id.*

launch a medical cannabis program that would make cannabis available on a very limited basis at 20 hospitals: “I feel comfortable with this approach,” Cuomo said.²⁵³ In June 2014, New York’s legislature approved a bill creating a broader medical program in New York, though on Cuomo’s insistence, it included a number of strict restrictions, including a ban on smokable forms.²⁵⁴

During 2016 and 2017, New York added more conditions including chronic pain to the list of qualifying conditions and issued 5 additional vertical licenses (cultivate, process, and sell) for medical cannabis Registered Organizations.²⁵⁵ To mark Veterans Day, Cuomo signed a bill to add post-traumatic stress disorder (PTSD) as a qualifying condition, making New York the 28th of the 30 medical cannabis states to allow PTSD patients to qualify for medical cannabis.²⁵⁶ New York’s medical cannabis program finally made some progress after being one of the most restrictive in the country.²⁵⁷ As of August 28, 2018, there were 69,466 certified medical cannabis patients in New York, and 1,857 registered practitioners.²⁵⁸

Because Cuomo has been historically unsupportive of even medical cannabis, his January 16 announcement of an adult-use legalization study represented a significant turning point in the prospects for near-term adult-use legalization in New York. On April 3, 2018, a New York Department of Health spokeswoman said the study would be completed in the Fall 2018: the agency would “collect the relevant information by the fall, at which point it will be reviewed and a report will be prepared.”²⁵⁹

Actress Cynthia Nixon (*Sex & the City*’s Miranda) and her bid for Governor, among other factors, pushed New York’s government to act more quickly than it promised (rare). On April 11, 2018, Ms. Nixon announced that she favors legalizing adult-use in New York. In her video message, she took aim at Cuomo, saying that cannabis would already be legal in New York if “there was more political courage coming out of Albany. In 2018, in a blue state like New York, marijuana shouldn’t even be an issue.”²⁶⁰

Suddenly, Cuomo’s comments took a dramatic change in tone. At a press conference on May 14, 2018, Cuomo said the report, planned for the fall, would be released sooner than expected. “That report should be done shortly,” Cuomo said. “How do you define shortly? It is supposed to be

²⁵³ *Id.*

²⁵⁴ *Id.*

²⁵⁵ https://www.health.ny.gov/regulations/medical_marijuana/

²⁵⁶ <https://www.mpp.org/states/new-york/>

²⁵⁷ <https://www.democratandchronicle.com/story/news/politics/albany/2018/04/11/cynthia-nixon-wants-legalize-marijuana-new-york/506580002/>

²⁵⁸ https://www.health.ny.gov/regulations/medical_marijuana/faq.htm

²⁵⁹ *Id.*

²⁶⁰ <https://www.democratandchronicle.com/story/news/politics/albany/2018/04/11/cynthia-nixon-wants-legalize-marijuana-new-york/506580002/>

done by calendar, it should be done within days.”²⁶¹ Cuomo again referred to Massachusetts and Vermont legalizing adult-use: “To say well, it won’t be in New York I think is to avoid reality at that point. The facts changed on this issue and the facts changed quickly.”²⁶²

On May 21, 2018 (and again on June 19), New York City Mayor Bill de Blasio instructed the NYPD to stop arresting people caught smoking cannabis.²⁶³ The headline in Newsweek read “NYC Mayor Bill de Blasio Preparing City For Marijuana Legalization, Instructs NYPD To Halt Arrests.”²⁶⁴ Mayor de Blasio said: “With marijuana legalization likely to occur in our state in the near future, it is critical our city plans for the public safety, health and financial consequences involved . . . it isn’t difficult to see where this is headed, and any responsible policymaker must prepare for that eventuality. My focus now will be helping to craft the critical regulatory framework that must come before legalization is realized.”²⁶⁵

A few days later, on May 23, 2018, New York’s Democratic Party at their Convention backed adult-use legalization, and also nominated Cuomo for a third term.²⁶⁶

On July 3, 2018, the New York Department of Financial Services announced that banks in New York could open accounts for medical cannabis businesses without fear of being punished by state regulators.²⁶⁷ Cuomo said: “The ability to establish a banking relationship is a challenge that legal industries face unlike no other. As the federal government continues to sow discord surrounding the medical marijuana and industrial hemp businesses, New York has made significant progress in creating a supportive economic development and regulatory landscape for these companies.”²⁶⁸

A week later, on July 12, 2018, New York enacted emergency rules allowing medical cannabis as an opioid replacement.²⁶⁹ In so doing, New York regulators allowed patients who would normally be prescribed opioids for any condition to use medical cannabis instead, a monumental advancement for New York’s medical cannabis program.²⁷⁰ New York State Health

²⁶¹ <http://www.nystateofpolitics.com/2018/05/cuomo-says-a-report-on-marijuana-legalization-could-be-released-within-days/>

²⁶² *Id.*

²⁶³ <https://newyork.cbslocal.com/2018/06/19/de-blasio-nypd-marijuana-enforcement-announcement/>

²⁶⁴ <https://www.newsweek.com/bill-de-blasio-marijuana-legalization-weed-legal-arrests-new-york-city-nypd-935753>

²⁶⁵ <http://www.nydailynews.com/news/politics/mayor-de-blasio-prepare-new-york-marijuana-legalization-article-1.4000084>

²⁶⁶ <https://www.democratandchronicle.com/story/news/politics/albany/2018/05/25/andrew-cuomo-marijuana-timeline/632312002/>

²⁶⁷ <https://www.marijuanamoment.net/cuomo-encourages-banks-to-work-with-medical-marijuana-and-hemp-businesses/>

²⁶⁸ *Id.*

²⁶⁹ <https://www.marijuanamoment.net/new-york-enacts-emergency-rules-allowing-medical-marijuana-as-opioid-replacement/>

²⁷⁰ *Id.*

Commissioner Dr. Howard Zucker said in a press release: “Medical marijuana has been shown to be an effective treatment for pain that may also reduce the chance of opioid dependence. Adding opioid replacement as a qualifying condition for medical marijuana offers providers another treatment option, which is a critical step in combating the deadly opioid epidemic affecting people across the state.”²⁷¹

The next day, July 13, 2018, brought one of the most significant developments of the year for the US cannabis industry (on par with former Speaker John Boehner joining Acreage Holdings). The New York State Health Department released its much-anticipated study recommending legalizing adult-use cannabis in New York.²⁷² “Numerous NYS agencies and subject matter experts in the fields of public health, mental health, substance use, public safety, transportation, and economics worked in developing this assessment,” the 75-page document says.²⁷³ “No insurmountable obstacles to regulation of marijuana were raised.” The report states in the opening section:

The positive effects of regulating an adult (21 and over) marijuana market in NYS outweigh the potential negative impacts. Harm reduction principles can and should be incorporated into a regulated marijuana program to help ensure consumer and industry safety. Legalizing marijuana could remove research restrictions in NYS, which will enable the State to add to the knowledge of both the benefits and risks. In addition, NYS would be one of the largest regulated marijuana markets. As such, there is potential for substantial tax revenue in NYS, which can be used to help support program initiatives in areas such as public health, education, transportation, research, law enforcement and workforce development. Tax revenues can also support health care and employment. Finally, legalization of marijuana will address an important social justice issue by reducing disproportionate criminalization and incarceration of certain racial and ethnic minority communities.²⁷⁴

The New York Health Department concluded: “Regulation of marijuana benefits public health by enabling government oversight of the production, testing, labeling, distribution, and sale of marijuana. The creation of a regulated marijuana program would enable NYS to better control licensing, ensure quality control and consumer protection, and set age and quantity restrictions.”²⁷⁵ Among the bullet points included in the report are:

²⁷¹ *Id.*

²⁷² https://www.health.ny.gov/regulations/regulated_marijuana/;
<https://www.forbes.com/sites/tomangell/2018/07/13/gov-cuomo-releases-report-backing-marijuana-legalization-in-new-york/#4f53a9f04c06>

²⁷³ *Id.*

²⁷⁴ <https://hoban.law/sites/default/files/2018-07/New%20York%20Regulated%20Marijuana%20Impact.pdf>

²⁷⁵ *Id.*

- Regulating marijuana reduces risks and improves quality control and consumer protection.
- Marijuana may reduce opioid deaths and opioid prescribing.
- The majority of credible evidence suggests legalization of marijuana has no or minimal impact on use by youth.
- Legalizing marijuana results in a reduction in the use of synthetic cannabinoids/novel psychoactive substances.
- Criminalization of marijuana has not curbed marijuana use despite the commitment of significant law enforcement resources.
- Marijuana prohibition results in disproportionate criminalization of certain racial and ethnic groups.
- There has been no increase in violent crime or property crime rates around medical marijuana dispensaries.
- Marijuana regulation could generate long-term cost savings.
- Regulated marijuana generates tax revenue; and
- Legalization provides an opportunity to educate consumers on what their options are and encourage the use of products with lower doses of THC.²⁷⁶

The Health Department's report estimated that legal adult-use sales could generate between \$248.1 million and \$677.7 million in revenues for New York State in the first year, depending on tax and usage rates.²⁷⁷ A report on May 15, 2018 by New York City Comptroller Scott M. Stringer estimates the legal, adult-use cannabis market at some \$3.1 billion per year in New York State, about \$1.1 billion of that in NYC, yielding annual tax revenues of \$1.3 billion at the State and City levels.²⁷⁸ A study by the NYC Comptroller in 2013 estimated potential tax revenue for a legal marijuana market in NYC alone would be more than \$400 million, and acknowledged that the actual tax revenues could be much higher.²⁷⁹

On July 31, 2018, Manhattan District Attorney Cyrus Vance, Jr., announced that Manhattan had seen its last prosecution for marijuana possession and smoking. Effective the next day, August 1, the Manhattan DA's Office would no longer pursue marijuana prosecutions. In one of the strongest statements on the issue by a high-profile law enforcement official, DA Vance said:

“Every day I ask our prosecutors to keep Manhattan safe and make our justice system more equal and fair. The needless criminalization of pot smoking frustrates this core mission, so we are removing ourselves from the equation. Our research has found virtually no public safety rationale for the ongoing arrest and prosecution of marijuana smoking, and no moral justification for the

²⁷⁶ <https://www.forbes.com/sites/tomangell/2018/07/13/gov-cuomo-releases-report-backing-marijuana-legalization-in-new-york/#136ed3bc4c06>

²⁷⁷ *Id.*

²⁷⁸ <https://comptroller.nyc.gov/reports/estimated-tax-revenues-from-marijuana-legalization-in-new-york/>

²⁷⁹ <http://www.drugpolicy.org/press-release/2018/01/governor-cuomo-calls-study-regulating-and-taxing-marijuana-adult-use-new-york>

intolerable racial disparities that underlie enforcement. Tomorrow, our Office will exit a system wherein smoking a joint can ruin your job, your college application, or your immigration status, but our advocacy will continue. I urge New York lawmakers to legalize and regulate marijuana once and for all.²⁸⁰

(Emphasis added.)

On August 2, 2018, Governor Cuomo announced that he directed a panel to draft legislation to legalize adult-use in New York.²⁸¹ Hearings on adult-use legalization are scheduled across the state in the Fall 2018. By all accounts, New York is on the precipice of legalization.

Cuomo was likely spurred into action by the realization that with Massachusetts and Vermont legalizing adult-use cannabis, New York would only continue to lose tax revenue by delaying legalization. Cynthia Nixon undoubtedly moved Cuomo forward too; his primary loyalty is to political expediency. It helps also that both senior Senators from New York, Schumer and Gillibrand, are amongst the most forceful advocates for federal legalization.

But a fourth driver of New York's recent progress, and perhaps the most influential, is developments in New Jersey, the state across the Hudson River from New York City, with deep ties to New York and where many of the city's 1.5 million daily commuters originate.²⁸² As iAnthus Capital CEO Hadley Ford sums up the New Jersey effect: the first time a tourist leaves Times Square on a 10-minute train ride to New Jersey carrying a pocketful of tax dollars to purchase adult-use cannabis, by the time the tourist takes the return train to Manhattan, cannabis will have been legalized in New York.

2. New Jersey

Like New York, New Jersey's nascent medical cannabis industry has been stymied by a governor, Chris Christie, who opposed the industry. In May 2017, Christie called legalization advocates "crazy liberals" who want to "poison our kids."²⁸³ In response to the notion that any high school student who wants cannabis can readily buy it illegally, Christie's said: "Then why not legalize heroin? I mean, their argument fails just on that basis. Let's legalize cocaine. Let's legalize heroin. Let's legalize angel dust. Let's legalize all of it. What's the difference? Let everybody choose."²⁸⁴

²⁸⁰ <https://www.manhattanda.org/tomorrow-d-a-vance-ends-prosecution-of-marijuana-possession-and-smoking-cases/>

²⁸¹ <https://www.forbes.com/sites/janetwburns/2018/08/02/cuomo-appoints-panel-to-move-marijuana-legalization-forward-in-new-york/#93589a9713c7>

²⁸² <https://www.citylab.com/transportation/2016/09/manhattan-commutes-port-authority-bus-terminal-capacity-study/501515/>

²⁸³ <https://www.businessinsider.com/chris-christie-attacks-weed-legalization-2017-5>

²⁸⁴ *Id.*

New Jersey has elected new progressive leadership, in Governor Phil Murphy's administration, that is responding to the calls of public opinion, expanding the state's medical cannabis program, and moving the state quickly toward adult-use legalization.

On March 13, 2018, Governor Murphy, in his FY 2019 Budget Address at the State House in Trenton, said: "[T]he only sensible option is the careful legalization, regulation, and taxation of marijuana sales to adults. Legalization will allow us to reinvest directly in our communities - especially the urban neighborhoods hardest hit by the misguided War on Drugs - in their economic development, in health care and housing, child care and after-school programs, and other critical areas . . . I am committed to working with you to get this passed this year."²⁸⁵ Murphy included revenues from legalized cannabis in his first state budget proposal.²⁸⁶

A few days later, on March 17, 2018, Governor Murphy announced the first stage of a wide-ranging expansion of New Jersey's medical cannabis program, allowing doctors to recommend medical cannabis to treat anxiety, various forms of chronic pain, and migraines.²⁸⁷ Murphy said: "Patients should be treated as patients, not criminals. We will be guided by science. [No more would patients be] failed by a system that has been prevented from delivering the compassionate care it promised nearly a decade ago."²⁸⁸ Murphy also said that he remained "fully committed" to legalizing adult-use by the end of 2018.²⁸⁹

Several legalization bills have put forward by New Jersey state senators, including by State Senators Nicholas Scutari (D-Union) and Reed Gusciora (D-Mercer).

Advocates on all sides of the debate have been pushing for a variety of policies. Some industry groups want hundreds of dispensaries, while existing medical dispensaries are interested in limiting the market.²⁹⁰ There has been opposition from the state's democratic Legislative Black Caucus, for reasons that have not been articulated clearly aside from purported fears of increased access to cannabis.²⁹¹ One of the strongest opponents has been State Senator Rice. He said: "They want to call them dispensaries, but they're going to be stores that do retail selling cupcakes with marijuana, candies with marijuana, sex toys and oils with marijuana, lipsticks with marijuana, all those kinds of products that kids can get and people can get."²⁹²

Nevertheless, on July 9, 2018, State Senate President Steve Sweeney said he thinks his chamber and Assembly Speaker Craig Coughlin will tackle the issue this summer: "We are rounding the corner on marijuana," Sweeney said. "I know the speaker and I are committed to getting the

²⁸⁵ https://www.nj.gov/governor/news/news/562018/approved/20180313b_budget.shtml

²⁸⁶ https://www.nj.com/marijuana/2018/03/murphy_wants_legal_weed_in_nj_by_end_of_year.html

²⁸⁷ https://www.nj.com/marijuana/2018/03/chronic_pain_anxiety_migraine_sufferers_may_apply.html

²⁸⁸ *Id.*

²⁸⁹ https://www.nj.com/marijuana/2018/03/6_big_changes_in_new_nj_marijuana_plan.html

²⁹⁰ https://www.nj.com/marijuana/2018/07/5_reasons_why_youve_had_to_wait_for_legal_weed_in.html

²⁹¹ <https://www.njtvonline.org/news/video/marijuana-bill-amendments-do-little-to-change-mind-of-key-opponent/>

²⁹² *Id.*

marijuana bills done this summer. That’s our goal. So marijuana is something we’re gonna get done.”²⁹³ A source in the State Senate told NJ.com on July 23, 2018 that a bill legalizing adult-use was expected to reach the Senate for consideration by September 2018.²⁹⁴ Certainly helpful is New Jersey’s influential Senator Cory Booker, who like his New York senate counterparts, is amongst the strongest proponents of federal legislative reform.

New Jersey’s criminal justice department, as in New York, has taken meaningful steps to end the state’s wasteful, failed war on marijuana. In 2016, 36,000 people were arrested on marijuana charges in New Jersey in 2016, more than 32,000 were charged for possession of small amounts.²⁹⁵ On July 18, 2018, Jersey City announced that adult-use would be decriminalized effective the next day. On July 24, 2018, in an announcement that would have been unthinkable even one year ago, New Jersey’s attorney general announced an immediate adjournment of all marijuana cases in municipal courts statewide until at least September.²⁹⁶

On August 3, 2018, Assembly Speaker Craig Coughlin enthusiastically supported adult-use legalization.²⁹⁷ A week later, on August 9, 2018, State Senate President Stephen Sweeney said that the state Legislature could vote to legalize adult-use cannabis as early as September 2018: “I think it’s gonna be soon. We’ll have the legislation done.”²⁹⁸ Sweeney told reporters that he and state Assembly Speaker Coughlin had “spent a lot of time” in early August speaking with sponsors of the legislation: “We’re getting much closer.”²⁹⁹

On August 20, 2018, Sweeney said he was certain he and Coughlin would secure the necessary votes in their respective chambers to pass adult-use by the end of September 2018: “I’m confident we’ll get to 21 and 41. I’m not going to get to 28, but I’m confident I’ll get to 21 votes and the speaker will find 41.”³⁰⁰ Sweeney also predicted some Republican support: “Don’t be surprised when people who say they were against it vote for it.”³⁰¹

Under Governor Murphy’s leadership, the state’s medical cannabis program is growing quickly. On May 1, 2018, Health Commissioner Shereef Elnahal reported that the state was adding 100 new medical cannabis patients per day: “This demonstrates that there was pent-up demand,” he

²⁹³ <https://pix11.com/2018/07/08/marijuana-left-out-of-nj-budget-but-gov-says-it-is-coming/>

²⁹⁴ https://www.nj.com/marijuana/2018/07/nj_just_effectively_decriminalized_weed_possession.html

²⁹⁵ *Id.*

²⁹⁶ *Id.*

²⁹⁷ <https://www.politico.com/states/new-jersey/story/2018/08/03/coughlin-publicly-endorses-marijuana-legalization-8826403>

²⁹⁸ https://www.nj.com/marijuana/2018/08/weed_could_be_legal_in_nj_by_2019_top_lawmaker_say.html

²⁹⁹ *Id.*

³⁰⁰ <https://www.politico.com/states/new-jersey/story/2018/08/17/sweeney-says-he-has-the-votes-for-marijuana-564897> As explained in a few paragraphs, this is a crucial statement for nationwide legalization.

³⁰¹ *Id.*

said.³⁰² There are more than 30,000 registered medical cannabis patients in New Jersey, with more than half having joined since Murphy took office in January.³⁰³

\$20 million of medical cannabis was sold in New Jersey in 2017 by a very small medical cannabis program.³⁰⁴ Early projections estimate that New Jersey's adult-use cannabis market could generate \$1 billion per year in revenues, and \$250 million in tax revenue.³⁰⁵

Predicting the pace of political and legal developments in New Jersey is difficult, but the Garden State may well be a tipping point for federal legalization.³⁰⁶ The natural progression is evident. As noted, it is hard to imagine a day that adult-use is legal in New Jersey but not in New York. New York will simply not allow many of its 63 million visitors a year,³⁰⁷ not to mention millions of residents, to travel to New Jersey and fill its treasury coffers with cannabis tax dollars. As New Jersey legalizes, so will New York. When cannabis is legal in both states, and then shortly thereafter in states like Pennsylvania and Connecticut, Congress will be compelled to act.

3. Pennsylvania

New Jersey's neighboring state, Pennsylvania, is also important for cannabis legalization progress. Pennsylvania is the fifth-largest state, home to nearly 13 million people.³⁰⁸ The state has been late to begin a medical cannabis program, but the program is showing enormous promise and state officials are beginning to respond to public opinion supporting cannabis.

Pennsylvania launched its medical cannabis program in February 2018. Less than two weeks later, dispensaries ran out of cannabis.³⁰⁹ They re-stocked as more cultivation has come online.

In May 2018, Pennsylvania's Department of Health added opioid use disorder to the state's extensive list of qualifying conditions—the second state in the country to do so.³¹⁰ The list of indications also includes chronic pain.³¹¹ The Health Department has also approved the sale of cannabis dry leaf at dispensaries, which offers patients a cheaper alternative to the oils and processed cannabis products previously available.³¹² This change will quickly increase patient

³⁰² <https://www.bloomberg.com/news/articles/2018-05-01/new-jersey-is-adding-100-medical-pot-patients-a-day-under-murphy>

³⁰³ https://www.nj.com/opinion/index.ssf/2018/07/nj_health_commissioner_we_need_more_medical_mariju.html; <https://www.nj.gov/health/medicalmarijuana/>

³⁰⁴ <https://cannabusinessplans.com/new-jersey-cannabis-market/>

³⁰⁵ https://www.nj.com/marijuana/2018/03/6_big_changes_in_new_nj_marijuana_plan.html

³⁰⁶ <https://thefreshtoast.com/cannabis/cnn-we-are-on-the-tipping-point-of-marijuana-legalization/>

³⁰⁷ <https://ny.curbed.com/2018/3/20/17144690/new-york-tourism-2017-nyc-and-company-records>

³⁰⁸ <https://mjbizdaily.com/chart-pennsylvanias-medical-marijuana-market-set-become-one-countrys-biggest/>

³⁰⁹ <https://herb.co/marijuana/news/pennsylvania-dispensaries-philadelphia-marijuana/>

³¹⁰ <https://herb.co/marijuana/news/pennsylvania-medical-marijuana-shortage-over/>

³¹¹ <https://mjbizdaily.com/chart-pennsylvanias-medical-marijuana-market-set-become-one-countrys-biggest/>

³¹² <https://herb.co/marijuana/news/pennsylvania-medical-marijuana-shortage-over/>

numbers in Pennsylvania, as cannabis in smokable form remains very popular and is the preferred means of consumption for a significant percentage of medical patients.

A new analysis estimates that Pennsylvania's medical cannabis program will see \$60 million in 2018 revenue, expected to quadruple to about \$240 million by 2020.³¹³ Pennsylvania's Health Department projects that the number of medical cannabis patients will reach as high as 250,000.³¹⁴ The state has a great website discussing its cannabis program.³¹⁵

There have been major recent strides in Pennsylvania. On February 6, 2018, the state's senate passed a unanimous resolution (vote count: 49-0) urging the US Congress to remove marijuana from the federal Schedule I controlled substances list.³¹⁶ This followed a January 2018 resolution from a bipartisan group of Pennsylvania state senators urging Congress to "recognize the proven medical purposes of marijuana."³¹⁷ Governor Tom Wolf is focused, according to his spokesman, on "maximizing the impact, benefits and accessibility of Pennsylvania's medical marijuana program for patients."³¹⁸ On May 14, 2018, Pennsylvania allowed eight of its universities to research medical cannabis - one of the very few medical-cannabis-only states to have done so.³¹⁹

Criminal enforcement policies in Pennsylvania lag behind public opinion. In 2017 alone, Pennsylvania spent \$46 million in taxpayer dollars to prosecute people with less than an ounce of cannabis.³²⁰ Nearly 21,000 adults were charged in Pennsylvania in 2017 for low-level marijuana offenses.³²¹ Yet, 59 percent of Pennsylvania voters support legalizing recreational cannabis,³²² and the state estimates there are about 800,000 regular cannabis users in the state.³²³

In March 2017, Pennsylvania's Auditor General Eugene DePasquale became the first statewide elected official to endorse regulating and taxing adult-use marijuana.

On July 19, 2018, DePasquale said Pennsylvania is missing out on \$581 million per year in tax revenue by not regulating and taxing marijuana — money that could fund critical initiatives that affect Pennsylvanians' lives.³²⁴ "Imagine what that \$581 million could mean for

³¹³ <http://www.wesa.fm/post/dry-leaf-marijuana-expected-quadruple-medicinal-cannabis-sales-pa-2020#stream/0>

³¹⁴ *Id.*

³¹⁵ <https://www.pa.gov/guides/pennsylvania-medical-marijuana-program/>

³¹⁶ <https://www.ydr.com/story/news/2018/02/06/pa-medical-marijuana-lawmakers-urge-feds-remove-pot-controlled-substances-list/308810002/>

³¹⁷ *Id.*

³¹⁸ <https://www.timesleader.com/news/local/709546/time-to-toke-where-do-pa-lawmakers-stand-on-recreational-marijuana>

³¹⁹ <https://mjbizdaily.com/eight-pennsylvania-colleges-get-ok-to-study-medical-marijuana/>

³²⁰ <https://theincline.com/2018/05/04/why-advocates-say-its-time-to-legalize-recreational-marijuana-in-pennsylvania/>

³²¹ <https://www.nbcphiladelphia.com/news/local/Pennsylvania-Recreational-Marijuana-DePasquale-488724161.html>

³²² <https://theincline.com/2018/05/04/why-advocates-say-its-time-to-legalize-recreational-marijuana-in-pennsylvania/>

³²³ <https://www.nbcphiladelphia.com/news/local/Pennsylvania-Recreational-Marijuana-DePasquale-488724161.html>

³²⁴ <https://www.paauditor.gov/press-releases/auditor-general-depasquale-says-state-could-reap-581-million-annually-by-regulating-taxing-marijuana>

Pennsylvanians,” DePasquale said. “Not only would it help balance the state budget, but it would also mean increases to initiatives that affect Pennsylvanians’ lives, such as greater access to opioid treatment and better health care access for veterans and children.” “With our neighboring states all looking at legalizing marijuana, now is the time for Pennsylvania to do the same,” DePasquale continued. “Legislators must act now so that we can be competitive and not lose potential revenue to other states.”³²⁵

In a 14-page special report, “Regulating and Taxing Marijuana,”³²⁶ DePasquale explains: “Across the U.S., state after state is regulating and taxing marijuana. This move reflects an observable shift in public perspective on adult use and on increasing acknowledgment of the financial and public health benefits associated with regulation and taxation.”³²⁷ And like other nearby state officials have done, he pointed to Pennsylvania’s neighbors with a sense of urgency: “With marijuana legal in nearby Vermont, Massachusetts and the District of Columbia, and with New Jersey, New York, Virginia, Connecticut and Delaware opening pathways to regulation, it’s imperative that Pennsylvania not lose its potential customers to other states’ markets. It is time for Pennsylvania to realize the benefits from regulating and taxing marijuana.”³²⁸

Pittsburgh Mayor Bill Peduto has joined DePasquale’s calls for Pennsylvania to legalize cannabis.³²⁹ Philadelphia, Pittsburgh, Erie, Harrisburg, York, State College, Allentown and Bethlehem have all decriminalized possession.³³⁰

On July 25, 2018, Pennsylvania Representative Jake Wheatley (D-Allegheny) said he plans to introduce legislation which would legalize adult-use in Pennsylvania: “States from coast to coast have embraced legalization and those states are reaping the economic and criminal justice benefits. It is time Pennsylvania joins with those states in leaving behind the ugly stigma of marijuana. This is why it comes as no surprise that recent polling shows that a majority of Pennsylvanians support legalization. This is an idea whose time has come.”³³¹ Wheatley said adult-use legalization is the natural path forward given Pennsylvania’s successful medical cannabis program, for which more than 52,000 patients have registered. He said: “I am pleased to see that many of our most in-need residents are able to improve their health, but I believe we can do more. The time has come for Pennsylvania to move forward with full legalization.”³³²

³²⁵ *Id.*

³²⁶ https://www.paauditor.gov/Media/Default/Reports/RPT_Marijuana_FINAL_reduced%20size_071918.pdf

³²⁷ *Id.*

³²⁸ *Id.*

³²⁹ <https://triblive.com/local/allegheny/13882695-74/auditor-general-pittsburgh-mayor-call-for-marijuana-legalization>

³³⁰ <https://www.timesleader.com/news/local/709546/time-to-toke-where-do-pa-lawmakers-stand-on-recreational-marijuana>

³³¹ <http://www.pahouse.com/Wheatley/InTheNews/NewsRelease/?id=99338>

³³² *Id.*

In his most recent comments on the issue, on August 7, 2018, Pennsylvania governor Tom Wolfe did not oppose legalization but said: “I don’t think Pennsylvania’s actually ready for recreational marijuana.”³³³ State Auditor DePasquale disagrees with the governor’s sentiment. DePasquale said: “This is probably the most significant issue I have seen where the public and the voters are so far ahead of the politicians. Legalization of marijuana in Pennsylvania is going to happen, but we must hold our elected officials accountable.”³³⁴

The medical cannabis program is set to flourish in Pennsylvania. It remains to be seen how long it will take for Pennsylvania legislators to respond to public opinion. Lawmakers are undoubtedly keeping a close eye on neighboring states, especially New York and New Jersey.

4. Illinois

If New York and New Jersey do not move ahead with adult-use legalization with all deliberate speed, Illinois could very well legalize adult-use cannabis ahead of them.

Illinois has had a medical cannabis program since 2013.³³⁵ The program was set to expire in 2018, but in July 2016 Governor Rauner signed legislation to extend it to 2020. While the program has been very slow to get started, since 2017 it has begun to ramp up and it has now expanded very significantly. As of April 2018, 41 conditions qualified, including post-traumatic stress.³³⁶

On May 31, 2018, the Illinois General Assembly passed SB 0336, a law authorizing medical cannabis as an alternative to opioids. On August 28, 2018, Governor Rauner signed the Alternative to Opioids Act into law. He said: “It’s clear that medical cannabis treats pain effectively, and it is less addictive and less disruptive than opioids. Creating that option is an important step forward to improve health quality, and that’s why I signed the bill.”³³⁷

Combining data from the CDC and state medical cannabis programs that track patient counts by condition shows that, on average, about 15 percent of individuals with cancer enroll in medical cannabis programs when available.³³⁸ If Illinois residents enrolled in the state’s medical program as an alternative to opioid use at the same rate as cancer patients have enrolled, Illinois’ program is projected to add roughly 365,000 new patients – nearly 10 times the 40,000 patients currently enrolled, adding up to an estimated \$425 million in additional medical cannabis sales.³³⁹

³³³ <https://www.phillymag.com/news/2018/08/09/wolf-marijuana-legalization-pennsylvania/>

³³⁴ *Id.*

³³⁵ <https://kushtourism.com/illinois-marijuana-information/>

³³⁶ <https://chicago.suntimes.com/cannabis/experts-outline-successes-and-flaws-of-illinois-medical-cannabis-program/>; <https://kushtourism.com/illinois-marijuana-information/>

³³⁷ <https://chicago.suntimes.com/cannabis/illinois-medical-marijuana-alternative-opioids-bruce-rauner/>

³³⁸ <https://mjbizdaily.com/chart-medical-cannabis-as-alternative-to-opioids-could-give-illinois-mmj-program-a-massive-boost/>

³³⁹ *Id.*

In March 2017, state lawmakers introduced legislation that would have established a system in which adult-use is regulated and taxed in Illinois.³⁴⁰ Some considered it a long shot at the time, especially in a state that would have to pass a legalization bill through the state legislature.³⁴¹ Now, in the Summer of 2018, it does not seem like a long shot at all.

On March 20, 2018, residents of Cook County, the largest county in Illinois and the nation's second-most-populous county (with more residents than 27 states), voted overwhelmingly by a greater than 2-1 margin, to approve a non-binding ballot question calling for adult-use legalization.³⁴² Though not binding, the vote sends a strong message to state lawmakers that ending cannabis prohibition is an issue that voters want the legislature to address.³⁴³ The same day, Illinois voters selected party nominees for governor, and businessman JB Pritzker won the Democratic gubernatorial nomination.

During the course of the campaign, gubernatorial candidate Pritzker has repeatedly promised to legalize cannabis. "I also support legalizing and taxing recreational use of marijuana, which is estimated to generate as much as \$700 million a year for the state," he said. "No more studies are needed to show it's time for Illinois to safely move forward and legalize marijuana. As governor, I will modernize drug laws and move Illinois towards a criminal justice system that gives all Illinoisans a chance to reach their full potential."³⁴⁴

During his victory speech after winning the Democratic nomination, Pritzker said: "We can begin by immediately removing one area of racial injustice in our criminal justice system. Let's legalize, tax, and regulate marijuana."³⁴⁵ Early polling in the Illinois governor's race between incumbent Bruce Rauner (R) and Pritzker showed Pritzker leading Rauner by 15 points.³⁴⁶ The latest polling has Pritzker leading by nine points.³⁴⁷

In 2017, Chicago police officers made just 129 arrests and wrote fewer than 300 tickets for possession of small amounts of cannabis.³⁴⁸ By comparison, there were more than 21,000 such arrests in 2011.³⁴⁹ Several recent decriminalization measures in Illinois have led to the effective end of criminalizing possession of small amounts of marijuana.³⁵⁰ The number of arrests began

³⁴⁰ <https://www.mpp.org/states/illinois/>

³⁴¹ *Id.*

³⁴² <https://www.forbes.com/sites/tomangell/2018/03/20/illinois-voters-approve-marijuana-legalization-ballot-measure/#6a3f27af7951>

³⁴³ *Id.*

³⁴⁴ *Id.*

³⁴⁵ *Id.*

³⁴⁶ <https://www.politico.com/story/2018/02/28/illinois-polls-rauner-pritzker-430780>

³⁴⁷ <https://capitolfax.com/2018/06/21/poll-pritzker-leads-rauner-by-nine-points/>

³⁴⁸ <https://chicago.suntimes.com/cannabis/marijuana-arrests-enforcement-chicago-police-declines-possession-blacks-african-americans-most-often-charged-ticketed-cannabis-weed-watchdogs/>

³⁴⁹ *Id.*

³⁵⁰ *Id.*

dropping after the Chicago City Council passed an ordinance in 2012 giving police officers the option of writing tickets to people for possession of less than 15 grams.

For a second year in a row, 66 percent of voters in Illinois support legalization and taxation of cannabis.³⁵¹ With Pritzker's significant lead in the gubernatorial race, Illinois legislators may soon respond to the overwhelming public opinion favoring adult-use cannabis in Illinois.

5. Michigan

Michigan is perhaps the most likely candidate for the next state to legalize adult-use.³⁵²

In 2008, Michigan's voters approved medical cannabis by a 63-37 vote.³⁵³ Hundreds of dispensaries opened throughout the state, unlicensed by the state, but approved by cities and towns. They operated in a legal grey area - the state law did not explicitly provide for cannabis dispensaries, only caregivers that could provide cannabis to no more than five patients.³⁵⁴ The state's caregiver/ dispensary scheme was loosely enforced, and Michigan's medical cannabis industry thrived, with a non-officially-sanctioned dispensary program.³⁵⁵ By December 2016, Michigan had more than 211,000 registered medical cannabis patients purchasing products from nearly 37,000 registered caregivers or growing their own cannabis.³⁵⁶

On December 13, 2016, Michigan implemented new legislation to regulate and tax the state's medical cannabis program, a market likely to exceed \$700 million annually.³⁵⁷ Michigan has gone through a process, delayed several times,³⁵⁸ requiring existing caregivers/dispensaries to terminate operations and apply through the state licensing application process by September 15, 2018 or face adverse action.³⁵⁹

On August 13, 2018, Michigan approved 16 medical cannabis licenses including dispensaries and testing labs,³⁶⁰ in addition to seven licenses granted earlier.³⁶¹ More than 637 applications have been submitted,³⁶² and the state will issue many licenses. The state's medical program is expected to begin licensed sales on September 15, 2018, but the enforced closure of existing dispensaries may be delayed slightly beyond that date as many legislators are advocating for an

³⁵¹ <https://www.newcannabisventures.com/5-states-expected-to-legalize-cannabis-by-2020/>

³⁵² <https://www.fool.com/investing/2018/05/06/3-states-most-likely-to-legalize-marijuana-this-ye.aspx>

³⁵³ <https://www.freep.com/story/news/local/michigan/2018/06/05/michigan-legislature-ballot-marijuana-legalization/672596002/>

³⁵⁴ <https://www.lansingattorney.com/can-tourists-legally-buy-medical-marijuana-michigan/>

³⁵⁵ *Id.*

³⁵⁶ <https://detroit.cbslocal.com/2016/12/20/new-medical-marijuana-laws-go-into-effect-across-michigan/>

³⁵⁷ <https://www.freep.com/story/news/local/michigan/2018/06/05/michigan-legislature-ballot-marijuana-legalization/672596002/>

³⁵⁸ <https://hightimes.com/news/michigan-medical-marijuana-dispensaries-forced-close/>

³⁵⁹ https://www.mlive.com/news/index.ssf/2018/08/lawmakers_call_on_governor_to.html

³⁶⁰ <http://www.michiganradio.org/post/state-board-approves-16-medical-marijuana-licenses>

³⁶¹ <https://www.freep.com/story/news/marijuana/2018/07/26/marijuana-bribes-michigan-state-police/844723002/>

³⁶² https://www.mlive.com/news/index.ssf/2018/08/lawmakers_call_on_governor_to.html

extension for existing dispensaries to operate owing to the state's protracted process of issuing new licenses.³⁶³ The state presently has more than 290,000 medical cannabis patients, second only to California.³⁶⁴

The University of Michigan is actively developing a dedicated cannabis research institute and its Department of Psychiatry Department is studying veterans receiving primary care at three VA medical centers "to characterize and understand patterns of cannabis use and how they relate to health, functioning, and service utilization among VHA primary care patients."³⁶⁵ Michigan State University will begin a pre-clinical study of neuroprotective compounds for Parkinson's.³⁶⁶

Adult-use cannabis legalization may come to Michigan not long after the state's fully-legal medical program begins. In April 2018, voters collected 365,384 signatures on a petition for an adult-use cannabis legalization measure to be placed on Michigan's November 2018 ballot.³⁶⁷ Ironically, Michigan Senate Republicans wanted to take up and pass the measure through the legislature so they could keep it off the November 6 general election ballot and make changes to the law that would have limited the program.³⁶⁸ But there was not enough support in the House of Representatives to pass the measure, so the State was required to include the measure on the November general election ballot.³⁶⁹

Multiple polls show that 60 percent of Michigan voters want to see adult-use cannabis legalized and regulated.³⁷⁰ If approved in November by Michigan voters, adult-use legalization will be the law in Michigan, barring a three-quarters super-majority vote by state lawmakers to amend the measure.³⁷¹

With a population of 10 million (tenth largest in the country),³⁷² Michigan would be the second-largest adult-use market in the country after California. Cannabis is very popular in Michigan. One million adult Michiganders (one in ten of the state's population) reported past-month use in December 2017.³⁷³ With adult-use legalization, Michigan's cannabis industry will quickly reach

³⁶³ *Id.*

³⁶⁴ <https://mjbizdaily.com/michigan-lawmakers-call-for-extension-to-prevent-potential-medical-cannabis-calamity/>

³⁶⁵ <https://medicine.umich.edu/dept/psychiatry/programs/addiction-center/research/addiction-center-research-projects>

³⁶⁶ <https://www.newswire.ca/news-releases/michigan-state-universitys-dr-norbert-kaminski-begins-pre-clinical-study-of-gb-sciences-neuroprotective-cannabis-compounds-for-parkinsons-disease-690130221.html>

³⁶⁷ https://www.mlive.com/news/index.ssf/2018/04/marijuana_legalization_petitio.html

³⁶⁸ <https://www.freep.com/story/news/local/michigan/2018/06/05/michigan-legislature-ballot-marijuana-legalization/672596002/>

³⁶⁹ *Id.*

³⁷⁰ *Id.*

³⁷¹ *Id.*

³⁷² <http://worldpopulationreview.com/states/michigan-population/>

³⁷³ <https://www.slideshare.net/cannabislegalgroup/the-economics-of-marijuana-markets-michigan-and-beyond>

\$1.5 billion in sales.³⁷⁴ Adult-use legalization in Michigan, the first Midwest state to do so, would have significant influence on nearby states and the national dialogue.

6. Florida

The Sunshine State is the third most-populous state in the US with 21 million residents. Florida had the second-largest population growth last year in the US,³⁷⁵ and is projected to reach 26 million people by 2030.³⁷⁶ Florida also has a rapidly-growing medical cannabis program.

As of August 31, 2018, the state's medical cannabis patient count was at 157,088, increasing at a rate of 2,500 patients a week.³⁷⁷ Florida added more than 60,000 patients during the first half of 2018, a 100-percent increase from the beginning of the year.³⁷⁸ 2018 cannabis revenues in Florida are projected to reach \$175-225 million.³⁷⁹ The market has developed quickly because of the state's large population and a list of indications that gives doctors a high degree of flexibility in determining patient qualification.³⁸⁰

But Florida's medical cannabis program is just getting started. Fewer than 50 dispensaries are open in the state, and only 16 percent of Florida's population lives in a town or city with a dispensary.³⁸¹ Impending changes to the program could open it to many more patients. In late May, a Florida judge lifted a stay banning smokable forms of cannabis and ordered the state Department of Health (DOH) to write rules governing the cultivation, distribution and sale of dry leaf cannabis flower.³⁸² The DOH and the governor have appealed the ruling, so smokable dry leaf remains unavailable, for now. If smokable dry leaf is allowed, it will provide a large boost to patient counts and sales. A decision is expected by Fall 2018.³⁸³ The state is also developing rules regarding edibles.³⁸⁴

Medical cannabis sales in Florida are projected to exceed \$1 billion in 2020,³⁸⁵ and reach \$2 to \$2.5 billion in 2025.³⁸⁶

³⁷⁴ *Id.*

³⁷⁵ <https://miamiagentmagazine.com/2018/01/03/florida-second-highest-population-growth-country/>

³⁷⁶ <http://worldpopulationreview.com/states/florida-population/>

³⁷⁷ <http://www.floridahealth.gov/programs-and-services/office-of-medical-marijuana-use/ommu-updates/index.html>;
<https://mjbizdaily.com/chart-no-end-florida-medical-marijuana-market-rapid-growth/>

³⁷⁸ *Id.*

³⁷⁹ <https://mjbizdaily.com/florida-to-expand-sizzling-medical-marijuana-market-with-four-new-licenses/>

³⁸⁰ <https://mjbizdaily.com/chart-no-end-florida-medical-marijuana-market-rapid-growth/>

³⁸¹ *Id.*

³⁸² <http://www.sun-sentinel.com/news/politics/florida-medical-marijuana/fl-reg-smokable-medical-marijuana-ruling-20180605-story.html>

³⁸³ <https://mjbizdaily.com/chart-no-end-florida-medical-marijuana-market-rapid-growth/>

³⁸⁴ *Id.*

³⁸⁵ <https://www.palmbeachpost.com/business/florida-pot-industry-track-hit-billion-but-when/9UfnVMl4P92huSjcl2S58N/>

On July 16, 2018, state officials laid out a process to issue four more medical cannabis cultivation/processing/dispensary licenses - they expect to receive more than 400 applications.³⁸⁷ Acquiring a license in Florida from a license holder is becoming very expensive. On June 6, 2018, Medmen (CSE:MMEN; OTC:MMNFF), a Los Angeles-based multi-state operator, acquired a previously-issued license for \$53 million.³⁸⁸ Florida is also ramping up its bureaucratic capacity. On July 19, 2018, Florida's Office of Medical Marijuana Use (OMMU) received approval for \$13.3 million in state funding, after receiving less than \$1 million in the original annual state budget.³⁸⁹

The industry reacted favorably to the June 27, 2018 departure of the head of Florida's OMMU, Christian Bax.³⁹⁰ The medical cannabis industry in Florida has grown rapidly despite Mr. Bax holding that position. "He was so inept that it had to be intentional. Anyone would be better and more capable. This is a great day for the sick and injured in Florida," Orlando lawyer John Morgan said.³⁹¹

Mr. Morgan is the best-known advocate for legalization in Florida, and one of the most forceful advocates in the country. He spent nearly \$9 million of his own money³⁹² spearheading the ballot initiative that led to the constitutional amendment in 2016 allowing Floridians to use medical cannabis and is the attorney on the smokable cannabis case.³⁹³

Mr. Morgan has been an outspoken critic of incumbent Governor Rick Scott, who has resisted adult-use advances in Florida and is spending taxpayer dollars appealing the smokable cannabis ruling. According to Morgan, Scott is "playing with political wildfire. This is plain old meanness. One day, marijuana will be legal in America. We know that. Nobody gives a [expletive] anymore except a few mean people."³⁹⁴ Morgan says he plans to invest \$100 million

³⁸⁶ <https://www.orlandoweekly.com/Blogs/archives/2018/07/28/floridas-medical-marijuana-chief-is-stepping-down>; <https://www.orlandoweekly.com/Blogs/archives/2018/08/01/canadian-firm-poised-to-enter-floridas-medical-marijuana-market>

³⁸⁷ <https://mjbizdaily.com/chart-no-end-florida-medical-marijuana-market-rapid-growth/http://www.sun-sentinel.com/news/politics/florida-medical-marijuana/fl-reg-medical-marijuana-new-license-20180715-story.html>

³⁸⁸ <http://www.sun-sentinel.com/news/politics/florida-medical-marijuana/fl-reg-medical-marijuana-operation-20180606-story.html>

³⁸⁹ <https://www.miamiherald.com/news/politics-government/state-politics/article215152905.html>

³⁹⁰ <https://www.orlandoweekly.com/Blogs/archives/2018/07/28/floridas-medical-marijuana-chief-is-stepping-down>

³⁹¹ *Id.*

³⁹² <https://www.naplesnews.com/story/news/local/2018/07/06/attorney-john-morgan-pushing-legalize-recreational-marijuana-florida-2020/763159002/>

³⁹³ <http://www.orlandosentinel.com/news/politics/political-pulse/os-john-morgan-smoke-lawsuit-20180529-story.html>; <https://www.miamiherald.com/news/politics-government/article152102702.html>

³⁹⁴ <http://www.orlandosentinel.com/news/politics/political-pulse/os-john-morgan-smoke-lawsuit-20180529-story.html>

in cannabis: “I am prepared to invest significant monies in this industry and I plan to,” he wrote. “I have learned a great deal about the miracles of marijuana over the last five years.”³⁹⁵

Legalizing adult-use cannabis in Florida could be a key issue in the upcoming elections. Three of the state’s top Democrat candidates for governor support legalizing adult-use, and the fourth backs decriminalizing cannabis for personal use, showing near-consensus.³⁹⁶ Morgan called adult-use cannabis a make-or-break issue for Democratic candidates seeking to replace outgoing governor Rick Scott.³⁹⁷ Morgan said he will raise funds and dip into his own deep pockets to get an adult-use measure on the 2020 ballot.³⁹⁸ In the meantime, Florida is expected to develop a billion-dollar medical cannabis industry in the near term with thousands of new, well-paying jobs,³⁹⁹ under the watchful eyes of nearby states that are much further behind.

7. Maryland

Maryland (population 6 million)⁴⁰⁰ is another state making strides in its medical program and towards adult-use legalization. The number of medical cannabis patients in Maryland by July 23, 2018 increased 27 percent from the end of May 2018 - to 35,019.⁴⁰¹ Maryland’s program is expected to reach 120,000 patients.⁴⁰² Revenues at Maryland’s dispensaries hit nearly \$9 million in June 2018, up from \$2.6 million in January. Total sales for the first eight months of 2018 reached \$45 million.⁴⁰³

Democrats in Maryland recently nominated gubernatorial candidate Ben Jealous, the former NAACP president who has run a progressive, pro-legalization campaign.⁴⁰⁴ While Jealous is expected to lose to Republican incumbent Governor Larry Hogan, Mr. Hogan has said he might take a look at legalizing adult-use cannabis.⁴⁰⁵ Even two years ago, 61 percent of Maryland adults thought adult-use cannabis should be legalized.⁴⁰⁶ Maryland appears to be on a trajectory to be one of the next states to legalize adult-use cannabis.⁴⁰⁷

³⁹⁵ <https://www.miamiherald.com/news/politics-government/article152102702.html>

³⁹⁶ <https://www.orlandoweekly.com/Blogs/archives/2018/06/01/legalizing-pot-could-be-key-issue-for-florida-democrats-in-2018>

³⁹⁷ *Id.*

³⁹⁸ <https://www.naplesnews.com/story/news/local/2018/07/06/attorney-john-morgan-pushing-legalize-recreational-marijuana-florida-2020/763159002/>

³⁹⁹ <https://www.cannarecruiter.com/florida-marijuana-jobs/>

⁴⁰⁰ <http://www.baltimoresun.com/news/maryland/politics/bs-md-sun-investigates-marijuana-20180726-story.html>

⁴⁰¹ *Id.*

⁴⁰² *Id.*

⁴⁰³ *Id.*

⁴⁰⁴ <https://www.civilized.life/articles/states-can-elect-pro-marijuana-governors/>

⁴⁰⁵ *Id.*

⁴⁰⁶ https://www.washingtonpost.com/local/md-politics/marylanders-support-longer-summers-and-legal-marijuana/2016/10/06/b864a2be-88de-11e6-b24f-a7f89eb68887_story.html?utm_term=.d36d020c70c9

⁴⁰⁷ <http://www.baltimoresun.com/news/opinion/editorial/bs-ed-0228-maryland-marijuana-20180227-story.html>

8. Other States To Watch

Texas, the second-most populous state in the country, has lagged far behind more progressive states in cannabis law reform. The state has an extremely restrictive medical cannabis program. Only patients suffering from intractable epilepsy may access low-THC cannabinoid oil.⁴⁰⁸ But on June 16, 2018, delegates at the Republican Party of Texas convention voted to approve platform planks endorsing marijuana decriminalization, medical cannabis, and industrial hemp. They are also calling for a change in cannabis' classification by the federal government.⁴⁰⁹ One of the party's official platform positions is: "Congress should remove cannabis from the list of Schedule 1."⁴¹⁰

According to a law professor at Texas A&M University, many Texas Republicans have libertarian beliefs – he says the combination of “leave me alone in my own house” attitude and the potential economic benefits led the GOP to endorse cannabis.⁴¹¹ More than half of the state's registered voters believe cannabis should be legalized, according to the latest University of Texas/Texas Tribune Poll.⁴¹² “Texas is going to be slow, but it's going that way,” said Daron Shaw, a government professor at the University of Texas at Austin and co-director of the poll: “In some ways the handwriting is on the wall, and it's pretty clear. Public opposition is diminishing, and if the economic or tax arguments change, it's hard to see what would keep pot from getting on the agenda.”⁴¹³

North Dakota has the second-highest marijuana arrest rates in the country. In 2016, 41 out of every 1000 marijuana users in the state were arrested for possession.⁴¹⁴ By contrast, neighboring Minnesota arrests marijuana users at a rate of 7 per 1,000. In Vermont and Massachusetts, marijuana arrest rates were less than 1 per 1,000 even before those states legalized adult use.⁴¹⁵

On July 9, 2018, proponents of a statewide ballot initiative to legalize adult use submitted over 19,000 signatures to the Secretary of State's office in an effort to place a measure before voters this November.⁴¹⁶ On August 13, 2018, state officials certified enough signatures to qualify the measure for the November 2018 electoral ballot.⁴¹⁷ A poll in February 2018 found that North Dakotan voters support legalizing adult-use cannabis by a margin of 45 to 39 percent, with 15

⁴⁰⁸ <https://thefreshtoast.com/cannabis/texas-cannabis-activists-battling-stoner-stereotypes/>

⁴⁰⁹ <https://www.forbes.com/sites/tomangell/2018/06/17/texas-republican-party-endorses-marijuana-decriminalization/#1bb6239d5236>

⁴¹⁰ *Id.*

⁴¹¹ <https://www.texasstandard.org/stories/how-close-is-texas-to-legalizing-marijuana/>

⁴¹² <https://www.texastribune.org/2018/06/27/marijuana-democrats-young-adults-texas-poll/>

⁴¹³ *Id.*

⁴¹⁴ https://www.washingtonpost.com/business/2018/07/11/next-state-legalize-marijuana-could-be-north-dakota/?utm_term=.3191bc6e768f

⁴¹⁵ *Id.*

⁴¹⁶ https://bismarcktribune.com/news/local/marijuana-legalization-measure-likely-to-appear-on-november-ballot/article_426b3503-23e0-5cb7-a082-e4ccad586d33.html

⁴¹⁷ <https://www.forbes.com/sites/tomangell/2018/08/13/north-dakota-marijuana-legalization-measure-qualifies-for-november-ballot/#d76ae8c3b6cb>

percent undecided.⁴¹⁸ In 2016, nearly two-thirds of the state’s voters approved a ballot measure regulating medical cannabis access, but the program is not yet operational.⁴¹⁹

Oklahoma became the 31st state to legalize medical cannabis. On June 26, 2018, Oklahoma voters approved one of the nation’s most liberal medical cannabis access laws,⁴²⁰ and the state even came close to adult-use law reform. Days away from an August 8, 2018 deadline, local activists scrambled to meet statewide requirements to place an adult-use legalization measure on the November ballot.⁴²¹ On August 8, they submitted signatures to the Secretary of State’s office,⁴²² but the initiative fell some 20,000 signatures short of the 123,000 required.

In *Ohio*, the state’s medical cannabis program is just beginning after delays – sales are expected to start this Fall. By August 8, 2018, 223 physicians had been approved to recommend medical cannabis.⁴²³ Ohio has established an expansive list of qualifying conditions, including chronic pain. Ohio’s medical cannabis program is expected to reach \$300 million annually by 2022.⁴²⁴

In *Connecticut*, on April 5, 2017, for the first time, an adult-use cannabis bill was approved by the state’s Appropriations Committee and is headed to the full General Assembly for consideration in October.⁴²⁵ *Utah* has a medical cannabis measure on the ballot for November after a signature-gathering campaign collected more than 100,000 supporters. 77 percent of Utah voters support medical cannabis law reform.⁴²⁶ *Delaware* legislators, in early July 2018, considered legalizing recreational cannabis, and *Rhode Island* voters almost had an opportunity to vote on a legalization ballot measure this year.⁴²⁷

Whether or not federal legalization happens before 2020, some predict that up to 15 more states (in addition to the nine states plus DC currently) will legalize adult-use cannabis by the end of 2019.⁴²⁸ There is every reason to believe that by then nearly every state will also have or be implementing a robust medical cannabis program. As Speaker Boehner said: “You’re going to see this thing spreading pretty quickly throughout the states.”⁴²⁹

⁴¹⁸ <https://www.sayanythingblog.com/entry/poll-plurality-of-north-dakotans-support-legalizing-recreational-marijuana/>

⁴¹⁹ <http://thehill.com/opinion/civil-rights/399540-which-of-these-6-states-will-be-next-to-legalize-marijuana>

⁴²⁰ <http://norml.org/news/2018/06/28/oklahoma-becomes-31st-state-to-legalize-medical-marijuana-access>

⁴²¹ <http://thehill.com/opinion/civil-rights/399540-which-of-these-6-states-will-be-next-to-legalize-marijuana>

⁴²² https://www.tulsaworld.com/news/marijuana/green-the-vote-submits-unknown-number-of-signatures-in-marijuana/article_dbd11900-54e7-5866-9b29-fa6a2f4a7251.html

⁴²³ <http://med.ohio.gov/Publications/Rosters>

⁴²⁴ <https://www.cincinnati.com/story/money/2018/08/15/help-wanted-cannabis-budtenders-edibles-chefs/793897002/>

⁴²⁵ <http://www.courant.com/politics/hc-pol-marijuana-legislation-hits-committee-deadline-20180405-story.html>

⁴²⁶ <https://www.utahpatients.org/news/2018/03/29/new-survey-77-of-utah-voters-favor-medical-cannabis/>

⁴²⁷ <https://hightimes.com/news/legalization/how-help-next-legal-weed-battleground-states-without-leaving-your-couch/>

⁴²⁸ <https://www.cheatsheet.com/culture/states-legal-marijuana.html/>

⁴²⁹ <http://wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

One thing, above all else, that state legislators across the country find impossible to ignore are the vast fortunes of tax revenues being collected in legal adult-use states.

G. Tax Revenues Collected In Legal States

Colorado—the first state to legalize adult-use cannabis—has collected \$500 million in cannabis tax revenues and fees since 2014.⁴³⁰ In 2017, the state collected \$247.4 million in cannabis taxes and fees, on \$1.5 billion in cannabis sales.⁴³¹ By 2016, the state had used \$80 million in cannabis tax revenue to fund its school system.⁴³² Colorado now allocates \$40 million in annual cannabis taxes for the state’s Building Excellent Schools Today (BEST) program.⁴³³

The state of Washington collected \$219 million in cannabis tax revenues and fees during fiscal year 2017.⁴³⁴ Oregon collected \$70.3 million during the same period.⁴³⁵

In Nevada, tax revenues from cannabis surpassed official projections for the whole first year of adult-use sales, in the first 10 months. During that period, the state collected \$56 million in taxes. Nevada projects collecting \$120 million in cannabis tax revenue by July 2019.⁴³⁶

The first complete year of cannabis legalization in Nevada exceeded state regulators’ and the industry’s highest estimations, with tax collections surpassing projections by 140 percent: Nevada collected \$70 million in tax revenue (about \$25 million allocated for Nevada schools) on \$425 million in sales.⁴³⁷

Although California has been slow to ramp up cannabis tax collections on a statewide level because of its vast black market and a host of other reasons, many municipalities are benefitting tremendously.⁴³⁸ Once fully operational, the state’s industry is projected to generate more than \$1 billion a year in tax revenue.⁴³⁹

Even Alaska, with only 740,000 residents, many geographically isolated, is collecting \$1 million per month in adult-use cannabis tax revenues.⁴⁴⁰

⁴³⁰ <https://www.nbcchicago.com/blogs/ward-room/cook-county-voters-weigh-in-on-marijuana-477566623.html>

⁴³¹ <https://www.cnn.com/2018/05/22/five-facts-you-didnt-know-about-the-cannabis-industry.html>

⁴³² <https://www.denverpost.com/2017/07/09/colorado-schools-get-300-million-boost-from-pot-sales/>

⁴³³ <https://www.vox.com/policy-and-politics/2017/7/12/15956742/colorado-marijuana-taxes-schools>

⁴³⁴ <https://www.cnn.com/2018/05/22/five-facts-you-didnt-know-about-the-cannabis-industry.html>

⁴³⁵ <https://www.marijuanamoment.net/legalizing-drugs-would-boost-us-budgets-by-100-billion-harvard-researcher-concludes/>

⁴³⁶ <https://lasvegassun.com/news/2018/jun/28/nevada-marijuana-tax-revenue-blows-past-12-month-p/>

⁴³⁷ <https://abcnews.go.com/International/wireStory/1st-year-nevada-marijuana-sales-exceeds-expectations-57010914>
<https://www.thestreet.com/investing/recreational-cannabis-sales-top-nevada-s-expectations-in-first-full-year-14696850>

⁴³⁸ <https://www.leafly.com/news/politics/select-californias-cannabis-cities-reap-millions-in-sales-taxes-the-rest-miss-out>

⁴³⁹ *Id.*

⁴⁴⁰ *Id.*

These kinds of tax windfalls are being closely watched nationwide by state governments that need to add to their empty coffers. The federal government also undoubtedly has its eyes on the potential taxes. If cannabis were fully legal nationwide, some estimate federal tax revenue would increase by \$132 billion between 2017 and 2025, along with a million new jobs.⁴⁴¹

This new giant source of state and federal tax revenue, combined with the associated reduced spending on policing, imprisonment, and related administrative costs, is a key driver of legalization. Reluctant states and the federal government will also be encouraged by the dearth of significant reported adverse effects in adult-use states.

H. The Sky Has Not Fallen - Success In Legal States

Studies have shown little to no significant adverse effects of adult-use legalization.

Legalization in Colorado, Washington, Oregon, and Alaska had no discernible impact on traffic accidents, public health, or violent crime rates.⁴⁴² In fact, multiple studies have shown substantial net positive effects from legalizing cannabis, beyond revenues. After one year of adult-use sales in Nevada, State Senator Tick Segerblom, a Las Vegas Democrat who helped lead the legalization effort, said the “biggest surprise has been that there’ve been no surprises.”⁴⁴³

Following legalization, the rate of adolescent cannabis use in Colorado has fallen to its lowest level in nearly a decade. State numbers from the National Survey on Drug Use and Health show that a little more than 9 percent of Colorado teens age 12 to 17 used cannabis monthly in 2015 and 2016. Rates of teen alcohol, tobacco, and heroin use are down sharply in the state, as well.⁴⁴⁴

⁴⁴¹ https://www.washingtonpost.com/national/2018/01/10/study-legal-marijuana-could-generate-more-than-132-billion-in-federal-tax-revenue-and-1-million-jobs/?utm_term=.9384f1a8dbda

⁴⁴² <http://thehill.com/opinion/criminal-justice/398069-Data-confirm-that-marijuana-decriminalization-is-long-overdue>; <https://www.freep.com/story/news/local/michigan/2018/06/05/michigan-legislature-ballot-marijuana-legalization/672596002/>; https://www.washingtonpost.com/news/wonk/wp/2016/10/13/heres-how-legal-pot-changed-colorado-and-washington/?utm_term=.70108340e39f; <https://www.mystatesman.com/news/local/legalized-pot-has-effect-states-traffic-death-rates-study-finds/AzglSzCEQyruFu85bCUYSI/>;

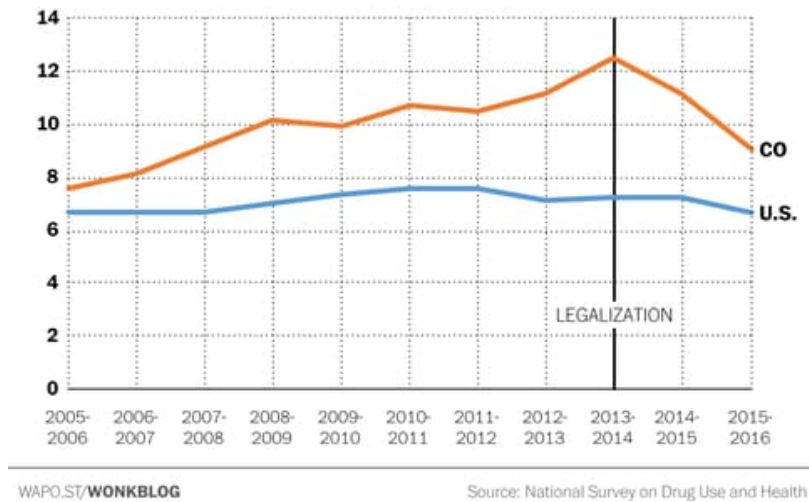
⁴⁴³ <https://news.medicalmarijuanainc.com/study-no-legalizing-marijuana-doesnt-increase-traffic-fatalities/>;

⁴⁴⁴ <https://abcnews.go.com/International/wireStory/1st-year-nevada-marijuana-sales-exceeds-expectations-57010914>

⁴⁴⁴ https://www.washingtonpost.com/news/wonk/wp/2017/12/11/following-marijuana-legalization-teen-drug-use-is-down-in-colorado/?utm_term=.346f15a03524

Teen pot use drops sharply in Colorado

% of 12-to-17 year olds using marijuana in the past month



In the states that border Mexico, the introduction of medical cannabis laws has led to a sharp reduction in violent crime.⁴⁴⁵ According to a study of crime along the border: “Whenever there is a medical marijuana law we observe that crime at the border decreases because suddenly there is a lot less smuggling and a lot less violence associated with that.”⁴⁴⁶

Another study, published in the *Journal of Economic Behavior and Organization*, focused on the two-year window (2013 and 2014) when adult-use cannabis was legal in Washington, but illegal in the adjacent state of Oregon. The study found a significant reduction in crime on the Washington side of the border in 2013–2014 relative to the Oregon side and relative to the pre-legalization years 2010–2012.⁴⁴⁷ The authors offer four possible explanations: First, and most obviously, they note that, for most users, cannabis produces “a state of relaxation and euphoria,” which presumably “reduces the likelihood of engaging in violent activities.” “Second, this effect is reinforced if cannabis is a substitute for violence-inducing substances such as alcohol, cocaine and amphetamines.” “Third, the legalization of recreational marijuana may induce a reallocation of police efforts away from cannabis pushers and consumers, and towards other types of offenses,” they note. And finally, it “may have reduced the role of criminal gangs and small criminals in local cannabis markets.”⁴⁴⁸

In another study published in the *American Journal of Public Health*, researchers analyzed 1.2 million traffic fatalities nationwide from 1985 through 2014, and found that deaths dropped 11

⁴⁴⁵ <https://www.theguardian.com/world/2018/jan/14/legal-marijuana-medical-use-crime-rate-plummets-us-study>. See also “Is Legal Pot Crippling Mexican Drug Trafficking Organisations? The Effect of Medical Marijuana Laws on US Crime,” at <https://onlinelibrary.wiley.com/doi/full/10.1111/ecoj.1252>.

⁴⁴⁶ <https://www.theguardian.com/world/2018/jan/14/legal-marijuana-medical-use-crime-rate-plummets-us-study>

⁴⁴⁷ <https://psmag.com/news/it-is-high-time-we-reduced-crime>

⁴⁴⁸ *Id.*

percent on average in states that legalized medical cannabis. The decrease in traffic fatalities was particularly striking – 12 percent – in 25- to 44-year-olds, an age group with a large percentage of registered medical cannabis users. According to the study’s author: “Instead of seeing an increase in fatalities, we saw a reduction, which was totally unexpected.” The author suggests that some may have substituted consuming cannabis at home for drinking alcohol in bars.⁴⁴⁹

As data continues to emerge from legalized adult-use and medical states showing an absence of significant negative side effects, along with substantial reductions in crime and even drunk driving fatalities, forces opposing legalization will have little real-world validation to support keeping the status quo of federal prohibition.

I. The Canada Effect: Foreign Progress

One of the main drivers of what is becoming not only a US move toward legalization, but slowly a worldwide movement, is Canada’s federal legalization of adult-use cannabis with Royal Assent on June 21, 2018.⁴⁵⁰ Canada’s move to legalize cannabis undermines the global drug policy regime that has existed for decades. From the 1960s through the 1980s, much of the world, including the US and Canada, signed on to three major international drug policy treaties: the Single Convention on Narcotic Drugs of 1961, the Convention on Psychotropic Drugs of 1971, and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988.⁴⁵¹ Combined, the treaties require participants to limit and even prohibit the possession, use, trade, and distribution of drugs outside of medical and scientific purposes, and work together to stop international drug trafficking.⁴⁵² Canada’s decision to legalize cannabis is the most high-profile rebuke of the international treaties since they were signed.⁴⁵³

Legal adult-use cannabis sales in Canada will begin on October 17, 2018.⁴⁵⁴ Canada’s Prime Minister Justin Trudeau was a most outspoken advocate for legalization. His Liberty Party’s marijuana platform, which he passionately and forcefully advocated, explains:

We will legalize, regulate, and restrict access to marijuana.

Canada’s current system of marijuana prohibition does not work. It does not prevent young people from using marijuana and too many Canadians end up with criminal records for possessing small amounts of the drug.

⁴⁴⁹ <https://www.reuters.com/article/us-health-marijuana-traffic-death/after-states-legalized-medical-marijuana-traffic-deaths-fell-idUSKBN14H1LQ>

⁴⁵⁰ <https://globalnews.ca/video/4288069/governor-general-presides-over-royal-assent-of-the-cannabis-act>

⁴⁵¹ <https://www.vox.com/2018/6/27/17508694/marijuana-legalization-canada-oklahoma-vermont-2018>

⁴⁵² *Id.*

⁴⁵³ *Id.*

⁴⁵⁴ http://www.millerthomson.com/en/publications/communiques-and-updates/health-communique/july-19-2018-health-cannabis-act-receives-royal-assent-new-cannabis-regulations-released/?utm_source=Mondaq&utm_medium=syndication&utm_campaign=View-Original

Arresting and prosecuting these offenses is expensive for our criminal justice system. It traps too many Canadians in the criminal justice system for minor, non-violent offenses. At the same time, the proceeds from the illegal drug trade support organized crime and greater threats to public safety, like human trafficking and hard drugs.

To ensure that we keep marijuana out of the hands of children, and the profits out of the hands of criminals, we will legalize, regulate, and restrict access to marijuana.

Prime Minister Trudeau once recounted how his brother Michel in 1998 – six months before he died in an avalanche in British Columbia – had been involved in a car accident.⁴⁵⁵ Police found a few joints in the wreckage and charged Michel. But their father – the former Canadian prime minister Pierre Trudeau – assured him it would be OK. “He reached out to his friends in the legal community, got the best possible lawyer and was very confident that he was going to be able to make those charges go away. We were able to do that because we had resources, my dad had a couple of connections, and we were confident that my little brother wasn’t going to be saddled with a criminal record for life. People from minority communities, marginalized communities, without economic resources, are not going to have that kind of option to go through and clear their name in the justice system,” he said. “That’s one of the fundamental unfairnesses of this current system is that it affects different communities in a different way.”⁴⁵⁶ Ironically, October 17, 2018, the first day of adult-use legal sales, falls on the eve of Pierre Trudeau’s birthday.⁴⁵⁷

As cannabis legalization spreads across many parts of the world, on the precedent set by Canada, history will undoubtedly long remember Prime Minister Justin Trudeau’s passionate advocacy, at great personal political risk, for cannabis legalization. He showed what is possible if more politicians had political courage to right wrongs and challenge the status quo.

⁴⁵⁵ <https://www.theguardian.com/world/2017/apr/25/justin-trudeau-brother-marijuana-charge-dismissed-canada>

⁴⁵⁶ *Id.*

⁴⁵⁷ <https://www.biography.com/people/pierre-trudeau-9510956>. Prime Minister Trudeau often speaks fondly of his late father. During his famous October 3, 2000 eulogy to his father (recommended viewing), Trudeau told the story of accompanying him as a 6-year-old on an official trip to the northernmost reaches of Canada, near the North Pole. He spoke of how he had no brothers there to play with and was getting a little bored because his father still somehow had a lot of work to do. Amid the vast Arctic expanse, broken up only by shed-like structures, young Justin was dispatched on what he called “a special top-secret mission” to find what he hoped was “the reason for the existence of this high-security Arctic base.” One building would provide the answer, he’d find out. He scaled a snow bank, got a lift to look through a window, then rubbed his sleeve on the frosty glass to get a good look. “I saw a figure hunched over one of the many worktables,” Justin Trudeau recalled about 22 years later. “He was wearing a red suit with that furry white trim. And that’s when I understood just how powerful and wonderful my father was.” <https://www.theglobeandmail.com/news/politics/jetaimepapa-justin-trudeaus-2000-eulogy/article26923529/>

Already, in addition to Canada, two other nations have ended cannabis Prohibition. Uruguay legalized adult-use cannabis in July 2017, the first country in the world to do so.⁴⁵⁸ Georgia did the same on July 30, 2018.⁴⁵⁹

In the UK, cannabis legalization took a major step forward on June 28, 2018. Home Secretary Sajid Javid announced that British doctors will be allowed to prescribe cannabis medicines in the Fall of 2018.⁴⁶⁰ Javid said: “Recent cases involving sick children made it clear to me that our position on cannabis-related medicinal products was not satisfactory. Following advice from two sets of independent advisors, I have taken the decision to reschedule cannabis-derived medicinal products – meaning they will be available on prescription.”⁴⁶¹

The UK will reschedule cannabis, ending nearly a century of Prohibition, in part due to a public outcry of support for a 12-year-old epileptic boy, Billy Caldwell, who nearly died after police seized his cannabis-derived CBD medicine. The boy, who had previously gone for as long as 300 days without a seizure while taking the medication, was soon hospitalized, and public outrage over his plight prompted the Home Office to return the boy’s medicine and grant him a special license to temporarily continue his treatment.

His mother, who has been tirelessly advocating for medical cannabis, commented: “For the first time in months I’m almost lost for words, other than thank you Sajid Javid. Never has Billy received a better birthday present, and never from somebody so unexpected,” noting that Javid made the announcement on her son’s 13th birthday. “Crucially, my little boy Billy can now live a normal life with his mummy because of the simple ability to now administer a couple of drops a day of a long-maligned but entirely effective natural medication.”⁴⁶²

In continental Europe, cannabis legalization is also progressing, with a strong focus on medical cannabis. Medical professionals are, in large part, driving the progress in Europe. Germany legalized medical cannabis in the spring of 2017. With a large population, a rapidly-growing

⁴⁵⁸ <https://www.theguardian.com/society/2017/may/27/marijuana-legalisation-uruguay-seen-half-measure-users>. Alicia Castilla’s imprisonment for watering her home-grown cannabis plants sparked efforts to reform Uruguay’s cannabis law firm. Her imprisonment at the women’s prison in the town of Canelones became round-the-clock news. “I fell into a foul-smelling pit that reminded me of Midnight Express. Cockroaches crawled over the bed, there were rats the size of rabbits in the bathrooms.” Castilla realized she had become a national celebrity when her fellow inmates broke into spontaneous applause on her arrival. The eldest of the 120 women imprisoned there, her fellow inmates nicknamed her “the reefer grandmother”, a moniker that was quickly picked up by the press. Thousands marched to demand her release. The protests soon galvanized a longstanding demand for the full legalization of recreational cannabis, leading to law reform. *Id.*

⁴⁵⁹ <http://georgiatoday.ge/news/11592/Smoking-Marijuana-Legalized-in-Georgia>. “This wasn’t a fight for cannabis, this was a fight for freedom,” Zurab Japaridze, the leader of Girchi, an opposition political party and a plaintiff in the lawsuit that led to Monday’s ruling, said. It makes Georgia “the first country in the post-Soviet space” to legalize cannabis consumption. *Id.*

⁴⁶⁰ <https://merryjane.com/news/after-public-outcry-medical-marijuana-is-finally-coming-to-the-u-k-this-fall>

⁴⁶¹ <https://www.independent.co.uk/news/health/medical-cannabis-uk-prescription-legal-epilepsy-pain-relief-home-office-moj-nhs-a8464766.html>

⁴⁶² <https://merryjane.com/news/after-public-outcry-medical-marijuana-is-finally-coming-to-the-u-k-this-fall>

patient count, and robust public health insurance coverage, the country is widely expected to become Europe's key medical marijuana market.⁴⁶³

Europe's population is more than twice the size of the US' and Canada's combined. While estimates vary, market intelligence business Prohibition Partners suggests that with around 12 percent of the continent's population being "irregular" or "intensive" users, a fully legal and regulated cannabis market would be worth more than €56 billion (\$65 billion USD) annually.⁴⁶⁴ Another report projects the European market could reach €115 billion (\$132 billion USD) by 2028.⁴⁶⁵ On June 29, 2018 Luxembourg legalized medical cannabis, becoming the 30th country in the world to do so.⁴⁶⁶

Aside from the US, ten of the most likely countries to legalize adult-use cannabis after Canada are Jamaica, Czech Republic, Colombia, Peru, The Netherlands, Portugal, Spain, Iceland, and France.⁴⁶⁷

There has also been talk of advances in cannabis law reform from unexpected places. On July 17, 2018, Lebanon's House Speaker told the US ambassador that the Middle Eastern nation is preparing to legalize cannabis cultivation for medical use to boost its troubled economy.⁴⁶⁸ Lebanon is the world's third-largest producer of illicit hashish, the psychoactive resin produced by cannabis plants.⁴⁶⁹

In Thailand, where mere possession of small amounts of marijuana can lead to 15 years in prison, the National Assembly is considering and is expected to approve legalizing medical cannabis in April 2019.⁴⁷⁰ Even in South Korea, on July 26, 2018 the country's food and drug minister announced support for a new medical cannabis bill that is currently being debated by the country's lawmakers. Some believe South Korea will become the first Asian country to legalize medical cannabis.⁴⁷¹

As other countries follow the bold lead that Canada has taken, arguments in favor of rescheduling and adult-use legalization in the US will gain even more traction. And when the US legalizes, much of the developed world will eventually follow suit.

⁴⁶³ <https://business.financialpost.com/cannabis/germany-relaunches-cannabis-tender-after-scuttling-first-bid>

⁴⁶⁴ <https://pitchbook.com/news/articles/pot-of-gold-inside-europes-evolving-cannabis-market>

⁴⁶⁵ <https://www.prohibitionpartners.com/europeancannabisreport/>

⁴⁶⁶ <https://www.buzz.ie/news/luxembourg-cannabis-290786>

⁴⁶⁷ <https://www.civilized.life/articles/countries-to-legalize-marijuana-after-canada/>

⁴⁶⁸ <https://www.businessinsider.com/lebanon-to-legalize-medical-marijuana-after-mckinsey-report-2018-7>

⁴⁶⁹ *Id.*

⁴⁷⁰ <https://nextshark.com/thailand-medical-marijuana-legalization/>

⁴⁷¹ <https://mjbizdaily.com/breakthrough-south-korea-cannabis-law-gets-major-backer/>

J. Politics Is Local And Personal: Jobs In The US Cannabis Industry

According to ZipRecruiter.com founder Ian Siegel (his company claims to have helped over one million businesses and 100 million job seekers): “You know what the fastest-growing job category in the United States is? Marijuana.”⁴⁷² Siegel said that ZipRecruiter’s analysis showed a 445-percent growth in job listings in the cannabis category year over year, compared to technology jobs growing at 245 percent and healthcare positions at 70 percent.⁴⁷³

While the industry is implementing brand-new technologies and automation for cannabis cultivation and processing, the human element will always be crucial because of the patient- and consumer-facing retail aspect. Job post boards on Monster,⁴⁷⁴ Indeed,⁴⁷⁵ Google, LinkedIn, and others list thousands of available positions. By 2021, the cannabis industry is expected to create 410,000 jobs in the US.⁴⁷⁶ Many plant-touching jobs fall in the \$50k to \$90k range;⁴⁷⁷ though master growers can easily earn \$100-\$150k especially in the new East Coast markets.⁴⁷⁸

Thousands attend industry job fairs across the country, often many more than organizers anticipate.⁴⁷⁹ Jobs in the industry range across all experience levels and backgrounds, from bud trimmers and dispensary workers and growers to compliance experts, technology and software experts, accountants, chefs, lawyers, lobbyists, community relationship managers, security, product reviewers, real estate professionals, courier and delivery services, and many others.⁴⁸⁰ Specialized employment firms like Vangst have found thousands of new jobs for their clients.⁴⁸¹

Every new cannabis job (like every new medical cannabis patient) helps move a new family and network of friends to support the industry. Every new cannabis business creates numerous brand-new jobs. Some cannabis businesses can even transform a town. In an article called “A Dying Southern Town Needed a Miracle. Marijuana Came Calling,” the New York Times reported extensively on a small town in Arkansas. The mayor had tried without success to attract numerous business to bring jobs and opportunity to his neglected, dying town, until a cannabis cultivator agreed to set up operations. The mayor did not see a downside. “I consider it

⁴⁷² <https://www.forbes.com/sites/tomangell/2018/04/09/marijuana-is-the-fastest-growing-job-category-top-recruiting-ceo-says/#503adc966874>

⁴⁷³ *Id.*

⁴⁷⁴ <https://www.monster.com/career-advice/article/booming-legal-marijuana-industry-has-jobs-that-pay-50k-to-90k>

⁴⁷⁵ <https://www.indeed.com/q-Cannabis-jobs.html>

⁴⁷⁶ <https://www.monster.com/career-advice/article/booming-legal-marijuana-industry-has-jobs-that-pay-50k-to-90k>

⁴⁷⁷ *Id.*

⁴⁷⁸ <https://www.forbes.com/sites/debraborchardt/2016/05/27/the-5-best-marijuana-jobs/#7e0895f56e3a>

⁴⁷⁹ *Id.*

⁴⁸⁰ <https://www.cheatsheet.com/money-career/jobs-being-created-by-the-marijuana-industry.html/>;

<https://www.leafly.com/news/industry/most-in-demand-jobs-careers-in-cannabis-industry-by-city>

⁴⁸¹ <https://vangst.com/vangst-main-page>

a miracle, I really do,” he said. “This is what we’ve been looking for. And what’s remarkable about it is that they came and found us.”⁴⁸² This story has been repeating across the country.

Mayors of large cities across the nation want the federal government to deschedule cannabis. On June 11, 2018, the US Conference of Mayors, which represents mayors leading the 1,408 largest US cities with populations of 30,000 or more, adopted two measures urging the federal government to enact major cannabis law reform.⁴⁸³ The first measure says:

“The United States Conference of Mayors urges the White House, U.S. Department of Justice and the U.S. Drug Enforcement Administration to immediately remove cannabis from the schedule of the CSA to enable U.S. federal banking regulators to permanently authorize financial institutions to provide services to commercial cannabis businesses, and increase the safety of the public.”⁴⁸⁴

The two measures also support extending safe and legal access to veterans and expungement of marijuana convictions.

A few days earlier, on June 8, 2018, a group of 12 bipartisan state governors sent a letter to congressional leaders urging cannabis law reform. The governors wrote: “Our states have acted with deliberation and care to implement programs through thoughtful and comprehensive legislation and regulations. Our citizens have spoken, we are responding. We ask that Congress recognize and respect our states’ efforts by supporting and passing the STATES Act.”⁴⁸⁵ The letters signers included governors from states that have legalized adult-use, Governors Cuomo (D-NY), Murphy (D-NJ), and Wolfe (PA-DA), and even signatures from Republican Governors Burgum and Hogan of North Dakota and Maryland.⁴⁸⁶

As the cannabis industry creates more jobs, grass roots support for legalization will only increase. And local and state elected officials will continue to respond to their constituents, who will increasingly be supportive of legalization as older voters are replaced by new millennial voters. Jobs and the resulting grass roots support is yet another force that will move Congress to act.

K. Cannabis Banking Is A Federal Priority

While the federal government has not yet provided legal protections for banks to service the cannabis industry, largely due to Rep. Pete Sessions (TX-R) blocking numerous legislative

⁴⁸² <https://www.nytimes.com/2018/03/24/us/arkansas-marijuana-cotton-plant.html>

⁴⁸³ <https://www.marijuanamoment.net/mayors-from-across-u-s-call-on-feds-to-deschedule-marijuana/>

⁴⁸⁴ *Id.*

⁴⁸⁵ <https://www.marijuanamoment.net/bipartisan-governors-call-for-federal-marijuana-reform/>

⁴⁸⁶ <https://www.civilized.life/articles/governors-call-on-congress-pass-bill-protecting-legalized-states/>

advances at the House Rules Committee, the Trump administration realizes the importance of doing so, for safety reasons, even though it has not yet acted publicly.

Treasury Secretary Steven Mnuchin has suggested in several appearances before congressional committees that he wants cannabis businesses to be able to access banking services. On February 7, 2018, he told the House Financial Services Committee: “I assure you that we don’t want bags of cash . . . We do want to find a solution to make sure that businesses that have large access to cash have a way to get them into a depository institution for it to be safe.”⁴⁸⁷ A week later, on February 15, 2018, Mnuchin told the House Ways and Means Committee that issuing updated banking guidance is “at the top of the list” for the Treasury Department: “I can tell you we’re working on it as we speak.”⁴⁸⁸

New York and California (which is studying the viability of a state-run bank for the industry), and other states, have strongly encouraged banks to work with the cannabis industry.⁴⁸⁹ In Los Angeles, voters in the November election will decide whether or not to amend the city charter to “allow for the establishment of a municipal financial institution or bank without further voter approval” to service the cannabis industry.⁴⁹⁰ In the meantime, some dispensaries must take extraordinary security measures due to the volume of cash they are handling such as metal detectors, armed security officers, extensive surveillance, and even bulletproof structures.⁴⁹¹

In June 2018, a spokesman for the American Bankers Association, representing thousands of large and small member banks, said: “The time has come for Congress and the regulatory agencies to provide greater legal clarity to banks operating in states where marijuana has been legalized for medical or adult use.”⁴⁹² The Independent Community Bankers of America, which represents small lenders, endorsed a bill that would restrict federal regulators from penalizing banks that provide services to cannabis businesses.⁴⁹³

On June 13, 2018, Federal Reserve Chairman Jerome Powell said that the current gap between federal and state laws “puts federally chartered banks in a very difficult situation. It would be

⁴⁸⁷ <https://www.forbes.com/sites/tomangell/2018/02/06/trump-treasury-secretary-wants-marijuana-money-in-banks/#826c5963a538>

⁴⁸⁸ <https://www.thecannabist.co/2018/02/15/marijuana-banking-treasury-blumenauer-mnuchin/99123/>

⁴⁸⁹ <https://westfaironline.com/104541/new-york-regulator-encourages-state-banks-to-work-with-medical-marijuana-companies/>; <https://www.nbcsandiego.com/news/local/New-Push-for-Statewide-Cannabis-Cash-Banking-System-487454931.html>

⁴⁹⁰ <https://www.leafly.com/news/politics/los-angeles-will-vote-on-a-cannabis-bank>

⁴⁹¹ <https://www.nbcsandiego.com/news/local/New-Push-for-Statewide-Cannabis-Cash-Banking-System-487454931.html>

⁴⁹² <https://thecrimereport.org/2018/06/18/banks-lobby-to-allow-dealings-with-pot-industry/>

⁴⁹³ *Id.*

great if that could be clarified. Our mandate has nothing to do with marijuana, so we just would love to see it clarified.”⁴⁹⁴

On August 24, 2018, state banking officials from Pennsylvania, Alaska, Connecticut, Hawaii, Louisiana, Michigan, Montana, Nevada, New York, Oklahoma, and Washington state sent a letter to Congressional leaders “urg[ing] Congress to consider legislation that creates a safe harbor for financial institutions to serve a state-compliant business or entrusts sovereign states with the full oversight and jurisdiction of marijuana-related activity.”⁴⁹⁵

Congressional protections for cannabis banking would go a long way towards advancing the industry. If Secretary Mnuchin is accurate about the issue being a top priority for the Treasury Department, banking protections may come soon if not immediately after Pete Sessions is voted out of Congress in November.

L. Cannabis Normalization

While the cannabis industry still occasionally finds it difficult to hire some professional service firms, especially in a public-facing role, amongst the nation’s large law firms and some accounting firms there is an increasing willingness to service the industry. Some large law firms like Akerman, Arent Fox, Cozen O’Connor, Duane Morris, Fox Rothschild, Foley Hoag, Greenspoon Marder, and Nixon Peabody have established dedicated cannabis practice groups, and expect a surge of lateral hires.⁴⁹⁶ These are in addition to the numerous growing law firms that are dedicated to the industry, like the Hoban Law Group.

Except for Marcum with a robust dedicated cannabis accounting group,⁴⁹⁷ the nation’s largest accounting firms have been slower to embrace the industry, which has created space for mid-sized and smaller firms to flourish in the industry.⁴⁹⁸

As more mainstream, top professional firms become involved, support and connections for the industry will only increase.

M. The Influence Of California Culture

According to California’s famous former governor Arnold Schwarzenegger, who has a history with cannabis: “That is not a drug, it’s a leaf.”⁴⁹⁹

⁴⁹⁴ <https://www.forbes.com/sites/tomangell/2018/06/14/more-banks-working-with-marijuana-businesses-despite-federal-moves/#53d573f21b1b>

⁴⁹⁵ <https://www.ganjapreneur.com/pennsylvania-gov-office-requests-cannabis-banking-protections/>

⁴⁹⁶ <https://www.law360.com/articles/953819/lateral-surge-on-the-horizon-as-biglaw-gets-into-pot;>
<https://thefreshtoast.com/cannabis/big-law-firms-advise-cannabis-industry-despite-possible-legal-threat/>

⁴⁹⁷ <http://www.marcumllp.com/industries/cannabis>

⁴⁹⁸ <http://www.roi-nj.com/2018/03/22/finance/growth-of-cannabis-industry-means-accounting-firms-face-difficult-decision/>; <https://www.ganjapreneur.com/marijuana-accounting-firms/>;
<https://www.medicaljane.com/directory/companies/types/accounting-firms/>

With California's legalization in January 2018 and the ever-increasing mainstreaming of cannabis culture in California, many more Californians are beginning to agree with Mr. Schwarzenegger. According to a BDS Analytics study conducted in Q1 2018, there has been a significant increase in cannabis consumption among Californians in one year.⁵⁰⁰ 29 percent of adults in California (about 9 million people) were cannabis consumers (at least once in the past six months), up from 23 percent in 2017.

The BDS Analytics study also revealed some interesting information about cannabis consumers. Despite stereotypes, 53 percent of consumers had full-time jobs with an average annual income of nearly \$70,000.⁵⁰¹ California consumers are more active than their counterpart non-consumers, considered either accepters or rejecters. 43 percent of consumers participate in outdoor recreation once or more a week; whereas 35 percent of acceptors and only 25 percent of rejecters do. 40 percent of consumers go to the gym a minimum of once a week, whereas 30 percent of acceptors and 27 percent of rejecters do.⁵⁰² 31 percent of consumers practice yoga or pilates at least once a week, while 26 percent of acceptors and only 20 percent of rejecters attend a yoga/pilates class weekly.⁵⁰³

Another study conducted by Consumer Research Around Cannabis showed that cannabis consumers in the Los Angeles Greater Metropolitan Area are more likely than non-users to be white collar workers who are employed full time and regularly exercise.⁵⁰⁴

California's legalization of cannabis for adult-use, and normalization of cannabis, is having an outsize influence on the nationwide debate, just as New York legalizing will. Beyond California's huge population of more than 40 million,⁵⁰⁵ and having the world's fifth largest economy (with 2017 Gross State Product of \$2.747 trillion),⁵⁰⁶ California's impact stems from its disproportionate cultural reach and ability to shape opinion.⁵⁰⁷ California's adult-use legalization in January 2018 was a pivotal step toward legalizing cannabis nationwide.

For better or worse, people around the country, and across the world, look to California as a cultural model and trendsetter.⁵⁰⁸ From Hollywood stars like Scarlett Johansson and Leonardo DiCaprio, to Apple and Google, California's culture and innovations reach almost every

⁴⁹⁹ <https://www.independent.co.uk/news/world/americas/marijuana-is-not-a-drug-its-a-leaf-says-schwarzenegger-398196.html>

⁵⁰⁰ <https://www.forbes.com/sites/marycarreon/2018/05/17/new-study-highlights-the-social-impacts-of-cannabis-legalization-in-california/#76fb56892194>

⁵⁰¹ *Id.*

⁵⁰² *Id.*

⁵⁰³ *Id.*

⁵⁰⁴ <https://www.consumerresearcharoundcannabis.com/los-angeles-southern-california-cannabis-marketplace-report/>

⁵⁰⁵ <https://www.sacbee.com/opinion/op-ed/article214771915.html>

⁵⁰⁶ <https://www.sacbee.com/news/business/article210466514.html>

⁵⁰⁷ <https://www.cnn.com/2018/02/22/californias-real-impact-on-legal-weed-commentary.html>

⁵⁰⁸ *Id.*

corner of the planet. Cannabis consumption will be normalized by California-created movies and shows depicting the consumption of cannabis as typical as having wine or beer after a day of work.⁵⁰⁹ Beyond normalization, cannabis is increasingly presented in films and television as a just cause, with positive societal, economic, racial and public health implications.⁵¹⁰

California, with its ability to shape US culture, will spur nationwide awareness. Education and familiarity will help drive reform. As explained next, so will direct lobbying.

N. Increased Lobbying Efforts, Support From Other Industries

On May 21-23, 2018, hundreds of cannabis industry leaders and lobbyists visited members of Congress as part of the National Cannabis Industry Association's (NCIA) 8th annual Lobby Days.⁵¹¹ Many elected officials including Congressman Blumenauer joined the group.



Rep. Blumenauer, founder of the Congressional Cannabis Caucus, said: “The politics is going to help us here and it's setting the stage for a really very monumental session next year if the results in the election go the way I think they will. More and more voters are talking about it, and the people who care, the advocates, get more organized, as there's more activity that's taking place across the country.”⁵¹² “We’re pushing every day looking at things we can do here,” Blumenauer said. “Next year, I think all the pieces can come together.”⁵¹³

The NCIA spent \$431,000 on Washington lobbying in 2017, and many individual companies hire their own lobbyists.⁵¹⁴ Marijuana Policy Project (MPP), another lead federal lobbying

⁵⁰⁹ *Id.*

⁵¹⁰ *Id.*

⁵¹¹ <https://thecannabisindustry.org/video-another-successful-ncia-lobby-days/>;
<https://www.nj.com/marijuana/2018/07/at-the-midyear-mark-heres-how-we-stand-on-federal.html>

⁵¹² *Id.*

⁵¹³ *Id.*

⁵¹⁴ <https://www.politico.com/newsletters/politico-influence/2018/05/29/cannabis-lobbying-continues-272627>

organization, was involved in the ballot initiatives to legalize, regulate, and tax cannabis in Colorado, Alaska, Maine, Massachusetts, and Nevada. NORML is another prominent non-profit advocacy group in the cannabis industry. NORML has been opposing Prohibition and advocating for legal reform since the 1970s, when it led successful efforts to decriminalize minor marijuana offenses in 11 states and significantly lower penalties in all others.⁵¹⁵

The cannabis industry lobby is very active in some states. During Colorado's 2018 legislative session which ended in May 2018, the state's industry spent \$720,000 on lobbyists, more than the oil industry lobby, which spent \$530,000, and the liquor lobby, which spent \$560,000.⁵¹⁶ In New York, medical cannabis companies such as PalliaTech, Vireo Health, and Etain spent \$2 million on lobbying in the state between 2013 and 2017.⁵¹⁷

On the federal level, the industry has also recently received support from unprecedented quarters.

The alcohol industry views cannabis legalization and advances in the industry with mixed feelings. Alcohol companies' bottom lines are directly adversely affected by cannabis legalization. In Washington State, a survey showed that the average yearly spend per person was almost identical for cannabis and alcohol.⁵¹⁸ In Aspen, Colorado, annual cannabis sales in 2017 exceeded alcohol sales; it is believed to be the first time that annual legal cannabis sales have topped alcohol anywhere in the US.⁵¹⁹ But alcohol companies also realize that the end of cannabis Prohibition is inevitable. They understand the industry well, are starting to invest in it, and are starting to publicly support it.

On July 12, 2018, for the first time ever, a major alcohol association announced its support of ending federal prohibition so that states can legalize cannabis without interference. The Wine & Spirits Wholesalers of America (WSWA), with nearly 400 member companies in 50 states, distributing more than 80 percent of all wines and spirits sold at wholesale in the US,⁵²⁰ announced "an official policy position in favor of a state's right to establish a legal, well-regulated, adult-use cannabis marketplace."⁵²¹ WSWA Acting Executive Vice President for External Affairs Dawson Hobbs said: "Eight decades ago, Americans acknowledged that the Prohibition of alcohol was a failed policy. The state-based system of regulation, adopted after

⁵¹⁵ <http://norml.org/about/intro>

⁵¹⁶ <https://herb.co/marijuana/news/colorado-marijuana-lobby-oil-alcohol/>

⁵¹⁷ <https://www.lohud.com/story/news/investigations/2017/04/26/ny-marijuana-lobbying/100642838/>

⁵¹⁸ <https://internationalhighlife.com/top-5-lobby-groups-legal-cannabis/>

⁵¹⁹ <https://www.independent.co.uk/news/world/americas/marijuana-sales-overtake-alcohol-colorado-aspen-ski-resort-us-city-weed-cannabis-a8202966.html>

⁵²⁰ <http://www.wswa.org/about>

⁵²¹ <http://www.wswa.org/news/articles/2018/07/12/major-alcohol-industry-association-announces-support-for-right-to-legalize-cannabis>

Prohibition, created a U.S. beverage alcohol market that is the safest, most competitive and best regulated in the world.”⁵²²

Cannabis-industry lobbying, and lobbying support from other industries such as the alcohol industry, is yet another force pushing toward federal legalization.

O. Forces Opposing Legalization

Smart Approaches to Marijuana (SAM) is one of the only significant non-profit advocacy groups financially opposing legalization efforts. But they and others like them are rapidly losing the battle for the hearts and minds of Americans.⁵²³ Their motivations are unclear. Yet there is an immutable truth they cannot defeat. The public understands that, putting all the medical benefits of cannabis aside, however you measure the consequences of use, cannabis is significantly less harmful to users and society than tobacco or alcohol, which are both regular industries.⁵²⁴ Tobacco, alcohol, and opioids, all legal and widely-available, kill tens of thousands a year, while there has never been a death attributed to cannabis.⁵²⁵

SAM’s message is getting little traction, but advances in cannabis law reform must overcome more powerful, entrenched, monied interests directly threatened by advances in the industry.

Ardent opposition comes from the private prison industry and police and prison guard unions. As cannabis arrests and prosecution become a thing of the past in many states and cities, jails and prisons are losing a large portion of their population. In 2008, the California prison union provided funds to help defeat Proposition 5, a measure to create prison diversion programs for nonviolent drug offenders.⁵²⁶ The end of Prohibition is a serious if not existential crisis for parts of the private prison industry.

Police unions are very concerned. In 2015, nationwide arrests for possessing small amounts of marijuana exceeded those for all violent crimes, even as social attitudes were changing and a number of cities and states already legalized or decriminalized small quantities.⁵²⁷ That year, law enforcement agencies made 574,641 arrests for small quantities of marijuana intended for personal use, 13.6 percent more than the 505,681 arrests made for all violent crimes, including murder, rape and serious assaults.⁵²⁸

Not surprisingly, in California, a group called the Coalition for Responsible Drug Policies, which was heavily involved in campaigning against the 2016 successful initiative to legalize adult-use,

⁵²² *Id.*

⁵²³ https://www.washingtonpost.com/news/wonk/wp/2014/07/29/medical-marijuana-opponents-most-powerful-argument-is-at-odds-with-a-mountain-of-research/?noredirect=on&utm_term=.dad79a212a80

⁵²⁴ *Id.*

⁵²⁵ https://www.huffingtonpost.com/2013/09/03/marijuana-deaths_n_3860418.html

⁵²⁶ <https://internationalhighlife.com/top-5-lobby-groups-legal-cannabis/>

⁵²⁷ <https://www.nytimes.com/2016/10/13/us/marijuana-arrests.html>

⁵²⁸ *Id.*

was funded by groups representing the California Police Chiefs Association, the Riverside Sheriffs' Association, the Los Angeles Police Protective League's Issues PAC, and the California Correctional Supervisor's Organization.⁵²⁹

Nevertheless, in more and more jurisdictions, in 2018, police officers can no longer use non-violent marijuana possession arrests to gain overtime hours. The public, and many prosecutors in not-yet-legalized states, are unwilling to continue to allow senseless marijuana arrests and imprisonment drain state tax coffers and harm untold lives and families, with generational impacts impossible to measure.

Large pharmaceutical companies have also been a formidable force opposing advances in cannabis law reform.⁵³⁰ Pharmaceutical company Insys spent \$500,000 to block adult-use legalization in Arizona.⁵³¹ Purdue Pharma and Abbott Laboratories, makers of the painkillers OxyContin and Vicodin, respectively, are among the largest contributors to the Anti-Drug Coalition of America.⁵³²

The tobacco industry is fighting battles on many fronts - cannabis legalization is not a direct threat. But the industry has historically opposed legalization measures.⁵³³ For his 1996 Senate campaign, Attorney General Jeff Sessions received donations from the tobacco company R.J. Reynolds that were so excessive that some of the money had to be returned. According to one report: "the tobacco industry helped get Jeff Sessions elected to the Senate in 1996."⁵³⁴

On the other hand, tobacco companies, facing declining revenues, especially domestically, are undoubtedly thinking about profiting from cannabis. Opposing an issue is sometime a great way to learn about the other side. An article titled, "Waiting for the Opportune Moment: The Tobacco Industry and Marijuana Legalization," describes how in the 1970s Philip Morris "applied for and (were) granted a special permit to grow, cultivate and make marijuana extracts."⁵³⁵

Ultimately, truth and facts will prevail over bottom line-driven opposition. In the public, there is little passion for opposing adult-use legalization, many are just ambivalent or uneducated; the voices of organized, motivated, rational advocates are increasingly resonating in halls of power.

P. Selected Quotes On Legalization And Cannabis

The individuals and organizations quoted here make strong statements regarding cannabis legalization and consumption. They are from all walks of life and across the political spectrum.

⁵²⁹ <https://www.thecannabist.co/2016/05/19/police-prison-groups-worried-california-legalization/54441/>

⁵³⁰ <https://www.theguardian.com/sustainable-business/2016/oct/22/recreational-marijuana-legalization-big-business>

⁵³¹ <https://www.theguardian.com/us-news/2017/apr/03/big-pharma-marijuana-competition-insys-arizona>

⁵³² <https://www.thenation.com/article/anti-pot-lobbys-big-bankroll/>

⁵³³ <https://internationalhighlife.com/top-5-lobby-groups-legal-cannabis/>

⁵³⁴ <https://therooster.com/blog/why-jeff-sessions-so-obsessed-destroying-medical-marijuana>

⁵³⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4089369/>

Most importantly, aside from the Prohibitionists quoted for context at the beginning, the sentiments expressed represent the views of the majority of the American public.

- Harry J. Anslinger, Commissioner of the US Bureau of Narcotics 1930-1962, Testimony to Congress in support of the Marijuana Tax Act of 1937: “[T]he primary reason to outlaw marijuana is its effect on the degenerate races.” “Marijuana is an addictive drug which produces in its users insanity, criminality, and death.” “Reefer makes darkies think they're as good as white men.” “You smoke a joint and you're likely to kill your brother.” “There are 100,000 total marijuana smokers in the US, and most are Negroes, Hispanics, Filipinos and entertainers. Their Satanic music, jazz and swing, result from marijuana usage. This marijuana causes white women to seek sexual relations with Negroes, entertainers and any others.”
- President Richard Nixon (RN) (Transcript of May 26, 1971 Oval Office Conversation with Chief of Staff Harry Robbins “Bob” Haldeman):

RN: Now, this is one thing I want. I want a Goddamn strong statement on marijuana. Can I get that out of this sonofabitching, uh, Domestic Council?

HRH: Sure.

RN: I mean one on marijuana that just tears the ass out of them. I see another thing in the news summary this morning about it. You know it's a funny thing, every one of the bastards that are out for legalizing marijuana is Jewish. What the Christ is the matter with the Jews, Bob, what is the matter with them? I suppose it's because most of them are psychiatrists, you know, there's so many, all the greatest psychiatrists are Jewish. By God we are going to hit the marijuana thing, and I want to hit it right square in the puss, I want to find a way of putting more on that. More [unintelligible] work with somebody else with this.

HRH: Mm hmm, yep.

RN: I want to hit it, against legalizing and all that sort of thing.

- President Jimmy Carter (August 2, 1977): “Penalties against drug use should not be more damaging to an individual than use of the drug itself. Nowhere is this more clear than in the laws against possession of marijuana in private for personal use.”⁵³⁶
- Melissa Etheridge (October 16, 2005): “Instead of taking five or six of the prescriptions, I decided to go a natural route and smoke marijuana.”⁵³⁷

⁵³⁶ <http://masscann.org/activism-helps/useful-quotes/>

- Jay Leno: “Forty million Americans smoked marijuana; the only ones who didn’t like it were Judge Ginsberg, Clarence Thomas and Bill Clinton.”⁵³⁸
- Jennifer Aniston: “I enjoy smoking cannabis and see no harm in it.”⁵³⁹
- Glenn Beck (April 6, 2009): “I think it’s about time we legalize marijuana . . . We either put people who are smoking marijuana behind bars or we legalize it, but this little game we are playing in the middle is not helping us, it is not helping Mexico and it is causing massive violence on our southern border . . . Fifty percent of the money going to these cartels is coming just from marijuana coming across our border.”⁵⁴⁰
- Richard Cowan, Former Director of NORML: “One of the problems that the marijuana reform movement consistently faces is that everyone wants to talk about what marijuana does, but no one ever wants to look at what marijuana prohibition does. Marijuana never kicks down your door in the middle of the night. Marijuana never locks up sick and dying people. Marijuana does not suppress medical research. Marijuana does not peek in bedroom windows.”⁵⁴¹
- Louis Armstrong (musician): “It really puzzles me to see marijuana connected with narcotics, dope and all that crap. It’s a thousand times better than whiskey – it’s an assistant – a friend.”⁵⁴²
- Pat Robertson (March 7, 2012): “I really believe we should treat marijuana the way we treat the beverage alcohol. I’ve never used marijuana and I don’t intend to, but it’s just one of those things that I think: this war on drugs just hasn’t succeeded.”⁵⁴³
- Sean Hannity (June 19, 2013): “I don’t think there should be jail terms [for marijuana]. I believe in decriminalization.”⁵⁴⁴
- President Barack Obama (January 2014): “I don’t think it’s more dangerous than alcohol.”⁵⁴⁵
- Illinois Compassionate Use of Medical Cannabis Pilot Program Act (January 1, 2014): “The recorded use of cannabis as a medicine goes back nearly 5,000 years. Modern medical research has confirmed the beneficial uses of cannabis in treating or alleviating the pain, nausea, and other symptoms associated with a variety of debilitating medical conditions,

⁵³⁷ <https://www.azquotes.com/quote/91151?ref=legalizing-marijuana>

⁵³⁸ <https://www.goodreads.com/quotes/368704-forty-million-americans-smoked-marijuana-the-only-ones-who-didn-t>

⁵³⁹ <https://potent.media/greatest-marijuana-quotes-of-all-time>

⁵⁴⁰ <http://marijuanamajority.com/?id=210>

⁵⁴¹ <http://masscann.org/activism-helps/useful-quotes/>

⁵⁴² <https://www.kannabia.es/en/blog/10-quotes-about-marihuana-will-not-leave-you-indifferent>

⁵⁴³ <https://www.nytimes.com/2012/03/08/us/pat-robertson-backs-legalizing-marijuana.html>

⁵⁴⁴ <http://nymag.com/daily/intelligencer/2013/06/sean-hannity-kate-upton-marijuana-decriminalization.html>

⁵⁴⁵ <http://time.com/2375/obama-pot-marijuana-cowardice/>

including cancer, multiple sclerosis, and HIV/AIDS, as found by the National Academy of Sciences' Institute of Medicine in March 1999 . . . The medical utility of cannabis is recognized by a wide range of medical and public health organizations, including the American Academy of HIV Medicine, the American College of Physicians, the American Nurses Association, the American Public Health Association, the Leukemia & Lymphoma Society, and many others.”⁵⁴⁶

- Sebastian Marincolo (German Author and PhD in Philosophy): “A marijuana high can enhance core human mental abilities. It can help you to focus, to remember, to see new patterns, to imagine, to be creative, to introspect, to empathically understand others, and to come to deep insights. If you don’t find this amazing, you have lost your sense of wonder. Which, by the way, is something a high can bring back, too.”⁵⁴⁷
- Martha Stewart (June 12, 2013): “Of course I know how to roll a joint.”⁵⁴⁸
- Andy Warhol: “I think pot should be legal. I don’t smoke it, but I like the smell of it.”⁵⁴⁹
- Dr. Sanjay Gupta (CNN) (August 8, 2013): “[Marijuana] doesn’t have a high potential for abuse, and there are very legitimate medical applications. In fact, sometimes marijuana is the only thing that works... [I]t is irresponsible not to provide the best care we can as a medical community, care that could involve marijuana. We have been terribly and systematically misled for nearly 70 years in the United States, and I apologize for my own role in that.”⁵⁵⁰
- The Dalai Lama (ardent opposer of alcohol and drugs) (October 15, 2013): If marijuana had pharmaceutical virtues, it would be “the exception.”⁵⁵¹
- Rick Steves (January 7, 2015) (credits cannabis for making him a better travel writer): “I have used cannabis all over the world.” “I think that people don’t realize that the sky will not fall when we legalize marijuana. . . We’ll just take the crime out of it. It’s already a huge black market economy.”⁵⁵²
- National Academy of Science, Report (January 2017): Reviewed 10,000 scientific abstracts and reached nearly 100 conclusions that found many medical uses for marijuana and

⁵⁴⁶ <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3503&ChapterID=35>

⁵⁴⁷ <https://cannasos.com/news/authors/10-medical-marijuana-quotes-of-10-people-who-changed-the-world>

⁵⁴⁸ http://www.laist.com/2013/06/21/martha_stewart_of_course_i_know_how.php

⁵⁴⁹ <https://potent.media/greatest-marijuana-quotes-of-all-time>

⁵⁵⁰ <https://thinkprogress.org/sanjay-gupta-reverses-on-marijuana-we-have-been-terribly-and-systematically-misled-2a52372ee694/>

⁵⁵¹ <https://www.theatlantic.com/international/archive/2013/10/dalai-lama-supports-medical-marijuana-use/309922/>

⁵⁵² <https://blog.sfgate.com/smellthetruth/2015/01/07/travel-writer-rick-steves-sees-two-americas-on-pot/>;
<https://www.ricksteves.com/about-rick/new-approach-to-marijuana>

cannabis-derived products, including that “conclusive or substantial evidence” exists for cannabis’ efficacy in patients suffering from chronic pain.⁵⁵³

- Senator Kirsten Gillibrand (D-NY) (February 14, 2018): “Legalizing marijuana is a social justice issue and a moral issue that Congress needs to address, and I’m proud to work with Sen. Booker on this legislation to help fix decades of injustice caused by our nation’s failed drug policies.”⁵⁵⁴
- Dr. Ron Paul (R-KY) (February 15, 2018): “Medical marijuana can also serve as an effective pain reliever, making it a viable alternative to opioids. This may be why states that have legalized medical marijuana have fewer deaths related to opioid abuse. These states have also experienced a decrease in crime and black-market activity . . . President Trump and the rest of the GOP would be foolish to stand with Sessions. Eliminating the Rohrabacher Amendment would expose the Republicans as ‘fair weather federalists’ who only support state autonomy when the state policies conform to the GOP’s agenda. This would cause the GOP to lose support of younger liberty-minded voters who expect their elected officials to consistently defend limited government and individual liberty . . . Allowing states to decide whether or not to legalize medical marijuana is a case where the politically popular thing to do is also the right thing to do. President Trump and the Republican Congress should stand for federalism and liberty and preserve the Rohrabacher Amendment.”⁵⁵⁵
- World Health Organization (WHO) (February 2018): CBD has “been demonstrated as an effective treatment for epilepsy” in adults, children, and even animals, and that there’s “preliminary evidence” that CBD could be useful in treating Alzheimer’s disease, cancer, psychosis, Parkinson’s disease, and other serious conditions.⁵⁵⁶
- Senator Cory Booker (D-NJ) (February 23, 2018): “Our country’s drug laws are badly broken and need to be fixed. They don’t make our communities any safer - instead they divert critical resources from fighting violent crimes, tear families apart, unfairly impact low-income communities and communities of color, and waste billions in taxpayer dollars each year.”⁵⁵⁷
- Former Speaker of the House John Boehner (April 11, 2018): “I’m joining the board of Acreage Holdings because my thinking on cannabis has evolved. I’m convinced de-

⁵⁵³ <http://nationalacademies.org/hmd/~media/Files/Report%20Files/2017/Cannabis-Health-Effects/Cannabis-report-highlights.pdf>

⁵⁵⁴ <https://www.nbcnewyork.com/news/local/New-York-Senator-Bill-End-Federal-Prohibition-on-Marijuana-Booker-NY-NJ-474089323.html>

⁵⁵⁵ <https://www.newsweek.com/ron-paul-sessionss-efforts-stop-medical-marijuana-use-defies-federalism-808251>

⁵⁵⁶ <https://www.forbes.com/sites/janetwburns/2018/03/18/who-report-finds-no-public-health-risks-abuse-potential-for-cbd/#65ef76602347>

⁵⁵⁷ https://www.nj.com/marijuana/2018/01/cory_bookers_weed_legalization_bill_hits_the_us_ho.html

scheduling the drug is needed so we can do research, help our veterans, and reverse the opioid epidemic ravaging our communities.”⁵⁵⁸

- The Atlantic Magazine (April 19, 2018): “The marijuana wars are entering a new phase. The first phase, over whether or not to legalize the recreational use of cannabis, is over. The partisans of legalization have won the battle for public opinion. Soon, marijuana legalization will be entrenched in federal law. At this point, to fight against legalization is to fight against the inevitable. The only question now is what form America’s legal marijuana markets will take.”⁵⁵⁹
- Senator Charles Schumer (D-NY) (April 20, 2018): “The time has come to decriminalize marijuana. My thinking — as well as the general population's views — on the issue has evolved, and so I believe there's no better time than the present to get this done. It's simply the right thing to do.”
- Dr. Sanjay Gupta’s Letter to Attorney General Jeff Sessions (April 24, 2018): “I feel obligated to share the results of my five-year-long investigation into the medical benefits of the cannabis plant. Before I started this worldwide, in-depth investigation, I was not particularly impressed by the results of medical marijuana research, but a few years later, as I started to dedicate time with patients and scientists in various countries, I came to a different conclusion. Not only can cannabis work for a variety of conditions such as epilepsy, multiple sclerosis and pain, sometimes, it is the only thing that works. I changed my mind, and I am certain you can, as well. It is time for safe and regulated medical marijuana to be made available nationally.”⁵⁶⁰
- Politico Magazine (April 24, 2018): “Evolution on the marijuana issue is proceeding at warp speed in political terms. Nearly 50 years of federal marijuana prohibition is about to disappear.”⁵⁶¹
- Rep. Tim Ryan (D-OH) (July 20, 2018): “As co-chair of the House Addiction, Treatment, and Recovery Caucus, I've been hesitant to support legalizing marijuana in the past. But after meeting with countless Ohio families and youth whose lives have been irreparably harmed by a marijuana arrest, I find the social and economic injustices of our marijuana policy too big to ignore. I firmly believe no person should be sentenced to a lifetime of hardship because of a marijuana arrest. It is morally wrong and economically nonsensical. That is why I am calling for an end to marijuana being used as an excuse to lock up our fellow Americans.”⁵⁶²

⁵⁵⁸ <https://twitter.com/SpeakerBoehner/status/984022770752290818>

⁵⁵⁹ <https://www.theatlantic.com/politics/archive/2018/04/legal-marijuana-gardner/558416/>

⁵⁶⁰ <https://www-m.cnn.com/2018/04/24/health/medical-marijuana-opioid-epidemic-sanjay-gupta/index.html?r=https%3A%2F%2Fwww.google.com%2F>

⁵⁶¹ <https://www.politico.com/magazine/story/2018/04/24/pot-marijuana-2018-congress-218069>

⁵⁶² https://amp.cnn.com/cnn/2018/07/20/opinions/legalize-marijuana-all-50-states-ryan/index.html?_twitter_impression=true

- Southern District Of New York Federal District Judge Jack Weinstein (July 7, 2018): “Like many federal trial judges, I have been terminating supervision for ‘violations’ by individuals with long-term marijuana habits who are otherwise rehabilitated. No useful purpose is served through the continuation of supervised release for many defendants whose only illegal conduct is following the now largely socially acceptable habit of marijuana use.”⁵⁶³
- Senator Elizabeth Warren (D-MA) (June 6, 2018): “Outdated federal marijuana laws have perpetuated our broken criminal justice system, created barriers to research, and hindered economic development,” commented Senator Warren in a statement. “States like Massachusetts have put a lot of work into implementing common sense marijuana regulations - and they have the right to enforce their own marijuana policies. The federal government needs to get out of the business of outlawing marijuana.”
- Senator Cory Gardner (R-CO) (June 6, 2018): “The federal government is closing its eyes and plugging its ears while 46 states have acted. The bipartisan STATES Act fixes this problem once and for all by taking a states’ rights approach to the legal marijuana question. The bipartisan, commonsense bill ensures the federal government will respect the will of the voters - whether that is legalization or prohibition - and not interfere in any states’ legal marijuana industry.”⁵⁶⁴
- Representative Steve Cohen (D-TN) (November 14, 2017) (questioning Attorney General Jeff Sessions on his past remarks regarding marijuana): “You said one time that ‘Good people don’t smoke marijuana. Which of these people would you say are not good people? John Kasich, George Pataki, Rick Santorum, Ted Cruz, Jeb Bush, George Bush, Arnold Schwarzenegger, Supreme Court Justice Clarence Thomas?’”⁵⁶⁵
- NJ Health Commissioner Dr. Shereef Elnahal (July 23, 2018): “I am asking my fellow physicians to enroll in the program and consider medical marijuana as another effective, therapeutic tool for many of their patients. In lectures that I have delivered to medical schools and teaching hospitals across the state, I have reviewed the evidence behind the therapy. Research has demonstrated the efficacy of marijuana in treating chronic pain, epilepsy, Crohn’s disease and more. Better research is needed, and the administration is advocating for descheduling the drug at the federal level to obtain necessary funding.”⁵⁶⁶

⁵⁶³ http://sentencing.typepad.com/sentencing_law_and_policy/2018/07/judge-jack-weinstein-laments-overuse-of-federal-supervised-release-and-especially-its-revocation-for.html

⁵⁶⁴ <https://www.forbes.com/sites/janetwburns/2018/06/07/congress-launches-bipartisan-states-act-to-protect-legal-cannabis-once-and-for-all/#d0a33b442ba4>

⁵⁶⁵ <https://www.thecannabist.co/2017/11/14/sessions-marijuana-judiciary-committee/92351/>

⁵⁶⁶ https://www.nj.com/opinion/index.ssf/2018/07/nj_health_commissioner_we_need_more_medical_mariju.html

V. THE MANY FACETS OF THE US CANNABIS INDUSTRY

The US has an estimated total of 2.1 million medical cannabis patients and nearly 2,500 dispensaries serving medical and adult-use cannabis.⁵⁶⁷ There are many facets to this rapidly-growing industry. Room here allows only for an overview – there is much more.

A. Myriad Medical Applications, Many Still Not Known/Tested

Medical cannabis. The term engenders many questions.

What is it? Medical cannabis is cannabis in a dry leaf form or in a derivative formulation such as an oil, edible, tincture, sublingual, capsule, inhalable, or topical product, used for a medicinal application. The forms of medical cannabis are the same forms used for adult-use recreational cannabis, but medical cannabis is available in certain specific cannabinoid combinations and genetic profiles, sometimes hard to create, tailored to address specific conditions.

Does it work? Medical cannabis heals or provides relief from a multitude of 21st century problems, like chronic pain, post-traumatic stress disorder, chemotherapy side effects, HIV, epilepsy, Alzheimer's, autism, arthritis, migraines, sleep apnea, multiple sclerosis, asthma, diabetes, anxiety, glaucoma, pancreatitis, Parkinson's, ulcerative colitis, Crohn's Disease, menstrual cramps, trauma, and many more.⁵⁶⁸

What is the effect on the patient? Dry leaf cannabis, or commonly-available traditional cannabis, is available in hundreds of strains, generally divided into Sativa (energizing), Indica (relaxing), hybrids of Sativa and Indica, or CBD-dominant (non-psychoactive) variations. Countless varieties of those strains have been identified, and each strain can be hybridized to produce an endless cycle of new strains (with nearly-infinite divergent genome sequencing, or genetic profiles).⁵⁶⁹ Dry leaf cannabis contains all of the plant's cannabinoid constituents, including the psychoactive cannabinoid THC (tetrahydrocannabinol). Medical cannabis in a derivate form may contain a mixture of cannabinoids such as THC and CBD (the non-psychoactive cannabinoid constituent cannabidiol), or individual cannabinoids in an isolated form.

How does it work? Cannabis does not directly create the most famous cannabinoids associated with the plant, THC and CBD. Instead, it synthesizes several cannabinoid acids which must be “activated,” usually by heat (traditionally, smoking, or now common, vaping) to yield the two

⁵⁶⁷ <https://www.phoenixnewtimes.com/news/arizona-medical-marijuana-cannabis-program-compare-10624652>

⁵⁶⁸ <https://texasoriginalcc.com/meet-raphael-mechoulam/>; <https://www.webmd.com/pain-management/features/medical-marijuana-uses>;

https://www.medicinenet.com/medical_marijuana_medical_cannabis/article.htm#what_are_the_uses_for_medical_marijuana; <https://www.cnn.com/2014/03/07/health/gallery/uses-for-medical-marijuana/index.html>; <https://www.cannabis-med.org/english/patients-use.htm>; <https://thethirty.byrdie.com/cannabis-for-pms--5a81fddeb677b>; <https://www.cancer.org/treatment/treatments-and-side-effects/complementary-and-alternative-medicine/marijuana-and-cancer.html>;

⁵⁶⁹ <https://www.rocche.com/media/releases/med-cor-2011-08-18u.htm>; <https://medium.com/google-cloud/dna-sequencing-of-1000-cannabis-strains-publicly-available-in-google-bigquery-a33430d63998>

well-known compounds THC and CBD. Cannabinoids can also be naturally decarboxylized in the plant post-harvest, using another factor of decarboxylation, time.⁵⁷⁰ In addition to THC and CBD precursors, there are a number of related cannabinoid acids produced by cannabis, including eight major cannabinoid acids and as many as 100 other detectable cannabinoid acids.⁵⁷¹ Cannabis plants also have naturally high levels of terpenes (aromatic organic compounds found in many plants).

A groundbreaking 2011 paper by neurologist and researcher Dr. Ethan Russo described the way cannabinoids and terpenes work together to boost and modulate the effects of one another in the body's endocannabinoid system, often called the "entourage effect." Dr. Russo found that terpenes "could produce synergy with respect to treatment of pain, inflammation, depression, anxiety, addiction, epilepsy, cancer, fungal and bacterial infections."⁵⁷² Nearly all of the major terpenes in cannabis are either analgesic (anti-pain) or anti-inflammatory.⁵⁷³

What is the potential? The proven treatment and therapeutic benefits of medical cannabis are numerous. What remains to be seen is how many more undiscovered and undocumented medicinal properties the cannabis plant offers. Some of the plant's minor cannabinoids are still being discovered. Concentrates of some of those cannabinoids and certain combinations of them may yield transformative cures. Sadly, federal illegality has stymied any systematic research and clinical trials of cannabis in the US in the era of modern medicine.

Widespread medical cannabis acceptance will transform 21st century healthcare by unleashing on the cannabis plant the wisdom of modern science and medicine, fueled by capitalism and necessity.⁵⁷⁴ The medical system as we know it (*i.e.*, treatment with dozens of prescription drugs in some cases) will look much different ten years from now because of medical cannabis.

From the first records of use of the cannabis plant as medicine 5,000 years ago, cannabis has been a medicine for 4,920 of those years, but unfortunately, not for the past 81 years - during the era of modern medicine. Whether undiscovered combinations or concentrations of cannabinoids and terpenes, prove to be the elixir of life, reducing tumors, curing cancer, and slowing aging, will take careful science to determine.⁵⁷⁵ But there are vast proven benefits cannabis is having every day, fundamentally transforming patients' lives.

Medical cannabis saves untold lives that would otherwise be destroyed by opioid abuse and diminished with other serious medical conditions. It prolongs the enjoyment of life for many seniors, helps heal the emotional scars on battle-hardened veterans, and is utterly transformative

⁵⁷⁰ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5006560/>

⁵⁷¹ <https://www.leafly.com/news/cannabis-101/list-major-cannabinoids-cannabis-effects>

⁵⁷² <https://www.heylocannabis.com/post/what-are-terpenes>

⁵⁷³ *Id.*

⁵⁷⁴ <https://www.allbud.com/learn/story/how-widespread-medical-cannabis-acceptance-will-ch>

⁵⁷⁵ <https://www.theguardian.com/society/2018/jan/15/medical-marijuana-does-it-work-miracle-drug-evidence>

for children with otherwise-incurable forms of epilepsy. Some medical cannabis patients are alive today only because of cannabis.

If well-documented anecdotal reports of cannabis-producing perceived miracles for other patients are proven clinically true under rigorous medical trials, medical cannabis holds enormous promise to transform modern healthcare. All of this from a plant that has led to more needless pain and suffering, only due to Prohibition, than any other substance in the world.

More than 150 medical organizations including the American Medical Association (AMA), American Nurses Association (ANA), American Public Health Association (AAPHA), and American College of Physicians, endorse the use of medical cannabis.⁵⁷⁶

Uninformed skeptics have called medical cannabis a panacea. It may be that too, but there can be no doubt of the efficacy of medical cannabis in improving the lives of patients. For many, it is the only medicine they want. In a comprehensive California study of 7,525 California adults, 92 percent said that medical marijuana alleviated symptoms of their serious medical conditions, including chronic pain, arthritis, migraine, and cancer.⁵⁷⁷ Some parents are relocating their families from other countries to obtain access to medical cannabis for their children.⁵⁷⁸

At the beginning of 2018, out of nearly 200 million residents in the 30 states where medical cannabis has been legalized, medical cannabis patients totaled approximately 2.25 million people.⁵⁷⁹ Based on current patient-to-total-population rates, if medical cannabis were legal nationwide today, there would be 3.5 million medical cannabis patients.⁵⁸⁰ Medical cannabis sales alone are expected to grow from \$4.7 billion in 2016 to \$13.3 billion in 2020.⁵⁸¹

Israel, which calls itself the “Innovation Nation,” has been the world’s preeminent leader in medical cannabis research. Israeli companies are involved in cutting-edge cannabis research. In 1964, Israeli chemist and Hebrew University professor Raphael Mechoulam, the “grandfather of marijuana research,” was the first to isolate and identify THC.⁵⁸² He has also promoted the therapeutic benefits of CBD for years. In 2016, with some exasperation, he said: “We knew 35 years ago that cannabidiol could be helpful in treating seizure disorders.”⁵⁸³ In April 2017, after a

⁵⁷⁶ https://www.huffingtonpost.com/entry/an-open-letter-to-jeff-sessions-from-a-doctor-concerned_us_589934eee4b02bbb1816bf03

⁵⁷⁷ https://www.washingtonpost.com/news/wonk/wp/2014/10/01/92-of-patients-say-medical-marijuana-works/?utm_term=.517e9f52f1c0

⁵⁷⁸ <http://fortune.com/2016/05/09/medical-marijuana-immigration/>

⁵⁷⁹ <https://www.mpp.org/issues/medical-marijuana/state-by-state-medical-marijuana-laws/medical-marijuana-patient-numbers/>

⁵⁸⁰ <https://toronto.citynews.ca/2016/03/17/canada-hits-population-record-california-still-has-more-people/>

⁵⁸¹ <https://www.forbes.com/sites/debraborchardt/2017/02/22/marijuana-industry-projected-to-create-more-jobs-than-manufacturing-by-2020/#253985c33fa9>

⁵⁸² <https://texasoriginalcc.com/meet-raphael-mechoulam/>

⁵⁸³ <https://www.kolmac.com/2016/04/meet-dr-raphael-mechoulam-father-modern-cannabis-research/>

keynote speech at Colorado State University, he told the Denver Post: “I believe that CBD has to be moved from the highest illegal situation. And once it’s moved, more people will be using it. And I hope it will become a major (medicinal) drug.”⁵⁸⁴

1. Severe Illnesses And Disorders

For serious illnesses and disorders such as cancer, multiple sclerosis, Parkinson’s Disease, Alzheimer’s Disease, ulcerative colitis, Crohn’s Disease, and autism spectrum disorder, medical cannabis has demonstrated healing and therapeutic properties to treat symptoms and alleviate treatment side effects, unmatched in scope and ability by any other substance in the world.⁵⁸⁵

25 percent of cancer patients use cannabis for relief from symptoms and from treatment side effects.⁵⁸⁶ In an Israeli study of Chron’s disease, medical cannabis achieved “complete remission” in nearly half the subjects.⁵⁸⁷ For children with autism, medical cannabis has been transformative;⁵⁸⁸ clinical trials are being undertaken across the world to investigate.⁵⁸⁹ One multiple sclerosis patient partaking in a clinical study of medical cannabis in Montreal said: “I used to wake up in the night, screaming in pain . . . I’m not waking up at night anymore. I’d say 80 per cent of the pain is gone. Last year, I felt like . . . I’ll be stuck in that wheelchair for the rest of my life. Last week, my neurologist said he hadn’t seen me move like that in years. It’s a miracle.”⁵⁹⁰ The mother of a 12-year-old Delaware boy with Dystonia (involuntary muscle contractions) who uses medical cannabis said he was previously heavily sedated and “basically comatose. This child would have died at the age of 9. To see him thriving, going to school, going on field trips and going to Mexico? We would have never done that.”⁵⁹¹ Hundreds of similar accounts are reported.

While the healing and therapeutic properties of cannabis for treating serious illnesses and diseases (often alongside traditional treatments to help alleviate side effects) has been recognized for some time, the medical benefits of cannabis are increasingly being realized for more common, widespread ailments.

⁵⁸⁴ <https://texasoriginalcc.com/meet-raphael-mechoulam/>

⁵⁸⁵ https://www.huffingtonpost.com/entry/an-open-letter-to-jeff-sessions-from-a-doctor-concerned_us_589934eee4b02bbb1816bf03

⁵⁸⁶ <https://familyofficeinsights.com/pir-qa/george-allen/>

⁵⁸⁷ <https://www.medicaldaily.com/medical-marijuana-achieves-complete-remission-crohns-disease-drug-improves-247783>

⁵⁸⁸ <https://www.coloradopotguide.com/colorado-marijuana-blog/article/cannabis-and-autism-is-marijuana-an-effective-treatment/>; <https://www.newsweek.com/2018/02/23/really-good-weed-why-cannabis-may-be-worlds-most-effective-remedy-core-806758.html>

⁵⁸⁹ <https://hightimes.com/news/medical-cannabis-treatment-autism-clinical-trials/>

⁵⁹⁰ <https://montrealgazette.com/news/multiple-sclerosis-patient-calls-medical-cannabis-trial-a-miracle>

⁵⁹¹ <https://www.delawareonline.com/story/news/health/2018/08/28/does-medical-marijuana-help-pediatric-patients/1071780002/>

The Washington Post analyzed news articles about medical cannabis from 1995 (a year prior to California adopting the first program) to 2017 to determine whether a narrative shift was being seen in news coverage.⁵⁹² In the period from 1995 to 1999, the Washington Post ran 56 articles about medical cannabis that associated it with cancer, 73 articles that mentioned HIV/AIDS, and only seven articles associating medical cannabis with opioid addiction, epilepsy, or PTSD. That relative emphasis has flipped in the last five years. The Post continued to make the connection to cancer, in 71 articles, but only 31 articles included HIV/AIDS. Meanwhile, The Post ran 195 articles that connected medical cannabis to opioid addiction (71), epilepsy (83) or PTSD (41). The results were similar when analyzing coverage in the New York Times.⁵⁹³

Because of its proven effectiveness for these additional common conditions and afflictions, widespread across the US, medical cannabis is increasingly garnering significant attention.

2. Incurable Epilepsy

More than three million Americans, including almost 400,000 children, live with epilepsy, with one-third suffering treatment-resistant seizures.⁵⁹⁴ Two famous 12-year-olds, Alexis Bortell challenging US cannabis Prohibition in the Second Circuit Court of Appeals,⁵⁹⁵ and Billy Caldwell provoking a public outcry in the UK that led to the immediate rescheduling of medical cannabis,⁵⁹⁶ helped bring awareness to the transformative healing that cannabis provides to many epileptic patients. There are thousands of children who, due to epilepsy, would not be leading a remotely-normal life and suffering from cognitive deterioration—some would no longer be alive—but for medical cannabis.⁵⁹⁷

As discussed in Section IV(C), the FDA recently approved Epidiolex (a plant-based formulation of CBD) to treat two rare forms of epilepsy.⁵⁹⁸ GW Pharmaceuticals had studied the drug in more than 500 children and adults with hard-to-treat seizures, overcoming numerous legal hurdles to performing their research.⁵⁹⁹

Published in The New England Journal of Medicine, GW's findings stem from a double-blind, placebo-controlled study—the most scientifically rigorous type of investigation possible.⁶⁰⁰ Dr.

⁵⁹² https://www.washingtonpost.com/news/monkey-cage/wp/2018/07/23/has-the-u-s-reached-a-tipping-point-in-marijuana-legalization/?utm_term=.489a71efcefb

⁵⁹³ *Id.*

⁵⁹⁴ <https://www.childrenscolorado.org/conditions-and-advice/marijuana-what-parents-need-to-know/medical-marijuana/medical-marijuana-and-epilepsy/>

⁵⁹⁵ <https://www.marijuanaventure.com/dismissed-federal-lawsuit-heads-to-court-of-appeals/>

⁵⁹⁶ <https://merryjane.com/news/after-public-outcry-medical-marijuana-is-finally-coming-to-the-u-k-this-fall>

⁵⁹⁷ <https://www.healthline.com/health-news/cannabis-product-may-reduce-epilepsy-seizure-rate#3>;
<https://www.sciencedaily.com/releases/2016/02/160208140604.htm>

⁵⁹⁸ <https://www.epilepsy.com/learn/treating-seizures-and-epilepsy/other-treatment-approaches/medical-marijuana-and-epilepsy>

⁵⁹⁹ <https://www.cbsnews.com/news/fda-approves-epidiolex-first-marijuana-based-drug-for-seizures/>

⁶⁰⁰ <https://www.scientificamerican.com/article/marijuana-treatment-reduces-severe-epileptic-seizures/>

Orrin Devinsky, neurologist, and director of the Comprehensive Epilepsy Center at New York University Langone Medical Center, said: “This study clearly establishes cannabidiol as an effective anti-seizure drug for this disorder and this age group. It certainly deserves to be studied in other types of epilepsy.”⁶⁰¹

Ancient societies in Africa, China, Greece, India, and Rome used cannabis to treat what we now refer to as epilepsy and other seizure disorders. Although they were most likely ignorant of the cause and mechanism of epilepsy, such cultures were aware of the healing and neuroprotective properties of cannabis.⁶⁰²

Today, in the US, we have much more awareness of the cause and mechanism of epilepsy. What remains is more conclusive research demonstrating the wide-ranging potential for cannabis to treat epilepsy.

3. Replacing Opioids And Healing Opioid Addiction

Excessive prescribing of opioids by the medical community in the past decade and illicit opioid use has led to a spike in opioid-related deaths in America.⁶⁰³ From Michael Jackson, to Prince, to Bethenny Frankel’s boyfriend Dennis Shield, the epidemic has left a trail of destruction, ruining hundreds of thousands of lives and diminishing the potential of countless highly-functioning people through addiction, not to mention wasteful spending. Between 1999 and 2014, sales of prescription opioids in the US nearly quadrupled, yet there was no overall change in the amount of pain Americans reported.⁶⁰⁴ In 2015, two million Americans had a substance use disorder involving prescription pain relievers.⁶⁰⁵ 94 percent of respondents in a 2014 survey of people in treatment for opioid addiction said they chose to use heroin because prescription opioids were “far more expensive and harder to obtain.”⁶⁰⁶

Opioids kill over 40,000 Americans (of the 63,600 total drug overdose deaths) each year.⁶⁰⁷ In 2016, doctors wrote 66.5 opioid prescriptions per 100 persons. 19 of every 100 Americans received one or more opioid prescriptions, with the average patient receiving 3.5 prescriptions.⁶⁰⁸ In 2016, opioids were involved in 42,249 deaths; opioid overdose deaths were five times higher in 2016 than in 1999.⁶⁰⁹ According to the Health Resources and Services Administration: “The Nation is in the midst of an unprecedented opioid epidemic. 116 people a day die from opioid-

⁶⁰¹ *Id.*

⁶⁰² <https://www.massroots.com/learn/does-cannabis-treat-epilepsy/>

⁶⁰³ <https://grizzle.com/america-marijuana-legalization/>

⁶⁰⁴ <https://www.cdc.gov/drugoverdose/data/prescribing.html>

⁶⁰⁵ <https://www.asam.org/docs/default-source/advocacy/opioid-addiction-disease-facts-figures.pdf>

⁶⁰⁶ *Id.*

⁶⁰⁷ <https://www.cdc.gov/nchs/data/databriefs/db294.pdf>

⁶⁰⁸ <https://www.cdc.gov/drugoverdose/pdf/pubs/2017-cdc-drug-surveillance-report.pdf>

⁶⁰⁹ <https://www.cdc.gov/drugoverdose/data/statedeaths.html>

related drug overdoses. Prevention and access to treatment for opioid addiction and overdose reversal drugs are critical to fighting this epidemic.”⁶¹⁰

Cannabis’ potential in fighting the opioid epidemic is two-fold: it can (a) replace or enhance opioids in the treatment of chronic pain, and (b) serve as an exit ramp for those fighting opioid addiction.⁶¹¹

According to Dr. Peter Grinspoon of Harvard Medical School (January 2018): “While marijuana isn’t strong enough for severe pain (for example, post-surgical pain or a broken bone), it is quite effective for the chronic pain that plagues millions of Americans, especially as they age. Part of its allure is that it is clearly safer than opiates (it is impossible to overdose on and far less addictive) and it can take the place of NSAIDs such as Advil or Aleve, if people can’t take them due to problems with their kidneys or ulcers or GERD.”⁶¹²

Cannabis’ superiority over opioids has been known for a long time. In 1868, Sir John Reynolds, physician to Queen Victoria, wrote: “The bane of many opiates...is that the relief of the moment is purchased at the expense of tomorrow’s misery. In no one case to which I have administered Indian hemp, have I witnessed any such results.”⁶¹³

In 1887, Philadelphia physician Hobart Hare wrote: “CANNABIS INDICA has been before the profession for many years as a remedy to be used in combating almost all forms of pain, yet, owing to the variations found to exist as to its activity, it has not received the confidence which I think it now deserves . . . The advantages in [cannabis] use over opium consist chiefly in the absence of prostration and nausea after its ingestion, and in the partial lack of soporific power which it possesses compared to the opiate, for in certain cases sleep is not always desirable when pain is to be removed....I have found the efficient dose of a pure extract of hemp to be as powerful in relieving pain as the corresponding dose of the same preparation of opium.”⁶¹⁴

Opioid overdoses routinely cause death by overloading the opioid receptors in the brain’s cardiorespiratory centers, with the result being “respiratory depression” that causes users to simply stop breathing and die.⁶¹⁵ The brain is rich in cannabinoid receptors, but there are almost no cannabinoid receptors in the brain’s cardiorespiratory centers—no one has ever consumed so much cannabis that they stopped breathing.⁶¹⁶

⁶¹⁰ <https://www.hrsa.gov/opioids>

⁶¹¹ <https://www.leafly.com/news/health/6-takeaways-from-dr-ethan-russos-cannabis-an-unconventional-solution-to-the-opioid-crisis>

⁶¹² <https://www.health.harvard.edu/blog/medical-marijuana-2018011513085>

⁶¹³ <https://www.leafly.com/news/health/6-takeaways-from-dr-ethan-russos-cannabis-an-unconventional-solution-to-the-opioid-crisis>

⁶¹⁴ <https://www.maps.org/research-archive/mmj/98russoproto.html>

⁶¹⁵ <https://www.leafly.com/news/health/6-takeaways-from-dr-ethan-russos-cannabis-an-unconventional-solution-to-the-opioid-crisis>

⁶¹⁶ *Id.*

The reason patients prescribed opioids often become addicted is because pain medications simply mask symptoms but do not treat the root cause of the pain, and tolerance is built over time.⁶¹⁷ The World Health Organization (WHO) has recommended adoption of a three-step “analgesic ladder” to meet the therapeutic challenges presented by opioid tolerance. In this approach, analgesic therapy is initiated with a non-opioid analgesic. As the underlying condition progresses and pain becomes more intractable, a weak opioid is substituted for the non-opioid. Eventually, a strong opioid is introduced. But the underlying problem of opioid tolerance persists.⁶¹⁸ More and stronger opioids are needed to achieve the same effect. In contrast, medical cannabis masks pain, but also, as research is continually showing, addresses and heals the source of the pain. As the source of the pain is treated, medical cannabis dosages can be lowered.

A study published June 17, 2016 in the American Pain Society’s Journal of Pain of 244 medical cannabis patients in Michigan found a 64-percent decrease in opioid use.”⁶¹⁹ The study concluded that “many chronic pain patients are essentially substituting medical cannabis for opioids and other medications for chronic pain treatment, and finding the benefit and side effect profile of cannabis to be greater than these other classes of medications.”⁶²⁰ An exhaustive study released July 10, 2018 by researchers from the University of California San Diego and Weill Cornell Medical College found that “statewide medical cannabis legalization implemented in 1993 to 2014 in the US was associated with close to 30-percent reductions in Schedule III opioids received by Medicaid enrollees.”⁶²¹

States that have legalized cannabis for adult-use use saw a six-percent drop in total opioid prescriptions.⁶²² States with active dispensaries saw 3.742 million fewer daily doses filled.⁶²³

Medical cannabis is saving lives that would have been lost to opioids. In states that have a medical cannabis program, opioid overdose deaths were 25 percent lower than in states that do not have a medical cannabis program.⁶²⁴ States that provide legal access to cannabis also experience significantly fewer opioid-related hospitalizations.⁶²⁵

Many long years after doctors reported its advantageous pain-relieving properties, the potential of cannabis is finally again being realized. Because cannabis can interject at the on-ramp for

⁶¹⁷ <https://health.clevelandclinic.org/6-myths-about-painkillers/>

⁶¹⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2628209/>

⁶¹⁹ <https://www.ncbi.nlm.nih.gov/pubmed/27001005>

⁶²⁰ *Id.*

⁶²¹ <https://www.marijuanamoment.net/medical-marijuana-reduces-opioid-prescriptions-another-study-finds/>

⁶²² <https://www.scientificamerican.com/article/where-marijuana-is-legal-opioid-prescriptions-fall/>

⁶²³ <https://www.forbes.com/sites/tomangell/2018/04/02/legal-marijuana-states-have-lower-opioid-use-new-studies-show/>

⁶²⁴ https://www.health.ny.gov/press/releases/2018/2018-06-18_opioid_use.htm;

<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/1898878>

⁶²⁵ <https://www.marijuanamoment.net/new-york-enacts-emergency-rules-allowing-medical-marijuana-as-opioid-replacement/>

opioids as a replacement and provide an off-ramp to assist with healing from opioid addiction, legalization of cannabis will undoubtedly go a long way toward addressing the opioid epidemic.

4. Post-Traumatic Stress Disorder

One often intractable problem for which cannabis provides proven relief is post-traumatic stress disorder (PTSD) and often-associated depression.⁶²⁶ PTSD—once referred to as “shell shock” or “battle fatigue”—is a debilitating condition that follows exposure to ongoing emotional trauma or in some instances a single terrifying event. Many exposed to such experiences will suffer from PTSD.⁶²⁷ The symptoms include persistent frightening thoughts with memories of the ordeal and frightening nightmares, and often feeling angry and in emotional isolation.⁶²⁸

According to the VA, more than 20 percent of the 2.7 million Iraq and Afghanistan veterans will experience post-traumatic stress or depression.⁶²⁹ 22 veterans commit suicide every day.⁶³⁰

Dr. David Bearman in Santa Barbara, California treats more than 100 patients with PTSD. Among those reporting that cannabis alleviates their symptoms are veterans of the Vietnam war, the first Gulf War and the recent and current Middle East conflicts.⁶³¹ Similar benefit is reported by victims of family violence, rape and other traumatic events, along with children raised in dysfunctional families.⁶³²

About 22 percent of the 20.4 million veterans in the US (including 7.1 million from the Gulf War era),⁶³³ totaling more than 4 million veterans, now use cannabis, according to a recent American Legion survey.⁶³⁴ Under current VA policy, while veterans are not denied VA benefits because of cannabis use and are encouraged to discuss it with their VA doctors, VA doctors may not prepare medical cannabis recommendations for veterans, even in states where it is legal.⁶³⁵ Veterans also have to pay for it out of pocket, even in states like California where medical marijuana has been legal for more than two decades.⁶³⁶ Some veterans are, unfortunately, compelled to illicitly sell or barter their legally-prescribed opioids to obtain cannabis.

According to one veteran: “We all have friends or family who we have lost to suicide or opioid addiction and can’t wait for other help anymore. We hope to keep (the marijuana efforts) all

⁶²⁶ <https://hempedification.wordpress.com/2018/04/08/p-t-s-d-and-cannabis-mechanism-of-action/>.

⁶²⁷ *Id.*

⁶²⁸ *Id.*

⁶²⁹ <http://thehill.com/opinion/healthcare/394083-veterans-are-left-out-of-medical-marijuana-protections>

⁶³⁰ *Id.*

⁶³¹ <https://www.linkedin.com/feed/update/urn:li:activity:6425523334225760256>

⁶³² *Id.*

⁶³³ <http://www.pewresearch.org/fact-tank/2017/11/10/the-changing-face-of-americas-veteran-population/>

⁶³⁴ <https://www-m.cnn.com/2018/04/28/health/veterans-grass-roots-marijuana/index.html?r=https%3A%2F%2Fwww.google.com%2F>

⁶³⁵ <https://www.publichealth.va.gov/marijuana.asp>

⁶³⁶ <https://www-m.cnn.com/2018/04/28/health/veterans-grass-roots-marijuana/index.html>

sustainable at least until the VA can prescribe it. Everyone comes to find relief from everything from anxiety and depression, the PTSD, the lack of sleep and chronic pain, to get over opioid addiction. We've seen it all.”⁶³⁷ Another veteran told CNN that cannabis is a better option than the “mess of pills” or “combat cocktail” of antipsychotics and opioids the VA put him on when he returned from combat.⁶³⁸ He said: “I didn’t feel good. I didn’t feel bad. It was like I was just existing.” Like a lot of guys he knew, he self-medicated with “quite a bit of beer on a daily basis,” which he knew was dangerous. “It really was rolling the dice with alcohol and pills, and it was a negative result,” he said. Now, he advocates for compassionate use for other veterans, “there is no doubt about it: This is something that works.”⁶³⁹

One veteran returned from Iraq in 2003 haunted by post-traumatic stress. He had seen friends die. At one point, he was prescribed 14 different drugs. “I stopped all the pills cold turkey,” he said, “and I picked up cannabis, ‘cause in my opinion, it was either find relief or suicide.”⁶⁴⁰ Nick Etten, Annapolis graduate and a former Navy SEAL, said: “We see cannabis not as a gateway drug. We see it as an exit path off opiates.”⁶⁴¹ He said: “Cannabis is the safe, responsible choice. It helps with the Big Three we struggle with after combat — pain, sleep and anxiety — and it is safer than many medications.”⁶⁴²

Another veteran spent three years in the Marine Corps and 13 years with the Glendale Police Department in Arizona—where he was exposed to murders, suicides and people dying in his arms—leaving him emotionally crippled. Drugs prescribed for PTSD “turned me into a zombie,” he says. “I was so out of it that I couldn’t even drive, so they (the police department) had to medically retire me.” Alonzo stopped showering, his wife left him, and he nearly lost his house. Then a friend suggested he try cannabis to relieve his symptoms. “It’s been a godsend. It curbs my anxiety, and it makes me sleep fantastic for at least four hours. It needs to be studied.”⁶⁴³ A Harvard-trained doctor who worked for the VA for 15 years then established a private practice to advise patients on medical cannabis said: “Time and time again I saw patients whose lives were destroyed by the ravages of drugs and alcohol. It occurred to me that I had seen all these harmed individuals, but never anyone who was sick from cannabis.”⁶⁴⁴

⁶³⁷ *Id.*

⁶³⁸ *Id.*

⁶³⁹ *Id.*

⁶⁴⁰ <https://www.nbcnews.com/nightly-news/marijuana-may-hold-promise-treating-veterans-ptsd-n824956>

⁶⁴¹ <https://www.cnn.com/2018/02/07/military-veterans-fight-for-medical-marijuana-to-kick-opioid-addiction.html>

⁶⁴² <https://www.nytimes.com/2018/07/25/us/marijuana-veterans.html>

⁶⁴³ <https://www.scientificamerican.com/article/as-vets-demand-cannabis-for-ptsd-science-races-to-unlock-its-secrets/>

⁶⁴⁴ <https://www.leafly.com/news/health/santa-cruz-veterans-alliance-cannabis-ptsd>

On June 7, 2008, the Senate Appropriations Committee approved an amendment to allow VA doctors to issue medical cannabis recommendations to military veterans.⁶⁴⁵ But all proposed amendments for veterans access are so far, sadly, not getting a chance for a vote in the House.

As discussed in Section IV(B)(4), the House Rules Committee (Pete Sessions, Chair) has prevented multiple amendments concerning medical cannabis access for veterans from going to the House floor for a vote, despite pleas from Republican members.⁶⁴⁶ 92 percent of veteran households support research into medical cannabis, research that the VA Department is presently federally-precluded from doing.⁶⁴⁷

Research is beginning to scientifically validate the efficacy of cannabis to treat PTSD and how it interacts with receptors in the brain's emotional centers—the amygdala and hippocampus—to reduce anxiety.⁶⁴⁸ Based on cross-country data from Statistics Canada, an observational study by researchers at the British Columbia Centre for Substance Use presented May 31, 2018 at the annual conference of the Canadian Public Health Association in Montreal showed that Canadians with PTSD who use medicinal cannabis are 60 to 65 percent less likely to have major depressive episodes or thoughts of suicide compared with those who do not treat their symptoms with cannabis. The study is the first national-scale indication of the effectiveness of cannabis at mitigating the hallmark symptoms of PTSD.⁶⁴⁹

In the US, funded by a \$2.15 million research grant from the University of Colorado, Dr. Sue Sisely, after a seven-year struggle with the US government, is conducting the first FDA-approved controlled phase 2 clinical trial—a triple-blind, outpatient, randomized, placebo-controlled study of 60 veterans—to evaluate smoked medical cannabis as a treatment for PTSD.⁶⁵⁰ She said: “I was dismissive and judgmental, then I started losing a lot of vets in my practice to suicide, and it became a big wake-up call. The veteran community has a higher rate of prescription drug overdose, and many vets discovered they can substitute cannabis for the more addictive medications they’ve been prescribed, which is how we started to examine this.”⁶⁵¹ Dr. Zach Walsh, a clinical psychologist at the University of British Columbia, is leading Canada’s first randomized, controlled trial to evaluate the impact of medicinal cannabis on PTSD, in partnership with Tilray.⁶⁵²

⁶⁴⁵ <https://www.marijuanamoment.net/senators-approve-medical-marijuana-for-military-veterans/>

⁶⁴⁶ <http://thehill.com/opinion/healthcare/394083-veterans-are-left-out-of-medical-marijuana-protections>

⁶⁴⁷ *Id.*

⁶⁴⁸ <https://www.scientificamerican.com/article/as-vets-demand-cannabis-for-ptsd-science-races-to-unlock-its-secrets/>; <http://www.maps.org/research/mmj/marijuana-us>

⁶⁴⁹ <https://www.theglobeandmail.com/canada/article-medicinal-cannabis-use-can-help-mitigate-symptoms-of-ptsd-study-says/>

⁶⁵⁰ <https://www.healio.com/psychiatry/ptsd/news/online/%7Bac35ff1a-3729-416e-bdfa-f0a6d68d5f43%7D/first-fda-approved-study-of-cannabis-for-ptsd-in-veterans-underway>

⁶⁵¹ *Id.*

⁶⁵² <https://www.theglobeandmail.com/canada/article-medicinal-cannabis-use-can-help-mitigate-symptoms-of-ptsd-study-says/>

The more than 4 million veterans that already use cannabis provide extensive anecdotal examples of cannabis' efficacy for treating PTSD. Federal legalization of cannabis would go a long way toward improving the lives and wellness of veterans, emergency responders, and so many others suffering from PTSD and depression.

5. Sleep Aid

Roughly 60 million Americans are affected by insomnia each year,⁶⁵³ and about 10 percent of US adults deal with chronic insomnia.⁶⁵⁴ Cannabis can be a highly-effective sleep aid. Even those with the most stubborn insomnia can find their escape to sleep with a sedating Indica strain. THC has a mild sedative effect.⁶⁵⁵ Aged Indica strains naturally degrade THC, producing cannabiol (CBN), which is five times more sedating than THC.⁶⁵⁶

Approximately 22 million Americans have sleep apnea in varying degrees of severity.⁶⁵⁷ "Sleep apnea is a condition where when you're asleep the airway becomes narrower. The muscles of the throat relax, and it's harder for people to breathe. As the airway becomes narrower, a vacuum gets created in the back of the throat."⁶⁵⁸ This vacuum is what leads to snoring, and in severe cases, the throat closes completely. Sleep apnea produces a host of medical problems - it can cause strokes, heart attacks and other cardiovascular problems, high blood pressure, diabetes, heartburn, obesity, and hypertension, along with millions of poorly rested drivers.⁶⁵⁹

As study of 73 sleep apnea patients published in January 2018 by University of Chicago and Northwestern University scientists found that a cannabinoid medication significantly helped their conditions.⁶⁶⁰ Patients reported less fatigue and fewer symptoms than the placebo group; the higher the dose, the better the patients did. Those with the most severe symptoms benefitted the most from the cannabinoid. Patients also showed the biggest reduction in symptoms at the point in their sleep cycle when they were usually the most acute.⁶⁶¹ According to Dr. Jerald Simmons, Stanford-board certified in Sleep Medicine, Epilepsy and Neurology: "There are no medications available that people can take to treat this, so if there's a medication that works it would be very helpful. It could help decrease these other issues that sleep apnea can cause."⁶⁶²

Though research is still in its infancy, early results are promising for cannabinoids' effect on sleep apnea. As with other uses for medical cannabis, much more research is needed.

⁶⁵³ <https://www.npr.org/templates/story/story.php?storyId=90638364>

⁶⁵⁴ <https://www.healthline.com/health/medical-marijuana/cannabis-for-sleeping>

⁶⁵⁵ <https://www.ncbi.nlm.nih.gov/pubmed/15118485>

⁶⁵⁶ <https://www.leafly.com/news/cannabis-101/cannabis-and-sleep>

⁶⁵⁷ <https://hightimes.com/news/new-research-shows-cannabinoids-may-treat-sleep-apnea/>

⁶⁵⁸ *Id.*

⁶⁵⁹ *Id.*

⁶⁶⁰ <https://academic.oup.com/sleep/article/41/1/zsx184/4600041>

⁶⁶¹ *Id.*

⁶⁶² *Id.*

6. Elderly Patients

Germany's University of Bonn and others have reported successful work with cannabis treatment of dementia and THC effects on aging.⁶⁶³ Cannabis has been shown in Israel and Santa Rosa, California to bring wide-ranging relief to residents of residential care facilities.⁶⁶⁴

With the introduction of medicinal cannabis into senior care facilities, the patients became less agitated, were happier, ate better, slept better, and required 20 percent fewer prescription medications.⁶⁶⁵

Seniors are the fastest-growing demographic of cannabis users.⁶⁶⁶ The popularity of medical cannabis in Florida – the state now has nearly 160,000 medical cannabis patients (100,000 new patients in 2018), see Section IV(F)(6) – is indicative of its positive effects for elderly patients.

7. The Future

Research conducted to date has shown there is still so much to learn about the cannabis plant's ability to treat conditions and symptoms for which it already proven beneficial.⁶⁶⁷ But the plant may also hold yet undiscovered applications that could be fundamentally transformational. As Acreage Holdings CEO Kevin Murphy said: "If you can take the cannabis plant, process it correctly and make it a doseable, predictable and a consistent medicine, this will be the silver bullet for medicine in the next 100 years. This plant is simply a remarkable plant."⁶⁶⁸

Research in 2014 by Dr. Peter McCormick of the UK's University of East Anglia found that mice induced with human breast cancer tumors had tumors shrink with THC.⁶⁶⁹ The report states: "The chemical may disrupt cancer cell growth as it binds to CB2 receptors, which are much more abundant on cancer cells than on healthy ones."⁶⁷⁰

On July 30, 2018, a groundbreaking study by researchers at Queen Mary University of London found that mice with pancreatic cancer that were treated with CBD alongside chemotherapy, survived almost three times longer than those treated with chemotherapy alone.⁶⁷¹ Lead researcher Professor Marco Falasca said: "This is a remarkable result . . . The life expectancy for pancreatic cancer patients has barely changed in the last 40 years because there are very few, and

⁶⁶³ <https://www.allbud.com/learn/story/how-widespread-medical-cannabis-acceptance-will-ch>

⁶⁶⁴ <https://patients4medicalmarijuana.wordpress.com/2018/03/02/what-research-shows-about-the-benefits-of-medical-marijuana-dr-david-bearman/>

⁶⁶⁵ *Id.*

⁶⁶⁶ <https://www.cpr.org/news/story/study-as-more-seniors-use-marijuana-they-want-more-resources-and-informed-doctors>

⁶⁶⁷ <https://www.scientificamerican.com/article/how-medical-marijuana-s-chemicals-may-protect-cells/>

⁶⁶⁸ <http://www.readingeagle.com/news/article/firm-promises-to-treat-south-heidelberg-well>

⁶⁶⁹ https://www.huffingtonpost.com/2014/07/16/marijuana-tumors_n_5588639.html

⁶⁷⁰ <https://www.sciencedaily.com/releases/2018/07/180730160618.htm>

⁶⁷¹ *Id.*

mostly only palliative care, treatments available. Given the five-year survival rate for people with pancreatic cancer is less than seven per cent, the discovery of new treatments and therapeutic strategies is urgently needed.”⁶⁷²

Another remarkable study published in the British Journal of Pharmacology on July 17, 2018 by Prof. Dr. Burkhard Hinz of Rostock University Medical Center in Germany examined the potential of cannabis for direct treatment of cancer. Dr. Hinz wrote:

Results emerging from preclinical studies suggest cannabinoids elicit effects at different levels of cancer progression, including inhibition of proliferation, neovascularization, invasion and chemoresistance, induction of apoptosis and autophagy as well as enhancement of tumour immune surveillance . . . Thus, cannabinoids may complement the currently used collection of chemotherapeutic agents, as a broadly diversified option for cancer treatment, while counteracting some of their severe side effects.⁶⁷³

Dr. Hinz’s studies showed that cannabinoids may stop cancer cells from dividing and invading normal tissue, they may block the blood supply to tumors, and may enhance the body’s immune response against the growth and spread of tumors.⁶⁷⁴ Dr. Hinz said: “There is still a need for additional anti-cancer drugs. In this context accumulating data from preclinical models suggest that cannabinoids elicit anti-cancer effects on several levels of cancer progression. Clinical studies are now urgently needed to investigate the impact of cannabinoids on cancer growth and progression in patients.”⁶⁷⁵

Acreage CEO Kevin Murphy discussed cannabis treating cancerous tumors:

We talk about cancer. Cannabis is the silver bullet for cancer. When you’re going through chemo and radiation it helps with pain relief and helps with nausea. We have seen it reduce tumor sizes . . . We’ve seen it happen more than a handful of times. When someone is on their last couple of months and basically they’re using cannabis on high dosages frankly to transition from life to death and have miraculously found that certain strains are reducing certain tumors, let me tell you something, that’s what we want to prove and put it on the front page of the Wall Street Journal and Washington Post.”

⁶⁷² *Id.* The interaction between cannabis and the pancreas is fertile ground for research. 4Front Ventures Chief Compliance Officer Leah Heise talks about the life-changing effect of medical cannabis after doctors gave her several years to live on account of pancreatitis. <http://greenrushpodcast.net/>

⁶⁷³ <https://bpspubs.onlinelibrary.wiley.com/doi/full/10.1111/bph.14426>

⁶⁷⁴ https://www.eurekalert.org/pub_releases/2018-07/w-cmh071718.php

⁶⁷⁵ <https://www.sciencedaily.com/releases/2018/07/180718082143.htm>

The future of medical cannabis holds enormous promise for dealing with the “Emperor of All Maladies,”⁶⁷⁶ and so many other major diseases, illnesses, and problems. More research is needed before firm conclusions can be reached; conclusive evidence must be presented.

With the end of Prohibition on the horizon, the urgently-needed research Dr. Hinz calls for, “to investigate the impact of cannabinoids on cancer growth and progression in patients,” may finally uncover the ultimate, transformational potential of the maligned cannabis plant.

B. Rapidly-Growing Adult-Use Sector

The line between medically-recommended cannabis and adult use or “recreational” cannabis is blurry. Many cannabis users are self-medicating without visiting a doctor, or simply improving their wellness, such as eating and sleeping better, by consuming cannabis.

Cannabis is increasingly being used “recreationally” instead of other available means of relaxing and reducing anxiety. One study found that more than a fifth of adult-use cannabis consumers use less beer, spirits, painkillers and sedatives than standard consumers.⁶⁷⁷ Legal adult-use cannabis consumers use 27 percent less over-the-counter pain medications, 22 percent less sleep aids, 21 percent less alcoholic spirits, and 20 percent less beer than cannabis consumers in states that have not legalized adult-use marijuana.⁶⁷⁸

Aspen, Colorado’s 2017 sales of cannabis exceeding liquor is indicative of a wider acceptance of cannabis as a replacement for alcohol.⁶⁷⁹ A Boulder industry participant said: “I think people are looking for something different from alcohol, which is essentially poison, and marijuana is botanical. I don’t say that with judgment, but you feel some lingering effects with alcohol.”⁶⁸⁰

The benefits of cannabis over alcohol - no hangover, no calories, and no liver damage, among others, is proving attractive to many. More US adults than ever before are using cannabis. According to a July 2018 Gallup poll, nearly one in four Americans between the ages of 18 and 29 say they “regularly” or “occasionally” consume cannabis.⁶⁸¹ A nationally representative survey published July 24, 2018 of 16,280 US adults found that one in seven used cannabis in

⁶⁷⁶ https://en.wikipedia.org/wiki/The_Emperor_of_All_Maladies

⁶⁷⁷ <https://mjbizdaily.com/report-rec-cannabis-consumers-use-less-alcohol-pain-medications-sleep-aids/>

⁶⁷⁸ *Id.*

⁶⁷⁹ <https://www.thecannabist.co/2018/02/08/aspen-marijuana-shops-sold-11-3-million-2017-topping-liquor-stores-first-time/98503/>

⁶⁸⁰ *Id.*

⁶⁸¹ <https://www.marijuanamoment.net/one-in-four-young-americans-consume-marijuana-survey-finds/>

2017.⁶⁸² On April 20, 2018, the annual unofficial cannabis holiday, a record amount of legal cannabis was sold across the country, \$87 million worth in one day, up 61 percent from 2017.⁶⁸³

Many older consumers (55+) are re-engaging with cannabis, with 56 percent of consumers in that age group reporting a return to cannabis after having tried it at a younger age.⁶⁸⁴

In mature adult-use cannabis markets like Washington, California, Nevada, and Oregon, new products and accessories are constantly brought to the market, such as advanced edibles, and high-tech concentrates that capture cannabis trichomes (the hair-like structures found on cannabis flowers that contain terpenes) and extractions.⁶⁸⁵ Lightly-processed concentrates like kief and hash range from 20 to 60 percent THC, while extractions like butane hash oils and CO2 oils can range from 50 to 90 percent THC.⁶⁸⁶

Non-flower alternatives to cannabis are growing in popularity. In 2017, in Colorado, for example, more than one third (37.7 percent) of total sales were non-flower products, compared to 25.4 percent in 2015.⁶⁸⁷ The most popular alternatives are oil-filled vaporizer cartridges, wax and shatter concentrates, and infused edibles. At California dispensaries, THC and CBD-infused sparkling beverages introduced on July 30, 2018 sold out immediately.⁶⁸⁸ Washington's Leira Cannagars produces "handcrafted cannabis cigars made from organic flowers, glazed in solvent free rosin, and sealed in cannabis leaves, providing hours of enjoyment," available in \$100, \$420, \$1600, and \$10,000 variants.⁶⁸⁹ Dispensaries in mature-market states have extensive menus with dozens of edible, beverage, chocolate, cake, and candy varieties.⁶⁹⁰

New high-technology products are introduced every day in numerous segments.⁶⁹¹ According to Todd Harrison of CB1 Capital: "[T]omorrow's cannabis consumer won't just smoke it; they'll drink it, eat it, rub it on, take it as a pill, or wear it as a patch. They'll take bubble baths in it."⁶⁹²

⁶⁸² <http://annals.org/aim/article-abstract/2694804/risks-benefits-marijuana-use-national-survey-u-s-adults>; <https://www.reuters.com/article/us-health-marijuana-us-adults/one-in-seven-u-s-adults-used-marijuana-in-2017-idUSKCN1LC2B>

⁶⁸³ <https://www.9news.com/article/money/april-20-hit-record-marijuana-sales-says-denver-pot-tracking-tech-firm/73-548415955>

⁶⁸⁴ <https://mjbizdaily.com/report-rec-cannabis-consumers-use-less-alcohol-pain-medications-sleep-aids/>

⁶⁸⁵ <https://potguide.com/guides/cannabis-concentrate-guide/>

⁶⁸⁶ <https://www.engadget.com/2017/04/20/concentrates-are-the-future-of-cannabis/>

⁶⁸⁷

<https://www.colorado.gov/pacific/sites/default/files/MED%20Demand%20and%20Market%20%20Study%20%2082018.pdf>

⁶⁸⁸ <https://www.pressdemocrat.com/business/8592964-181/lagunitas-brewing-leads-rush-by>

⁶⁸⁹ <http://www.leiracannagars.com/#cannagars>; <https://www.prnewswire.com/news-releases/diego-pellicer--washington-introduces-el-dorado-the-worlds-only-10-000--24-karat-gold-cannabis-cigar-300669591.html>

⁶⁹⁰ See, e.g., <https://www.forevergreenherbal.com/product-category/new-products/>;

<https://www.packworld.com/article/package-design/structural/cannabis-packaging-snapshot>

⁶⁹¹ <https://www.cnet.com/news/puffco-peak-smart-rig-weed-tech/>

⁶⁹² <https://www.investopedia.com/news/waiting-exhale-case-cannabis-investing/>;

https://twitter.com/todd_harrison/status/1025339083357401093

According to a recent report, “Wellness centers around the country have taken treatments to new highs by infusing spa treatments, like massages and manicures, with CBD.”⁶⁹³

As more discrete means and formulations for consuming cannabis, such as vape pens and beverages and edibles become increasingly popular, cannabis users are increasing, and cannabis use can be more frequent, as users are not restricted from using these means of consumption in many locations.

Linda Gilbert, BDS Analytics’ managing director of consumer insights, notes that the culture in legal states says it is acceptable to microdose throughout the day. It is not acceptable to drink alcohol throughout the day, however, no matter what state you are in. Similarly, it is not socially appropriate to consume cough syrup just because it feels good. “We haven’t been able to come up with an example of any other product that consumers can look to as being everything from fully recreational to fully medical,” she says. “No other product really lives in that space where it’s appropriate for multiple occasions throughout the day, too. You can use it at night, you can use topicals in the morning or edibles in the afternoon or topicals after exercising. Cannabis is unique in that way.”⁶⁹⁴

A Rabobank analysis found that women, in particular, who have avoided illegal marijuana are likely to begin consuming cannabis more consistently once it is legalized. The analysis specifically highlights professional women looking to relax after work without consuming calories from a glass or two of wine. “The guys, the young men, we say, they’re already smoking,” said Steve Rannekleiv, Rabobank’s global beverages strategist. “It’s the people who are the more educated, more affluent, they are saying ‘if it’s legalized, I’ll give it a try.’ And that’s definitely the demographic of the wine consumer.”⁶⁹⁵

Because of the rapidly-increasing interest in cannabis among many demographics and age groups, with many waiting for legalization before consuming again for the first time in many years, widespread legality will generate enormous sales revenues and taxes. According to the Canadian Government, Canadians spent an estimated USD \$4.63 billion on cannabis in 2017,⁶⁹⁶ with a population smaller than California.⁶⁹⁷ In the US, with nine times the population of Canada, and some 75 million annual visitors,⁶⁹⁸ total demand for cannabis (legal and black

⁶⁹³ <https://www.forbes.com/sites/jonisweet/2018/08/06/cbd-oil-spa-treatments/#773803ff3278>

⁶⁹⁴ <https://www.forbes.com/sites/marcarreon/2018/05/17/new-study-highlights-the-social-impacts-of-cannabis-legalization-in-california/#76fb56892194>

⁶⁹⁵ <https://www.usatoday.com/story/news/nation/2018/04/26/trading-wine-weed-legal-marijuana/550949002/>

⁶⁹⁶ <https://www.reuters.com/article/us-canada-marijuana-statistics/canadians-spent-c5-7-billion-on-cannabis-in-2017-statistics-canada-idUSKBN1FE282>

⁶⁹⁷ <https://toronto.citynews.ca/2016/03/17/canada-hits-population-record-california-still-has-more-people/>

⁶⁹⁸ <https://skift.com/2017/02/28/international-visitor-spending-in-the-u-s-squeezed-through-a-record-in-2016/>

market) is projected to reach \$100 billion by 2025.⁶⁹⁹ By that time, much of the cannabis market will be the legal cannabis industry. The black market will not be able to compete.

C. Sports

A May 27, 2018 Boston Globe headline read: “Forget protein shakes. The newest workout supplement? Marijuana.”⁷⁰⁰ Peter Grinspoon, a primary care doctor at Massachusetts General Hospital said: “The fact that a lot of people are saying it helps them can’t be ignored.”⁷⁰¹

Athletes of all kinds find benefits from cannabis. Professional sports players like NFL player Mike James⁷⁰² and former NFL and NBA players Marvin Washington and Al Harrington are amongst the highest-profile players raising awareness. Former New England Patriots tight end Martellus Bennett estimated that roughly 90 percent of current NFL players use cannabis, largely to deal with the physical pounding endured during the season.⁷⁰³ Former NBA forward Kenyon Martin said 85 percent of NBA players regularly use cannabis.⁷⁰⁴ According to former NHL player Riley Cote, half of the NHL players he played with smoked cannabis.⁷⁰⁵

Former NBA commissioner David Stern said last year that medical cannabis should be removed from the league’s banned substances list.⁷⁰⁶ On July 20, 2018, Don Fehr, NHL Players Association Executive Director, said that with the impending legalization of cannabis in Canada on October 17, it is “possible that the NHL and NHLPA could come to an informal understanding about marijuana usage among players in the league.”⁷⁰⁷ Basketball’s BIG3 has become the first US professional sports league to allow its athletes to use CBD.⁷⁰⁸ Former college basketball player and CEO of KushCo Holdings, formerly Kush Bottles (OTCQB: KSHB), Nick Kovacevich said: “[A] lot of athletes are using it for medical purposes — and CBD is a far healthier long-term solution than popping traditional pain relievers, many of which are in the dangerously addictive opiate family of drugs.”

⁶⁹⁹ <https://www.cnn.com/video/2018/07/23/cannabis-company-acreage-holdings-plans-for-canadian-ipo.html>

⁷⁰⁰ <https://www.bostonglobe.com/metro/2018/05/27/forget-protein-shakes-the-newest-workout-supplement-weed-man/VDeIZRkSqcQG8tGcuL/story.html>

⁷⁰¹ *Id.*

⁷⁰² <https://www.m.cnn.com/2018/04/30/health/nfl-marijuana-mike-james-profile-exclusive/index.html?r=https%3A%2F%2Fwww.google.com%2F>

⁷⁰³ *Id.*

⁷⁰⁴ <https://hightimes.com/news/kenyon-martin-claims-nba-players-smoke-weed/>

⁷⁰⁵ <https://www.forbes.com/sites/nickkovacevich/2018/08/01/cannabis-for-the-win-sports-leagues-see-the-light-on-cbd/#26131b908577>

⁷⁰⁶ <https://www.bostonglobe.com/metro/2018/05/27/forget-protein-shakes-the-newest-workout-supplement-weed-man/VDeIZRkSqcQG8tGcuL/story.html>

⁷⁰⁷ <https://www.sportsbusinessdaily.com/Daily/Issues/2018/07/20/Leagues-and-Governing-Bodies/NHL-Marijuana-Policy.aspx>

⁷⁰⁸ <https://www.forbes.com/sites/nickkovacevich/2018/08/01/cannabis-for-the-win-sports-leagues-see-the-light-on-cbd/#26131b908577>

Beyond professional athletes, amateur athletes commonly report on the benefits of cannabis. For one 39-year-old who won his age group in the South Beach Triathlon and placed third in the NYC Triathlon, cannabis is a genetically-engineered workout supplement—a combined focusing agent for exercise and a pain reliever that numbs his post-workout aches.⁷⁰⁹ THC allows him to stay focused on things like his heart rate, or stay motivated. “My mind is always all over the place, I can get caught up in what’s going on around me,” he says. “Weed helps me keep my mind focused, if you can imagine that.”⁷¹⁰

Because of its healing-properties, especially reducing inflammation and relieving pain, cannabis is enormously beneficial for athletes of all forms. Its psychoactive properties can be helpful for endurance athletes. For purely recreational and relaxation purposes, many athletes prefer cannabis to alcohol because of its lack of calories and lack of lingering effects. After drinking six beers or a few cocktails, one cannot effectively exercise. Cannabis not only does not interfere with endurance endeavors, it can assist.

D. Skin Care

Cannabis is also proliferating in skin care and beauty products,⁷¹¹ from cannabis-infused lip balms to moisturizing body washes.⁷¹² Cannabis-derived oils mimic the skin’s lipids almost exactly, making it very readily absorbed at the cellular level, and CBD is lauded as an effective agent for curbing seasonal dryness, and chronic skin irritations like rosacea and eczema.⁷¹³ Cannabis’ anti-inflammatory properties address psoriasis and allergic dermatitis, and help to reduce redness and wrinkles.⁷¹⁴

“Cannabis is America’s latest gold-rush,” says Alexia Inge, the co-founder of website Cult Beauty, which is known for spotting skincare industry trends. “The human body has an incredible biological affinity to this plant,” explains Inge, “and when it comes to wellbeing through ingestion or topical application, the use of quality, whole-plant extracted CBD can have hugely beneficial anti-inflammatory, calming and protective effects on our skin.”⁷¹⁵

According to dermatologist Dr. Adam Friedman: “There are lots of cannabinoid receptors throughout the brain and body, and our body produces endogenous cannabinoids.” The cannabinoid receptor is involved with everything from pain to appetite and can be stimulated by both the cannabinoids produced naturally by the human body and by those found in the cannabis

⁷⁰⁹ <https://www.mensjournal.com/health-fitness/does-pot-make-you-better-athlete/>

⁷¹⁰ *Id.*

⁷¹¹ <https://www.wellandgood.com/good-looks/cannabis-skin-care-cbd-anti-inflammatory-beauty-products/>;
<https://hellogiggles.com/beauty/cannabis-beauty-products/>

⁷¹² <https://www.wmagazine.com/gallery/cannabis-beauty-products>

⁷¹³ <https://globalnews.ca/news/4157537/cannabis-beauty-products/>

⁷¹⁴ <http://www.beautyexpert.com/blog/in-the-spotlight/cannabis-skincare/>

⁷¹⁵ <https://www.ft.com/content/8e01768e-2142-11e8-8d6c-a1920d9e946f>

plant. “The effects [in skincare] can reduce keratinocyte (skin cell) turnover, inflammation and even sebum production,” says Friedman. “They are also likely to have an antioxidant effect.”⁷¹⁶

It is only very recently that cannabis has been subject to examination for its skincare benefits. With research restrictions lifted, the topical use of cannabis for aesthetic and medical skincare applications will continue to proliferate.

E. Pets

In 2017, Americans spent \$69.5 billion on their pets, more than ever before.⁷¹⁷ Pet medicine, supplies, and veterinary services make up 55 percent of pet-related spending in the US, or more than \$42 billion a year.⁷¹⁸ Drug spending makes up \$8.6 billion of the total.⁷¹⁹

Dr. Gary Richter, 47, a 20-year veterinarian, has been outspoken on the topic of cannabis for pets, researching its uses for years. The issue is “at the forefront of the conversation in the veterinary world right now,” he said. “While there are some differences in how cannabis affects pets compared to humans, they can benefit in many of the same ways people do,” Richter said. He adds that his professional experience “has shown me that there is enormous potential to treat medical conditions with cannabis.”⁷²⁰

Another veterinary technician said: “Every animal with a spinal column also has an endocannabinoid system, so it stands to reason that cannabis can help many species. I think we’ve reached an inflection point in society now where cannabis use in humans has become much more widespread and accepted. People see the good it does in people and want to provide the same benefits to their pets.”⁷²¹

Robert Silver, a retired 25-year veterinarian from Boulder, Colorado observed animals undergoing cannabinoid therapies and recovering from conditions that had been hard to treat with either conventional or other integrative medicine approaches.⁷²² He said that he has seen cancerous tumors shrink and many go into complete remission with cannabis, noting that in some cases CBD was effective, and in others a blend of THC and CBD worked best.⁷²³ He has also seen dogs that have been given CBD in place of prescribed arthritis medication “do better than on the NSAIDs,” and dogs with low-grade seizures who were able to stop their anticonvulsant therapies by switching to cannabis.

⁷¹⁶ <https://www.independent.co.uk/extras/indybest/fashion-beauty/beauty/best-cannabis-beauty-products-reviews-benefits-oil-a8252461.html>

⁷¹⁷ <https://www.prnewswire.com/news-releases/americans-spent-695-billion-on-their-pets-last-year-more-than-ever-before-300618209.html>

⁷¹⁸ <https://grizzle.com/cannabis-dogs-pet-market-explored/>

⁷¹⁹ *Id.*

⁷²⁰ <https://www.greenstate.com/health/marijuana-for-pets-cbd-pet-treats-what-do-vets-say/>

⁷²¹ *Id.*

⁷²² *Id.*

⁷²³ *Id.*

New York, Nevada, and California are considering legislation to legalize medical cannabis for animals, saying it could help pets with chronic illnesses.⁷²⁴

Should the efficacy of medical cannabis for pets prove the same or similar as it has and will for humans, a significant percentage of the \$70 billion Americans spend annually on their pets, including some of the nearly \$9 billion in medication, may be used to purchase cannabis.

VI. FEDERAL ILLEGALITY CREATES THE ARBITRAGE OPPORTUNITY

The medical, adult-use, and ancillary cannabis verticals translate into a huge industry, with vast room for growth to meet known demand.

In 2017, the worldwide legal cannabis market grew by 37 percent from 2016 to \$9.5 billion.⁷²⁵ At more than \$8.5 billion, the US legal cannabis market accounted for 90 percent of it.⁷²⁶ US cannabis sales are projected to grow at a compound annual growth rate of 25 percent through 2021.⁷²⁷ By 2022, legal cannabis revenue in the US market is projected to nearly triple from current levels, reaching more than \$23 billion.⁷²⁸ The total US demand for cannabis in 2025 is projected to reach \$100 billion.⁷²⁹ Federal legalization in the near term would likely accelerate these growth rates and projections.

The US legal cannabis industry is already flourishing in Western adult-use and mature medical program states like Colorado, California, Washington, Oregon, Nevada, and California. Those states have existing medical and adult-use programs generating billions in annual revenue, hundreds of millions in tax revenue, tens of thousands of jobs, and are still growing.

In states like Massachusetts (where adult-use retail sales are just beginning), and in states like New York, New Jersey, Illinois, Michigan, Pennsylvania, and Florida, with burgeoning medical programs and for some impending adult-use legalization, the US cannabis industry is experiencing rapid growth, much faster growth than any other industry. The end of federal Prohibition would catalyze that growth exponentially. Even if the US federal government takes several years to pass comprehensive cannabis law reform, vast affluent markets along busy interstate travel corridors, with millions of annual visitors, are opening and expanding.

⁷²⁴ <https://www.usatoday.com/story/news/politics/2018/03/18/dope-dogs-n-y-lawmaker-pushing-medical-marijuana-pets/436582002/>

⁷²⁵ <https://www.forbes.com/sites/thomaspellechia/2018/06/26/in-2017-beyond-u-s-enjoys-the-highest-legal-cannabis-market-share-worldwide/>

⁷²⁶ *Id.*

⁷²⁷ <https://www.businessinsider.com/arcview-north-america-marijuana-industry-revenue-2016-2017-1>

⁷²⁸ <https://globenewswire.com/news-release/2018/04/20/1482418/0/en/New-Frontier-Data-Projects-U-S-Legal-Cannabis-Market-to-Grow-to-25-Billion-by-2025.html>

⁷²⁹ <https://mgretailer.com/acreage-holdings-closes-119-million-private-round/>. The total global legal cannabis market is expected to reach \$145 billion within seven years. <https://www.prnewswire.com/news-releases/the-global-legal-marijuana-market-is-expected-to-reach-usd-146-4-billion-by-end-of-2025--300659055.html?G1Ref>

In the immediate near term, Massachusetts is set to become the “Colorado of the East Coast,”⁷³⁰ and more. If Colorado set an analogous precedent, Massachusetts will be a robust market.⁷³¹ In 2017, cannabis sales in Colorado reached \$1.5 billion.⁷³² 301 metric tons of cannabis (301,000 kg) was sold in Colorado last year.⁷³³ Massachusetts’ population is 6.8 million, about 20 percent larger than Colorado’s population of 5.7 million.⁷³⁴

According to a June 2018 Massachusetts Department of Health report, one in five of the state’s adults use cannabis (more than half of adults in Massachusetts perceive slight or no risks).⁷³⁵ Half of Massachusetts residents 18 to 25 years old reported using cannabis in the past 30 days.⁷³⁶ Rates of cannabis use in Massachusetts are expected to increase substantially. In comparison, in Colorado, 984,000 adults used cannabis in 2017, about one in six of the state’s population, with visitors accounting for approximately 13 percent of the total 160 million overall individual use days.⁷³⁷ Massachusetts has about the same number of annual visitors as Colorado, 27 million.⁷³⁸

Massachusetts dispensaries in cities like Boston, Worcester, and Springfield, along major interstate travel corridors, will be for some time the only adult-use dispensaries east of the Mississippi River. Tens of millions of people, many affluent, live within a short distance. Dozens of higher education institutions in the greater Boston area enroll more than 250,000 students a year, many from neighboring states without adult-use cannabis.⁷³⁹ A fully-developed adult-use market in Massachusetts is projected to reach \$1.2 billion within two years.⁷⁴⁰ As in Nevada, those projections are likely to be far exceeded.⁷⁴¹

The quickly-growing medical cannabis programs and soon-to-come adult-use markets in New York, New Jersey, and Illinois (42 million residents in total) will be a boon for the industry. Florida’s medical program is on track to exceed \$1 billion by 2020, if not sooner. During the next year, the medical program in Pennsylvania will also grow rapidly, and medical cannabis

⁷³⁰ <http://www.patriotledger.com/news/20180522/will-legal-marijuana-put-end-to-massachusetts-black-market>

⁷³¹ <https://www.nbcchicago.com/blogs/ward-room/cook-county-voters-weigh-in-on-marijuana-477566623.html>

⁷³² *Id.*

⁷³³

<https://www.colorado.gov/pacific/sites/default/files/MED%20Demand%20and%20Market%20%20Study%20%2082018.pdf>

⁷³⁴ <http://worldpopulationreview.com/states/colorado-population>

⁷³⁵ http://www.lowellsun.com/news/ci_31979275/report-1-5-mass-adults-use-marijuana#ixzz5NGXlil5g

⁷³⁶ <http://dailycaller.com/2018/08/03/us-pot-capital-massachusetts/>

⁷³⁷

<https://www.colorado.gov/pacific/sites/default/files/MED%20Demand%20and%20Market%20%20Study%20%2082018.pdf>

⁷³⁸ <http://www.massculturalcouncil.org/services/whosvisiting.asp>

<https://www.colorado.gov/pacific/sites/default/files/MED%20Demand%20and%20Market%20%20Study%20%2082018.pdf>

⁷³⁹ <https://www.boston.com/news/education/2015/09/01/massachusetts-is-the-8th-most-popular-destination-for-college-students>

⁷⁴⁰ <https://www.statista.com/statistics/798068/massachusetts-cannabis-sales-value-forecast/>

⁷⁴¹ <https://www.reviewjournal.com/news/pot-news/marijuana-sales-in-1st-year-exceed-expectations-in-nevada/>

will become even more widely available and-regulated in Michigan, along with likely adult-use legalization. Maryland has a swiftly-expanding medical program, and soon potentially adult-use.

Nevertheless, federal illegality and the Schedule 1 status of cannabis creates a host of challenges and impediments to the industry, as more fully described in Section III(A), including hurdles to access banking, extortionate taxation, limited insurance options, stymieing of medical research, and challenges finding professional services and real estate. Some of these difficulties are less pronounced in certain mature-market states, but the industry is still far from fully-normalized without federal legality. Taxation and banking affects all industry participants.

Perhaps the single biggest challenge for large, growing cannabis companies in the US, as discussed in Section III(A)(2), is the lack of access to the US capital markets and traditional sources of investment capital from institutional and venture funds. Only a select few large funds have studied the industry. The federal illegality overhang has prevented, with a few limited exceptions, investment into the industry from other industries that have parallels and natural affinities with the cannabis industry, such as the pharmaceutical, alcohol, and tobacco sectors.

In addition, many institutional and retail investors are still unaware of the existence of high-quality, publicly-traded US cannabis companies. Perhaps most in the US are still unfamiliar with cannabis and the industry. This knowledge gap, which will not last too long, is a key factor creating the arbitrage opportunity.

When the end of Prohibition is in sight and certainly in the months leading up to it, national media will be flooded with reports on successful cannabis companies. There will be an influx of investment into the industry. Large investment capital pools always look for growing industries; none is growing faster than cannabis. Retail investors will increasingly participate as the industry proliferates. Every patient whose quality of life is transformed by cannabis will have an interested family and network. Every adult who sees a health and wellness improvement from substituting cannabis for alcohol will be a potential investor. Most retail cannabis investors have been investing in the Canadian cannabis industry. As the industry in Canada grows and enormous gains continue to be made, and the US industry continues to expand, capital invested in the Canadian industry will look south for growth.

The end of Prohibition will remove the federal-illegality barriers to the industry, especially the ability for US cannabis companies to list on a US stock exchange and have normalized banking access. A normal taxation scheme will instantly increase profit margins by double-digit percentages. Top-notch professional services and real estate will be widely available to the industry. Combined with a groundswell of new institutional, related-industry, and retail investment, as the end of Prohibition becomes a certainty and a date is fixed, US cannabis companies are poised to see growth rates that will rival if not eclipse the returns seen in Canada over the past 2.5 years for the large licensed producers.

At present, due to the capital and knowledge barriers owing to federal illegality, there is an enormous valuation gap for strong US cannabis companies.

A comparison of USD share prices over two years, between August 31, 2016 and August 31, 2018, of the five largest Canadian licensed producers by market capitalization, Canopy, Aurora, Aphria, Cronos, and Hydropothecary, shows how much growth is possible in the nascent US cannabis industry in a short time.

The two-year chart below for the five largest Canadian cannabis companies shows share price increases ranging from an over 2400-percent increase for Cronos to a 190-percent increase for Hydropothecary:



Canopy Growth Corp. (NYSE:CGC) (Market Cap: \$9.3B USD): On August 31, 2016, CGC (formerly OTC:TWMJF) shares closed at \$2.84; on August 31, 2018, CGC shares closed more than 1,500 percent higher at \$45.72.



Aurora Cannabis Inc. (TSE:ACB; OTCMKTS:ACBFF) (Market Cap: \$8.3B CAD). On August 31, 2016, ACBFF shares closed at \$.67 USD; on August 31, 2018, ACBFF shares closed nearly 900 percent higher at \$6.68 USD, reaching as high as \$11.94 on January 23, 2018.

ACB – 2-year chart



Aphria (TSX:APH; OTCQB:APHQF) (Market Cap: \$3.5B CAD): On August 31, 2016, APHQF shares closed at \$1.97 USD; on August 31, 2018, APH shares closed more than 550 percent higher at \$12.96 USD, reaching as high as \$18.10 on January 10, 2018.

APH – 2-year chart



Cronos Group (NSDQ:CRON) (Market Cap: \$1.8B USD): On August 31, 2016, CRON (formerly OTC:PRMCF) shares closed at \$.39 USD; on August 31, 2018, CRON shares closed more than 2400 percent higher at \$9.88 USD.

CRON – 2-year chart



Hydrophothecary Group (TSE: HEXO; OTCMKTS:HYYDF) (Market Cap: \$996M CAD). On March 19, 2017, HYYDF began trading at \$1.44 USD; on August 31, 2018, HYYDF shares closed 190 percent higher at \$4.20 USD.



Many early investors in publicly-traded Canadian cannabis companies have seen ten-fold returns and much more in only two years. Legalization in Canada is a certainty; the date of the first sales, October 17, has already been set. While there remains uncertainty regarding how the Canadian market will look, the legal status of the industry in Canada is surely a central factor in the multi-billion-dollar valuations for the largest Canadian companies.

Returns for early investors in large, well-capitalized US cannabis companies, as federal legalization becomes a certainty in the US, may rival and exceed returns for early investors in Canada. The regulatory landscape in the US has created an enormous valuation arbitrage, but it will not last for too long.

A key takeaway from a July 24, 2018 GMP Securities report on the US cannabis industry is the exponential increase in the projected aggregate US public cannabis market valuation, to bring valuations on par with Canadian companies. According to GMP: “[I]ncluding readily addressable international export opportunities, the public Canadian cannabis sector is currently valued at ~2x–3x industry sales at maturity in 2022. Applying this multiple to a 2022 US cannabis industry sales estimate of ~\$US20b [considerably lower than other estimates], we derive an implied aggregate public market valuation of ~US\$50b for the US sector, or ~10 times higher than currently.”⁷⁴²

To demonstrate the large market potential of individual states in the US, GMP highlights Arizona; a medical-only state which is currently generating approximately \$400 million in annual retail sales. Arizona’s market is about 30 percent larger than Canada’s entire medical

⁷⁴² <https://gmpsecurities.bluematrix.com/sellside/EmailDocViewer?encrypt=a961ff7f-89df-4dc2-ad0d-ccaa4d5ee244&mime=pdf&co=Gmpsecurities&id=GMPSecuritiesL.P.All%40gmponline.com>

market though the state has a population of 7 million, just 1/5th that of Canada.⁷⁴³ 140,000 Arizonans, 2.54 percent of Arizona residents, have a medical cannabis registration card.⁷⁴⁴

GMP's bottom line recommendation: "The US cannabis industry offers an attractive risk/reward profile, hence we believe investors should actively pursue exposure to the sector."⁷⁴⁵

Early investors in the US cannabis industry will be rewarded because of the knowledge and valuation gap created by federal illegality. As Kevin Murphy said: "There is a mismatch between risk and reward. A \$7 billion market today to a \$150 billion opportunity leaves a lot of room for margin and opportunity. And that's where I believe this is going to tip over very quickly."⁷⁴⁶

A. Institutional Capital Almost Entirely Excluded

As noted, the US cannabis industry faces a host of challenges and impediments due to cannabis' Schedule 1 status - perhaps principal among them is raising the vast sums of capital required to build the infrastructure for a new industry from the ground up.

Canadian companies have seen significant institutional investment due to cannabis' evolving legal status in Canada. For example, Vanguard's \$110 billion Developed Market Index has invested \$50 million in large Canadian cannabis companies.⁷⁴⁷

But large institutional investors have not (yet) invested in the US cannabis industry. Primary investors in US cannabis companies' private placements have been family offices and high-net-worth individuals. Several private equity funds and capital pools have made considerable US cannabis investments like Arcview, Privateer Holdings, Tuatara Capital, MedMen Capital, Gotham Green, Merida Capital, Case Verde Capital, Poseidon Asset Management, Salveo Capital, Navy Capital, Phyto Partners, and Tiger Capital. CB1 Capital is a hedge fund focused on the industry, especially the medical and wellness aspects. There are also a few publicly-traded cannabis investment firms, like Mentor Capital (OTC: MNTR) and Tidal Royalty (OTC:TDRYF), and Innovative Industrial Properties Inc. (NYSE:IIPR), which invest in real estate for the cannabis industry.

Because of the federal illegality status, many large funds have not researched or followed the US cannabis industry. Funds managing assets for the Church of England, sovereign wealth funds, union pensions, and similar multi-billion-dollar investment pools cannot and have not pursued investments into the industry because of the federal illegality. Nevertheless, stories abound in the cannabis industry about bankers and institutional traders, after a pitch from a cannabis company,

⁷⁴³ *Id.*

⁷⁴⁴ <https://www.phoenixnewtimes.com/news/arizona-medical-marijuana-cannabis-program-compare-10624652>

⁷⁴⁵ *Id.*

⁷⁴⁶ <http://wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁷⁴⁷ <https://www.newcannabisventures.com/vanguard-mutual-fund-surprisingly-owns-47-million-of-cannabis-stocks/>

explaining that their company cannot invest due to Prohibition, but then pulling out their personal checkbooks to participate.

Institutional capital is slowly beginning to look at the US sector more closely, and the industry is the precipice of major expansion. According to a recent article in *The Street*, *Cannabis Industry Sits on Precipice of Major Expansion*: “Not the slow trickle of PIPEs and venture funding rounds investors have seen since 2014 but a full-fledge boom. Over the last two weeks, the cannabis industry has seen events which could bring a wave of institutional investment into the sector, as well as other changes.”⁷⁴⁸

B. Pharmaceutical, Alcohol, Tobacco, Related Industry Capital Mostly Excluded

The cannabis industry has seen several notable investments by major alcohol companies.

Constellation Brands (NYSE:STZ, \$35B market cap), owner of Corona beer and Mondavi wine, is at the forefront. On June 29, 2018, Constellation reported in its fiscal first-quarter 2018 results a \$700 million gain from its October 2017 groundbreaking \$186 million purchase of a nearly 10-percent stake in Canopy.⁷⁴⁹

On August 15, 2018, Constellation stunned the cannabis industry, announcing a \$5 billion CAD (\$4 billion USD) investment into Canopy, bringing Constellation’s ownership of Canopy to 38 percent, along with warrants that could give Constellation a stake of more than 50 percent.⁷⁵⁰ Canopy CEO Bruce Linton said: “This is rocket fuel. We’re going to be way more global.”⁷⁵¹ The New York Times reported that as “sales of beer fall in the US, brewers have begun to bet that legalization of marijuana around the globe, especially the US, will continue to build momentum and sales of cannabis products will take off . . . alcoholic beverage companies are trying to buy into the cannabis industry before they become disrupted by it.”⁷⁵² The Wall Street Journal called Constellation’s investment a “major bet on the potential global market for cannabis-infused drinks and other products.”⁷⁵³

On August 1, 2018, Molson Coors Canada announced an agreement with Hydropothecary to create a joint venture focused on non-alcoholic, cannabis-infused beverages for the Canadian market.⁷⁵⁴ Molson will maintain a 57.5 percent controlling interest in the JV. Molson CEO Mark

⁷⁴⁸ <https://www.thestreet.com/politics/washington-driving-cannabis-market-towards-increase-in-investors-14566961>

⁷⁴⁹ <https://www.bloomberg.com/news/articles/2018-06-29/constellation-brands-marijuana-investment-reaps-700-million>

⁷⁵⁰ <https://www.bnnbloomberg.ca/i-got-this-suit-at-winners-no-flash-for-canopy-growth-s-paper-millionaire-co-ceo-1.1123999>

⁷⁵¹ <https://business.financialpost.com/cannabis/constellation-brands-spending-5-billion-to-increase-stake-in-canopy-growth>

⁷⁵² <https://www.nytimes.com/2018/08/16/business/dealbook/constellation-canopy-cannabis.html>

⁷⁵³ <https://www.wsj.com/articles/constellation-brands-expands-investment-in-cannabis-company-canopy-growth-1534332997>

⁷⁵⁴ <https://midasletter.com/2018/08/molson-coors-selects-hexo-over-aphria-inc-to-develop-beverages/>

Hunter said cannabis increasingly “is becoming part of the lifestyle of many consumers” in Canada, and: “Consumers who want to enjoy cannabis as they would a beer – in moderation – are able to do so, which is quickly driving acceptance and adoption.”⁷⁵⁵

Canopy’s and Hydropothecary’s competitor cannabis companies are all pursuing or considering beverage opportunities. On June 22, 2018, Aurora’s Chief Corporate Officer Cam Battley said: “We’ve said specifically we’re interested in the infused beverage space and we do intend to enter that market.”⁷⁵⁶ Lagunitas Brewing Company, owned by Heineken, recently began distributing its beer-like, non-alcoholic Hi-Fi Hops throughout California.⁷⁵⁷ Early September 2018 media reports discuss alcohol companies like Anheuser Busch and Diageo looking at the industry.⁷⁵⁸

On February 8, 2018, tobacco company Alliance One International (NYSE:AOI) (annual sales exceeding \$1.5 billion) announced that it bought controlling interests in two Canadian cannabis producers, believed to be the first foray by a significant tobacco business into the cannabis industry.⁷⁵⁹ According to AOI’s press release: “The combined Canadian cannabis acquisitions are anticipated, subject to regulatory approvals, to have approximately 1 million square feet of production space within a three year period and with the opportunity to become a truly international cannabis company.”⁷⁶⁰

Aside from GW’s pursuit of FDA approval for Epidiolex, the pharmaceutical industry has made very limited investments into the medical cannabis industry. Johnson & Johnson recently accepted two medical cannabis businesses, Avicanna and Vapium Medical, into its Canadian JLab Innovation network.⁷⁶¹ But the federal illegality of the cannabis industry precludes most pharmaceutical companies—now—from investing directly in the cannabis industry.

Other potentially aligned industries are the coffee and confectionary industries. On April 12, 2018, Canadian coffee company Second Cup (TSE:SCU) announced an agreement with Canadian cannabis clinic operator National Access Cannabis to develop and operate a network of cannabis stores.⁷⁶² Second Cup’s board chairman Michael Bregman said: “(Cannabis) is going to be an awfully big business in Canada, and we have some amazing locations. I wish I knew now

⁷⁵⁵ https://www.millercoorsblog.com/news/molson-coors-canada-to-form-joint-venture-to-make-cannabis-infused-beverages/amp/?_twitter_impression=true

⁷⁵⁶ <https://www.profitconfidential.com/marijuana/marijuana-news-today-big-money-hit-pot-stocks-alcohol-companies/>

⁷⁵⁷ <https://www.forbes.com/sites/mikeadams/2018/08/05/beer-makers-wanting-to-cash-in-on-legal-marijuana-are-ditching-alcohol/#1c283a942ba9>

⁷⁵⁸ https://www.forbes.com/sites/mikeadams/2018/09/04/is-anheuser-busch-next-to-strike-a-deal-with-the-cannabis-industry/amp/?_twitter_impression=true

⁷⁵⁹ <https://hempindustrydaily.com/big-us-tobacco-company-buys-stake-canadian-cannabis-growers-american-hemp-firm/>

⁷⁶⁰ <http://www.aointl.com/news/news-releases/alliance-one-international-reports-improved-sales-and-gross-profit-third-quarter-and-nine-months-ended-december-31-2017-and-anno/>

⁷⁶¹ <https://merryjane.com/news/big-pharma-is-investing-in-medical-marijuana-research-despite-u-s-law>

⁷⁶² <https://www.theglobeandmail.com/business/article-second-cup-eyes-converting-some-coffee-shops-into-marijuana-stores/>

in what form we would be pursuing and participating. We're just trying to position ourselves so we can participate as the opportunities arise and the legislation is formed.”⁷⁶³

On August 6, 2018, reports discussed William Wrigley Jr. II (Wrigley family scion and billionaire) leading a \$65 million investment round for Surterra Wellness, a medical cannabis startup in Georgia with licenses to operate in Florida and Texas. He said: “When I understood the massive benefits, it really changed my mind about the industry. You don’t see too many opportunities to have that kind of an impact in an industry that is being created from scratch.”⁷⁶⁴

As a percentage of the hundreds of billions of dollars available in the pharmaceutical, alcohol, tobacco, soda, coffee, confectionary and other related industries for US cannabis investment, the amounts invested thus far have been miniscule. That will change with impending legalization.

Constellation CEO Robert Sands suggested the company would invest in the US market if it were legal to do so: “We are not going to do anything that is violative of federal law, but we are looking closely at that issue and making sure we understand what we can do and what we can’t do,” he said. If it’s legal, “we will do it.”⁷⁶⁵ Alexandre Ricard, CEO of Pernod Ricard (distributor of brands such as Absolut Vodka, Glenlivet, Jamesons, Chivas Regal, and Beefeater) said: “We look at it closely. The whole sector is watching it closely.”⁷⁶⁶ Acreage CEO Kevin Murphy said: “Big alcohol is clearly interested in the space. They are in and around the space today. . . I believe you are going to see more big alcohol and spirits making moves into the space.”⁷⁶⁷

J. Pieter Sikkel, tobacco giant Alliance One’s president and CEO, said the company intends to “broaden our business portfolio over the next three to four years by focusing on consumer-driven agricultural products, with increased operating margins when compared to our historical leaf processing businesses.”⁷⁶⁸

Todd Harrison of CB1 Capital aptly described the large cannabis companies and the wide range of appeal for related industries: “They are biotech companies in drag, large-scale producers of consumer-packaged goods, or both. They’ll use cannabis and hemp as base-line ingredients for an array of end-products ranging from medicine to cosmetics to pet supplements to plastic composites, and more, and those margins will improve as cannabis prices decline.”⁷⁶⁹

⁷⁶³ *Id.*

⁷⁶⁴ <https://www.bloomberg.com/news/articles/2018-08-06/wrigley-billionaire-moves-from-chewing-gum-to-medical-marijuana>

⁷⁶⁵ <https://www.bloomberg.com/news/articles/2018-06-29/constellation-brands-marijuana-investment-reaps-700-million>

⁷⁶⁶ <https://mjbizdaily.com/liquor-titans-ceo-alcohol-companies-eyeing-cannabis-industry/>

⁷⁶⁷ <http://www.wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁷⁶⁸ <https://hempindustrydaily.com/big-us-tobacco-company-buys-stake-canadian-cannabis-growers-american-hemp-firm/>

⁷⁶⁹ <https://www.investopedia.com/news/waiting-exhale-case-cannabis-investing/>

On June 2, 2018, at an investor panel at the CWCB Conference in New York City, Acreage Holdings president, George Allen, recounted how Acreage was approached by an unspecified Fortune 10 board member expressing interest.⁷⁷⁰ The only Fortune 10 company with an obvious connection to cannabis is Johnson & Johnson,⁷⁷¹ but large technology companies on that list could also be interested. Mr. Allen also said that major pharmaceutical companies have formed special board committees to consider entries into the cannabis industries.⁷⁷²

Undoubtedly, term sheets have already been drafted and alliances formed between the major US cannabis companies and related industries. But large investments have not, yet, been deployed.

VII. MULTI-STATE, VERTICALLY-INTEGRATED, AND POISED TO CAPITALIZE

Large US multi-state vertically-integrated operators are particularly well-situated to experience rapid growth as the US cannabis industry expands and legalization brings a flood of investment capital into the industry.

There is a clear demarcation in the cannabis industry between plant-touching companies, on one hand, and the essential ancillary businesses that facilitate the cultivation, extraction and processing, and retail selling of cannabis, on the other hand. The ancillary businesses do not face many of the obstacles faced by plant-touching businesses, and in many cases have been able to grow and operate for years as regular businesses.⁷⁷³

Cannabis packaging and labeling, including child-resistant packaging, is a key ancillary segment.⁷⁷⁴ During the first half of 2018, California's poison control centers received 386 calls involving children 19 years and under who ingested cannabis mostly in edible forms.⁷⁷⁵ While that number is very small compared to the 15,545 calls received in 2017 for ingestion of analgesics (aspirin, Tylenol, Advil) and cannabis is highly unlikely to cause any permanent damage,⁷⁷⁶ it is imperative that cannabis be kept out of children's hands. KushCo Holdings (OTC: KSHB), formerly Kush Bottles, is one of the leaders in this area. Others include Marijuana Packaging and Pollen Gear.

Cannabis testing laboratories is another important ancillary vertical. Cannabis testing alone is expected to become a \$1.4 billion market by 2021, up from \$866 million in 2016.⁷⁷⁷ Evio (OTCMKTS), DigiPath (OTCQB: DIGP), Steep Hill Labs, SC Laboratories, CannaSafe

⁷⁷⁰ <https://www.cwcbexpo.com/new-york/2018/schedule>

⁷⁷¹ <http://fortune.com/2018/05/21/fortune-500-most-valuable-companies-2018/>

⁷⁷² <http://greenrushpodcast.net/>

⁷⁷³ <https://www.cannabisbusinessexecutive.com/2017/09/cbe-2017-top-150-cannabis-ancillary-businesses/>

⁷⁷⁴ <https://qz.com/quartz/1310480/the-pot-industry-is-reinventing-child-resistant-packaging-design/>

⁷⁷⁵ <https://www.leafly.com/news/health/poison-control-chart-cannabis-vs-alcohol>

⁷⁷⁶ *Id.*

⁷⁷⁷ <https://hightimes.com/business/marijuanas-next-billion-dollar-market-lab-testing/>

Analytics, and CW Analytical Laboratories are leading US testing labs. Some cannabis testing will likely move in-house, a model that Acreage Holdings is developing.⁷⁷⁸

Cultivation products and services, including technologies such as lighting, are essential to the industry. Scotts Miracle Grow (NYSE:SMG), which has a division focused on cannabis cultivation, GrowGeneration (OTC:GRWG), and Urban-Gro are some of the leading US companies in this area.

Another key ancillary is manufacturing and supply of cannabis extraction/processing equipment. One of the leaders is Precision Extraction Solutions. Great extraction equipment is made in Germany. Manufacturers of consumption devices like oil cartridges and vaporizers will also see a boon with more cannabis users. The Blinc Group is an incubator for startups in this area.

Verticals like payroll, staffing, cash processing and storage, security, and software are important ancillaries.⁷⁷⁹ Hypur and MJ Freeway are key players. NASDAQ-listed cannabis company, MTech Acquisition (MTEC), is a \$50 million Special Purpose Acquisition Company that intends to acquire assets in several ancillary verticals including compliance and software.

Yet, despite the lack of direct adverse effects on these ancillaries from federal illegality, and the varied opportunities in the ancillary sector, investors in the US cannabis industry would be well-served to look closely at plant-touching businesses, specifically multi-state vertically-integrated cannabis companies. These companies are generally structured as holding companies with subsidiaries that hold state licenses to cultivate, extract and process, and sell cannabis at retail medical and adult-use dispensaries.

As explained next, a principal reason to consider vertically-integrated, multi-state plant-touching companies is that the state licenses they own create a barrier to competition, giving them a crucial early-mover edge. If a large company in an ancillary industry, such as Microsoft with software or Monsanto with agriculture technology, were to enter the cannabis industry, it could displace many smaller companies in a particular ancillary vertical. In contrast, vertically-integrated cannabis companies holding licenses in restricted-license East Coast and Midwest states cannot be replicated. They are poised for tremendous growth.

A. Operating In Limited-License Versus Unrestricted-License Markets

In every state with legal medical and/or adult-use cannabis, all plant-touching activity such as cultivating, extracting/processing, and selling/transporting cannabis requires a state license.

A fundamental dynamic of the US cannabis industry is the delineation between: (1) the free-market unrestricted licensing regime in Western states like California, Colorado, Nevada, Washington, Oregon, and Arizona, as well as Michigan, and soon Oklahoma, and (2) the limited,

⁷⁷⁸ <http://www.wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁷⁷⁹ <https://www.cannabisbusinessexecutive.com/2016/06/cannabis-business-executive-100-top-ancillary-businesses/>

restricted-market licensing regime in East Coast states like Massachusetts, New York, New Jersey, Florida, Pennsylvania, and Maryland, and in Midwest states like Illinois and Ohio.

Unrestricted-License States - California has issued 6,421 cannabis licenses, including 3,844 cultivator licenses, 830 manufacturer licenses, and 683 retail dispensary licenses, accounting for 40 percent of all active cannabis licenses nationwide.⁷⁸⁰ Colorado has roughly 1,400 licensed cultivators⁷⁸¹ and 520 dispensaries.⁷⁸² Nevada issued an initial cap of 132 adult-use retail stores through November 2018 (limited to previous medical cannabis licensees), but afterwards the state will open the application process to any interested applicants.⁷⁸³ Washington State has issued approximately 2,000 cannabis business licenses, including more than 500 cultivators and 500 retail licenses.⁷⁸⁴ Oregon has licensed 1,900 cannabis businesses⁷⁸⁵ including 598 dispensaries.⁷⁸⁶ Arizona has 130 dispensaries for its medical cannabis-only program (with 140,000 patients.)⁷⁸⁷ In these states, it is relatively easy to obtain a cannabis business license.

Restricted-License States - In contrast to the Western States, which aside from California are not very highly-populated, the highly-populated East Coast states have issued far fewer licenses. New York, with a population of nearly 20 million, initially granted only five vertically-integrated licenses before recently expanding to ten; New Jersey, with a population of nine million granted only six vertically-integrated licenses before accepting applications for an additional six on August 31, 2018; Pennsylvania, with nearly 13 million people, only granted 13 licenses; Florida, with a population of over 20 million, granted 14 vertically-integrated licenses; Illinois with a population of 13 million, granted 60 licenses for dispensaries and 22 for cultivation; and Ohio, with more than 11 million people, granted 12 vertically-integrated licenses.⁷⁸⁸

Another primary differentiator is that, in Western states, licenses are often for a single tier, such as cultivator, extractor/processor, or dispensary, while licenses in the East Coast and Midwest states, for now, are usually vertically-integrated for all tiers of the cannabis value chain.

The restricted, vertically-integrated licensing regime in the large East Coast and Midwest markets creates a barrier that is making the vertically-integrated licenses in those states

⁷⁸⁰ <https://www.newcannabisventures.com/california-adds-6421-cannabis-licenses-in-first-half-of-2018/>

⁷⁸¹ <https://www.forbes.com/sites/kriskrane/2018/04/25/cannabis-cultivation-will-be-a-race-to-the-bottom/#569e7a664184>

⁷⁸² <https://www.phoenixnewtimes.com/news/arizona-medical-marijuana-cannabis-program-compare-10624652>

⁷⁸³ <http://marijuana.nv.gov/Businesses/GettingALicense/>; <https://mjbizdaily.com/nevada-opens-up-84-potential-adult-use-licenses-for-existing-or-provisional-medical-marijuana/>

⁷⁸⁴ <https://data.lcb.wa.gov/stories/s/WSLCB-Marijuana-Dashboard/hbnp-ia6v/>

⁷⁸⁵ <https://mjbizdaily.com/oregon-to-halt-processing-new-recreational-marijuana-licenses-next-month/>

⁷⁸⁶ <https://www.phoenixnewtimes.com/news/arizona-medical-marijuana-cannabis-program-compare-10624652>

⁷⁸⁷ *Id.*

⁷⁸⁸ <https://www.forbes.com/sites/kriskrane/2018/04/25/cannabis-cultivation-will-be-a-race-to-the-bottom/#569e7a664184>; <http://worldpopulationreview.com/states/new-jersey-population/>; <https://www.nj.gov/health/medicalmarijuana/alt-treatment-centers/>; <https://www.marijuanaventure.com/illinois-retail/>; <http://www.sun-sentinel.com/news/politics/florida-medical-marijuana/fl-reg-medical-marijuana-new-license-20180715-story.htm>

increasingly valuable. A Florida license tied to an operator that had not yet begun selling cannabis sold in June 2018 for \$53 million.⁷⁸⁹ Another Florida license was acquired for \$46 million.⁷⁹⁰ A land grab is occurring across the limited-license markets to acquire licenses and to apply for new ones as additional applications are accepted, though some of the states have capped their license numbers for the foreseeable future.

As more patients join medical cannabis programs and adult-use is legalized, many of the East Coast and Midwest states will increase license availability,⁷⁹¹ but early entrants have a significant advantage as they stake claims and build brands with large-scale cultivation facilities, advanced extraction and processing facilities, and trusted dispensaries in busy retail locations.

For plant-touching companies, the barriers to competition are non-negotiable. Without a state license, a company cannot grow, process, or sell cannabis in the state. The most well-capitalized pharmaceutical company and companies with extensive reach and distribution capacity and retail presence like Amazon, Ebay, Pfizer, Merck, Johnson & Johnson, Coca Cola, CVS, Duane Reade, Walgreens, and Starbucks cannot sell into a state market without a license. The companies that hold the licenses are the gatekeepers to the entire US cannabis market.

Direct, consumer-derived revenue in the cannabis industry is earned predominately at dispensaries selling in-store and via delivery. As iAnthus' Hadley Ford says: "We operate a network of cash registers."⁷⁹² All other ancillaries are competing for a share that revenue. Multi-state operators give investors direct access to the principal source of cannabis revenue.

In contrast to the limited-license regime creating a barrier to entering the market in the East Coast and Midwest states, the unrestricted license regimes in the West Coast states present little barriers to entry. Almost any qualified applicant with a bank account and a business plan can apply for and obtain a license. As an investor, especially in publicly-traded companies, it is difficult to gain broad exposure to those free-market jurisdictions, with limited exceptions such as California's CannaRoyalty (CSE:CRZ; OTC:CNNRF) discussed in Section VIII(E).

B. Branding Advantage

As in all consumer-facing industries, brand recognition will be critical to success in the cannabis industry. Two of the main brand categories that will emerge are brands of cannabis products and dispensary brands. While cannabis products cannot cross state lines, multi-state operators' brands can achieve a nationwide following. In addition, multi-state operators can create a recognized dispensary brand in numerous locations across the country offering customers a

⁷⁸⁹ <http://www.sun-sentinel.com/news/politics/florida-medical-marijuana/fl-reg-medical-marijuana-operation-20180606-story.html>

⁷⁹⁰ <http://floridapolitics.com/archives/253901-medical-marijuana-firm-sold-43m-deal>

⁷⁹¹ Some states like New York and Florida have been subject to litigation challenging the limited number of licenses made available. It is likely that similar litigation will occur in many other states.

⁷⁹² <https://www.youtube.com/watch?v=twPvCyEMMW8>, see interview beginning at 52:00.

consistent experience. Those recognized dispensary brands can also carry their own branded cannabis products or other companies' brands manufactured in-state.

For cannabis product manufacturers, dispensaries are the only means of distribution. Thus, multi-state operators in limited-licensing states can effectively be kingmakers for brands to achieve broad success. In major adult-use states like California, Colorado, Washington, and Oregon, due to the vast number of business operators, the market is fragmented with no brand achieving more than 15 percent market share.⁷⁹³ In contrast, multi-state companies are able to position the same brands in numerous stores in multiple states, capturing large market share. As Acreage Holdings CEO Kevin Murphy said: "The brands will ultimately start with distribution in each state."⁷⁹⁴

The branding advantage also applies to ancillary products sold directly to consumers in dispensaries, mainly consumption devices like vaporizers. Many new and repeat consumers will purchase new consumption devices, as new technologies continue to emerge. Multi-state operators sell their own white-label devices or choose among third-party devices to carry in dispensaries. Without having keen insight into consumption devices, it is hard for an investor to pick one manufacturer. Dispensary operators are best-positioned with their consumer-facing operations to do so. They will propel certain consumption device brands ahead of others.

Thus, investing in a company that operates many retail dispensaries in multiple states allows an investor to participate in the upshot from crucial branding and consumption devices.

C. No Interstate/International Commerce Under Federal Legalization

One of the key market dynamics that will almost certainly remain in place even after federal legalization (under the proposed STATES Act or similar) are the present restrictions on interstate and international commerce. Presently, intellectual property, equipment, branding, and industry employees may cross state lines and US borders, but cannabis and cannabis-derivative products may not cross state lines, even between adjoining legal states, and may not cross the US border.

Essentially, the industry in each US state operates on its own island that must grow, produce, and sell all cannabis products within the state for consumption within the state.⁷⁹⁵ For the foreseeable future, these artificial barriers to free-market commerce will remain in place. There will not be a national market for cannabis products or an import/export market for a long time.

Because of the restriction on transporting cannabis interstate and internationally, wholesale and retail prices in one state (and in Canada and other countries) have little to no bearing on prices in other US states, except to the extent that consumers within range of multiple adult-use legal states may choose to purchase products from the cheapest market to transport back to their home

⁷⁹³ <https://gmpsecurities.bluematrix.com/sellside/EmailDocViewer?encrypt=a961ff7f-89df-4dc2-ad0d-ccaa4d5ee244&mime=pdf&co=Gmpsecurities&id=GMPSecuritiesL.P.All%40gmponline.com>

⁷⁹⁴ <http://www.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁷⁹⁵ <https://www.bnnbloomberg.ca/video/acreage-holdings-to-go-public-in-canada~1454044>

state. With closed state borders, multi-state vertically-integrated operators are able to have significant control over their bottom line in individual states. They have only in-state competitors, with whom they often collaborate, but cannot be undercut by imports from other more mature markets with cheaper wholesale and retail cannabis products.

Years after federal legalization, free market dynamics will likely encourage a shift to interstate and also international commerce in cannabis. Movement toward a free-trade globalized cannabis market will result in significantly reduced domestic cultivation and regular-way commoditization of cannabis. Removing import and export restrictions would shift a large segment of the market to imports from countries with climates and labor conditions far more favorable for growing and some processing of cannabis, such as in South America and Africa.

Colombia is a key country to watch as a potential major exporter. In 2017, a gram of cannabis cost Canada's lowest-cost cannabis producer, Aphria, \$2 to grow; in Colombia, cannabis can be grown at \$.05 per gram, or 40 times cheaper than in Canada.⁷⁹⁶ Several notable companies are making significant investments into ultra-large-scale Colombian cannabis cultivation and processing infrastructure. New York-based Northern Swan is the majority owner of a fully-licensed, vertically-integrated Colombian cannabis company called Clever Leaves, which expects to become the world's largest medical cannabis grower by 2023 with over 10 million square feet of growable terrain that could produce up to 30,000,000 ml of full spectrum cannabis oil annually.⁷⁹⁷ Other large Colombian operators include Khiron Life Sciences (CVE:KHRN; OTC:KHRNF), ICC Labs (CVE:ICC; OTC:ICCLF), and PharmaCielo.

A decade or two in the future might also see vast amounts of standard-quality cannabis being grown in Africa, where it may be grown for even cheaper than in Colombia.⁷⁹⁸ Canopy and Supreme Cannabis (TSX-V:FIRE; OTC:SPRWF) have invested millions in Lesotho, the first African nation to allow medical cannabis cultivation and export.⁷⁹⁹

Nevertheless, as the US industry evolves over the next decade, two key aspects will remain in place. First, state dispensaries in densely-populated areas will be the gateway to retail revenue. Second, value-added derivative products and high-margin formulations sold as recognized brands will be a large segment of the industry. Companies with a network of advanced processing facilities and well-regarded dispensaries and brands will be the US market leaders.

D. Former Import Black Markets, No Existing Cultivation Infrastructure

Another key advantage for vertically-integrated companies in limited-license East Coast and Midwest states is that unlike in California, Washington, and Oregon, the East Coast and Midwest

⁷⁹⁶ <https://business.financialpost.com/commodities/agriculture/canadian-company-pharmacielo-ltd-could-be-the-first-to-grow-legal-pot-in-colombia>

⁷⁹⁷ <http://www.cleverleaves.com/>

⁷⁹⁸ <https://www.longevitylive.com/anti-aging-beauty/another-country-africa-legalizes-cultivation-cannabis/>

⁷⁹⁹ <https://www.potnetwork.com/news/why-canopy-growth-eyeing-africas-marijuana-market>

states have little local black-market cultivation. Instead, East Coast and Midwest states are vast import black markets. Dispensaries in East Coast and Midwest states do not have to compete with local black-market cultivators undercutting their pricing.

East Coast and Midwest dispensaries will also see decreasing competition from the import black market. Many former black-market exporters on the West Coast are joining the legal industry. West Coast states are also requiring strict inventory management and tracking for legal operators. Further, enforcement on the West Coast is increasing against the shrinking number of black-market exporters who do not participate in licensing regimes. These factors will all contribute to decreasing black market exports from West Coast states to import states.

The lack of direct competition with black-market cultivators will prove to be a significant advantage for license holders in East Coast and Midwest states. As legal cannabis prices fall in limited-license adult-use markets, it will be less economical and increasingly difficult (with much more available law enforcement) for black-market operators to import cannabis to East Coast and Midwest states from the West Coast. The vast range of products and the far better, safer purchasing experience at a legal dispensary will draw many black-market consumers to the legal industry and many new customers who would not have purchased on the black market.

With no local cultivation black market, and a diminished import black market, operators in limited-license East Coast and Midwest states have enormous addressable markets.

E. Falling Dry Leaf Prices

Another key dynamic of the cannabis industry is inevitably falling wholesale flower prices as has been observed in Colorado and Oregon⁸⁰⁰ which can undermine a cultivator's business model and margins. Without vertical integration, in unrestricted licensing states wholesale cultivators are forced to meet in-state market prices to sell to dispensaries or extraction/processing facilities.

In limited-license markets, on the other hand, where cultivation is part of a vertically-integrated licensing model, falling wholesale flower prices have little bottom line effect because companies can add value and margin at the extraction/processing level, and also maintain a floor for retail pricing. Further, as dry leaf cannabis increasingly becomes an input ingredient for various formulations and products, cheaper dry leaf will actually increase margins for vertically-integrated operators. According to GMP Securities, EBITDA margins should reach approximately 40 to 50 percent at maturity for fully vertically-integrated operators.⁸⁰¹ GMP's estimate is based on cultivation margins to be similar to those projected for Canada at

⁸⁰⁰ <https://www.thecannabist.co/2018/03/08/marijuana-prices-2017-cannabis-benchmarks/100103/>

⁸⁰¹ <https://gmpsecurities.bluematrix.com/sellside/EmailDocViewer?encrypt=a961ff7f-89df-4dc2-ad0d-ccaa4d5ee244&mime=pdf&co=Gmpsecurities&id=GMPSecuritiesL.P.All%40gmponline.com>

approximately 25 to 30 percent, with the ability to participate in retail adding another approximately 15 to 20 percent of EBITDA margin.⁸⁰²

F. Best Practices

While cannabis products cannot cross state lines, as noted information and best practices can. Multi-state cannabis companies benefit tremendously from sharing information, standard operating procedures, and best practices across operations in multiple states. Multi-state operators have a unique diversified view of the cannabis industry, ranging from cultivation and extraction and processing technologies and techniques, to dispensary design and operations, popular products with consumers, new trends, attracting new customers and community integration, and challenges to be expected as markets mature.

The ability to share information, react to market trends, and avoid and mitigate problems based on experiences learned in other states, gives multi-state companies a significant competitive advantage over their single-market competitors.

G. Streamlined Support And Scale

Operating a cannabis company in the US requires significant legal and accounting support to comply with evolving regulations and compliance and taxation issues such as IRC Section 280E (See Section III(A)(4)). Smaller cannabis companies are required to spend disproportionately on professional services to meet regulatory requirements.

Other challenges faced by the cannabis industry as a result of federal illegality such as reduced access to banking, insurance, and real estate are also mitigated for larger companies due to their size and negotiating leverage. Large multi-state companies have a pre-positioned support structure with standard operating procedures and experienced professionals in legal, accounting, banking, and design that have opened operations numerous locations across the country.

Further, because it is expensive to build and staff a retail store in a prime shopping area, many stores in the busiest retail corridors of the country are national chains like Starbucks, Dunkin Donuts, Chipotle, Subway, McDonalds, and Burger King. In some cases, retail stores must be prepared to operate at a loss for months or even years before turning profitable. Large multi-state cannabis companies have the capitalization to open and to sustain a retail operation until profitability, giving them a significant edge in establishing early-mover market share.

The cannabis industry, at least in the limited-license East Coast and Midwest states, is headed in the same direction as the coffee, beverage, tobacco, pharmaceutical, and alcohol industries where several large companies account for most of the market. There will of course be room in the industry for strong mid-sized companies and craft-type unique dispensaries. But the largest

⁸⁰² *Id.*

companies can most easily engage in strategic mergers and acquisitions to position themselves to dominate the industry, just as the largest companies in many similar industries have.

H. Obtaining New Licenses

As limited-license states expand licensing opportunities, and especially as new states open medical cannabis programs and grow to adult-use markets, multi-state operators also have a big advantage in obtaining new licenses, which is becoming increasingly competitive.

There are two ways to obtain a state cannabis license, applying for one or acquiring one from a license holder. Large multi-state companies are well-positioned in both areas.

State regulators are keen to ensure that their new programs and markets start the right way. They want to be make sure no troublesome practices emerge such as cultivators and dispensaries diverting products to the black market or selling to unlicensed consumers (in the case of medical programs) or underage consumers. The industry is an object of fascination to the media that will seize on any such stories. Regulators will be more comfortable with a company applying for a license with a track record of operating successful, compliant businesses in multiple states. These companies will have already succeeded with license applications in multiple states. They know how to prepare strong presentations to regulators. Finally, many states license applications are expensive to prepare and file, and applicants must demonstrate significant dedicated capital.

In addition, as noted, acquiring licenses through purchase is becoming increasingly expensive in limited-license states. Only large multi-state cannabis companies have the capital to compete to acquire licenses in the large East Coast and Midwest states. As multi-state companies become larger and better capitalized, they will only move further ahead of their smaller competitors in their ability to spend large sums of money expanding into new lucrative markets.

I. Institutional Capital Will Flow To Large, Well-Capitalized Diversified Entities

Finally, some institutional investors and related-industry investment capital will naturally gravitate towards non-plant-touching ancillary businesses which might be perceived as safer investments. But many will research the industry closely and conclude, as this Paper posits, that companies presenting the best reward/risk profiles are well-capitalized vertically-integrated operators in multiple states with experienced, professional management.

The positioning of these multi-state, vertically-integrated companies in each tier of the industry value chain - cultivation through dispensing - hedges against unexpected developments in any one tier. In addition, diversification across multiple states counterbalances the risk of regulatory changes or licensing scheme adjustments in individual states. In an industry that will be brand-new to almost all institutional investment capital, the largest, well-capitalized, diversified companies will be highly attractive candidates for major investments.

VIII. SELECTED US MULTI-STATE VERTICALLY-INTEGRATED COMPANIES

As the inevitability of federal legalization draws closer, the cannabis industry presents an unequalled opportunity for investment returns. Cannabis Prohibition will only end once. But investors must be cautious. Some businesses, despite their founders' best intentions, simply have no chance to realize long-term success in the industry. There will be many unrealized dreams. There are also unsavory, unreliable actors.

Two familiar but crucial company-specific criteria that an investor in the cannabis industry must look at carefully are: the company's management team and barriers to competition.

With regard to management, especially in the cannabis industry, a previous track record of success outside of the industry, and within the industry, is vital. There is no shortage of individuals who are passionate about cannabis. The executives who treat the cannabis industry like any other industry, essentially growing and selling widgets, making sure no shortcuts are taken and all regulations are complied with, and maintaining top-down professionalism throughout an organization, are the ones that will succeed.

Pay close attention to management's stated vision for their company from months and years past and see how they have executed. A good reputation, and strong relationships and alliances within the industry with competitors, vendors, financiers, and professionals are key to success. Ensure the management team is well-liked and has formed and nurtured the connections critical to position their company to succeed. Finally, strong communication skills are essential for cannabis executives, particularly to educate the public and regulators about the benefits of cannabis and to help remove the fading stigma.

The importance of barriers to competition and duplication cannot be overstated. The notion that investing anywhere in the cannabis industry will yield strong returns is misguided. Many startup cannabis companies will struggle for market traction and will not succeed. For example, hundreds if not thousands of companies are producing CBD products, some with dubious quality and efficacy. Many companies appear to have a unique product or idea, but often there are dozens of other companies built on the same business model.

One of the key barriers is the state licensing regime discussed above. High-tech products and processes with strong, defensible intellectual property protection can also create barriers. Ancillaries requiring specialized knowledge and equipment like testing laboratories have a relatively secure position. But companies that are one of many, with no differentiation and barriers to duplication, have nothing to prevent a larger similar company from displacing them.

Several multi-state vertically-integrated companies are profiled below, followed by details on several others. These companies meet the management and barriers criteria and are particularly well-positioned as cannabis normalization expands state-by-state and eventually federally.

A. Acreage Holdings

Acreage Holdings, based in New York, is the largest cannabis company in the US by several measures, among them geographic footprint. As of early August 2018, Acreage subsidiaries hold licenses to cultivate, extract/process, and/or sell medical and adult-use cannabis in 15 states, including New York, New Jersey, Massachusetts, Florida, Illinois, Pennsylvania, Connecticut, Maryland, Maine, New Hampshire, Ohio, Oregon, and California.⁸⁰³ Acreage owns a minority share in edibles company Dixie Brands and a REIT that owns nine industrial and commercial properties (660,000 square feet) leased to 23 best-in-class cannabis operators in Colorado, Oregon, Washington, and Arizona.⁸⁰⁴

Acreage's stated vision is: "We deeply believe in the transformational power that cannabis has to heal and change the world."⁸⁰⁵

Acreage CEO Kevin Murphy has been investing in the cannabis industry since 2011, and in 2015 he formed a holding company that morphed into the present holding company structure which operationally and financially controls its operations in 15 states.⁸⁰⁶ According to Mr. Murphy, Acreage's "goal is to build out the rest of our team, build out the rest of the country, and, given that we were one of the first players in the space and today we are the largest player in the space, we would like to maintain that position going forward. So, from our vantage points it's really about the aggregation of other assets."⁸⁰⁷

Mr. Murphy told CNBC on July 23, 2018 that the company expects to go public this year: "Our goal is take the stock and really the tangible assets of that stock and use that to go out and aggregate more of this country's assets in cannabis." Murphy explained that "the traditional benefits of scale for any business are dramatically amplified in the nascent world of cannabis... The difference between 'good' and 'excellent' execution is unusually large and we plan to take advantage of that by creating a template for excellence and delivering it systematically."⁸⁰⁸

On April 11, 2018, Acreage stunned the cannabis industry when it announced the appointments of former Speaker of the United States House of Representatives John Boehner and former

⁸⁰³ <https://www.acreageholdings.com/about>

⁸⁰⁴ *Id.*

⁸⁰⁵ *Id.* See also <https://www.greenmarketreport.com/industry-insiders-expect-substantial-consolidation-cannabis>; <https://www.leafly.com/news/politics/meet-acreage-holdings-john-boehners-new-cannabis-crush>

⁸⁰⁶ <https://www.bnnbloomberg.ca/video/acreage-holdings-to-go-public-in-canada~1454044>

⁸⁰⁷ *Id.*

⁸⁰⁸ <https://www.acreageholdings.com/press-release>

Governor of the State of Massachusetts Bill Weld to its Board of Advisors. Speaker Boehner and Governor Weld's joint statement said:

While we come at this issue from different perspectives and track records, we both believe the time has come for serious consideration of a shift in federal marijuana policy. Over the past 20 years a growing number of states have experimented with their right to offer cannabis programs under the protection of the 10th amendment. During that period, those rights have lived somewhat in a state of conflict with federal policy. Also, during this period, the public perception of cannabis has dramatically shifted, with 94% of Americans currently in favor of some type of access, a shift driven by increased awareness of marijuana's many medical applications.

We need to look no further than our nation's 20 million veterans, 20 percent of whom, according to a 2017 American Legion survey, reportedly use cannabis to self-treat PTSD, chronic pain and other ailments. Yet the VA does not allow its doctors to recommend its usage. There are numerous other patient groups in America whose quality of life has been dramatically improved by the state-sanctioned use of medical cannabis.

While the Tenth Amendment has allowed much to occur at the state level, there are still many negative implications of the Federal policy to schedule cannabis as a Class 1 drug: most notably the lack of research, the ambiguity around financial services and the refusal of the VA to offer it as an alternative to the harmful opioids that are ravishing our communities.

We are excited to join the team at Acreage in pursuit of their mission to bring safe, consistent and reliable products to patients and consumers who could benefit. We have full confidence in their management team and believe this is the team that will transform the debate, policy and landscape around this issue.⁸⁰⁹

Speaker Boehner tweeted that day: "I'm joining the board of #AcreageHoldings because my thinking on cannabis has evolved. I'm convinced de-scheduling the drug is needed so we can do research, help our veterans, and reverse the opioid epidemic ravaging our communities."⁸¹⁰ The tweet received 25,000 likes from some of Mr. Boehner's 1.4 million followers. The announcement, according to some reports, sent the "Internet Ablaze."⁸¹¹

Historically, Speaker Boehner was opposed to cannabis law reform. In 2011, he wrote an Ohio constituent that he was "unalterably opposed to the legalization of marijuana or any other FDA Schedule I drug."⁸¹² Spokesman David Schnittger said Mr. Boehner's evolving position has been

⁸⁰⁹ <https://www.acreageholdings.com/news-release-board-of-advisors-appointment>

⁸¹⁰ <https://twitter.com/SpeakerBoehner/status/9840227707522908181>

⁸¹¹ <https://www.thewrap.com/internet-ablaze-john-boehner-joins-marijuana-company-board/>

⁸¹² <https://www.thecannabist.co/2018/04/11/john-boehner-longtime-opponent-marijuana-reform/103361/>

the result of close study after leaving office.⁸¹³ Mr. Boehner said: “I have concluded descheduling the drug is needed so that we can do research and allow VA to offer it as a treatment option in the fight against the opioid epidemic that is ravaging our communities.”⁸¹⁴

Over the following days, Speaker Boehner explained the evolution in his thinking, in many interviews, including pointing to the failed war on drugs. He said: “Over the last 10 or 15 years, the American people’s attitudes have changed dramatically. I find myself in that same position.”⁸¹⁵ He explained: “When you look at the number of people in our state and federal penitentiaries, who are there for possession of small amounts of cannabis, you begin to really scratch your head. We have literally filled up our jails with people who are nonviolent and frankly do not belong there.”⁸¹⁶

Speaker Boehner was not deterred from joining the cannabis industry by Jeff Sessions’ January announcement to nullify the Cole Memo: “When I saw the announcement, I almost chuckled to myself,” Boehner said, “I don’t know why they decided to do this. It could be that the attorney general is trying to force the Congress to act.”⁸¹⁷

Bill Weld, former Massachusetts Governor (1991-1997), 2016 Libertarian Party Vice Presidential nominee, Chief of the Department of Justice’s Criminal Division (1986-1988), and US Attorney for the District of Massachusetts (1981-1986),⁸¹⁸ said the conventional wisdom about marijuana during the Reagan administration was that it acted as a “gateway drug” to more harmful substances. “Now there’s some evidence that it can become an exit drug” and an alternative to opioid addiction, which has become the primary public health concern in Massachusetts, Mr. Weld said.⁸¹⁹ “If some states don’t want marijuana to be legal, that’s their prerogative,” Weld said. “But that shouldn’t be dictated by the nanny state in Washington.”⁸²⁰ “Millennials who will inherit the kingdom before long, they are even more positive about cannabis than the populous at large,” Mr. Weld said. “You can look at the trend of millennial opinion and you can see the future.”⁸²¹ Mr. Boehner echoed Mr. Weld’s sentiment on forward progress. He said: “You can see where this is going. Over the next five or ten years, this will be available all over the country.”⁸²²

⁸¹³ *Id.*

⁸¹⁴ *Id.*

⁸¹⁵ <https://www.bloomberg.com/news/articles/2018-04-11/ex-speaker-john-boehner-joins-marijuana-firm-s-advisory-board>

⁸¹⁶ *Id.*

⁸¹⁷ *Id.*

⁸¹⁸ https://en.wikipedia.org/wiki/Bill_Weld

⁸¹⁹ *Id.*

⁸²⁰ <https://www.bloomberg.com/news/articles/2018-04-11/ex-speaker-john-boehner-joins-marijuana-firm-s-advisory-board>

⁸²¹ *Id.*

⁸²² <https://twitter.com/tomangell/status/1002197103374938117?s=21>

The announcement that Speaker Boehner and Governor Weld joined Acreage Holdings was a watershed moment for the cannabis industry.⁸²³ According to Mr. Murphy: “They really give us a good roadmap of how things work legislatively, and they also are compassionate men that had the courage to change their minds about cannabis, and that I believe really turned a lot of heads and its made others think about why this isn’t the scary drug that’s Schedule 1 with no medicinal value.”⁸²⁴ Mr. Murphy said: “They have a keen understanding of who’s doing what when and what motivates people in government to do what they do, and to have that knowledge in-house to really migrate through all the twists and turns is going to be a huge help for us.”⁸²⁵

George Allen, Acreage’s president said: “We view this advocacy that we get from these two gentlemen as immensely positive for the industry.”⁸²⁶ Vahan Ajamian, a leading cannabis industry analyst then at Beacon Securities, commented: “It is difficult to overstate the impact of this monumental event for the U.S. cannabis sector.”⁸²⁷ He said that Mr. Boehner’s move “should send shockwaves throughout the industry,” and that “this news should serve to ‘legitimize’ the sector and further perk up investor interest.”⁸²⁸ Erik Altieri, NORML executive director said: “Former Speaker Boehner is still held in high regard by a large percentage of the GOP membership and voter base. We look forward to his voice joining the growing chorus calling for an end to cannabis criminalization.”⁸²⁹

Speaker Boehner’s effect on the industry was felt immediately. The very evening of Mr. Boehner’s announcement on April 11, 2018, President Trump told Senator Gardner (R-CO) that despite Mr. Sessions’ January memo, the US government would not interfere with the cannabis industry (see Section IV(E).) Senator Gardner had been holding up President Trump’s DOJ nominations, but Mr. Boehner’s announcement certainly influenced the President.

Speaker Boehner and President Trump are close friends. On April 26, 2016, in a speech at Stanford University, Speaker Boehner said he has played golf with the President for years and that they are “texting buddies.”⁸³⁰ On December 7, 2016, he told an Ohio television interviewer: “When I was speaker, if I was having a tough week, I’d always get a call from Donald. He’d pat me on the back, cheer me up. He’s a good guy.”⁸³¹ In August 2013, Mr. Trump and Mr. Boehner

⁸²³ <https://www.americancannabisreport.com/single-post/2018/04/11/Cannabis-Industry-Turning-Point-Boehner-Is-In;> <https://www.cnn.com/video/2018/07/23/cannabis-company-acreage-holdings-plans-for-canadian-ipo.html>

⁸²⁴ *Id.*

⁸²⁵ <https://www.bizjournals.com/newyork/news/2018/07/23/boehner-backed-cannabis-company-raises-big-cash.html>

⁸²⁶ <https://www.bloomberg.com/news/articles/2018-04-11/ex-speaker-john-boehner-joins-marijuana-firm-s-advisory-board>

⁸²⁷ *Id.*

⁸²⁸ <https://www.businessinsider.com/john-boehner-former-house-speaker-to-join-board-of-marijuana-company-2018-4>

⁸²⁹ http://www.register-herald.com/health/boehner-wags-finger-at-republicans-opposing-legalization-of-weed/article_bbc781c0-3e99-11e8-b77d-d3312050a2a3.html

⁸³⁰ <https://www.stanforddaily.com/2016/04/28/john-boehner-talks-election-time-in-office/>

⁸³¹ <https://www.wcpo.com/longform/john-boehner-on-donald-trump-and-politics-thank-god-im-not-in-the-middle-of-this>

golfed together at one of Trump's golf courses, and Trump donated \$100,000 to a Boehner-aligned super-PAC.⁸³²

As Speaker Boehner mentioned in his April 11 statements and as he repeats often, one of his primary interests in the cannabis industry is the life-changing benefits that cannabis will bring to so many veterans suffering from PTSD and other ailments. A VA Department survey found that nearly a million veterans may be using medical cannabis,⁸³³ though the number is likely as high as four million.⁸³⁴ But the VA Department, owing to federal law, will not recommend cannabis products for patients, and has declined for the most part to study potential benefits.⁸³⁵

Acreage is dedicated to advancing the cause of veterans' access to medical cannabis. The company worked with House Committee on Veteran's Affairs Chairman Phil Roe (R-TN), Ranking Member Tim Walz (D-MN), and Representative Lou Correa (D-CA) to provide assistance and input during the drafting of the VA Medicinal Cannabis Research Act of 2018 (H.R.5520) introduced on April 16, 2018.⁸³⁶ The legislation would authorize the VA Secretary to conduct and support research on the efficacy and safety of medicinal cannabis, and require annual reports from the VA Department for the next five years on how it intends to exercise that authority.⁸³⁷ The bill has 55 co-sponsors.⁸³⁸ On May 8, 2018, the House VA Committee voted unanimously to pass the bill, which remains pending a floor vote. Co-sponsor Rep. Correa said:

Today's committee vote is a historic step for our veterans and cannabis research. For veterans throughout my district, cannabis is an invaluable medicine for managing their pain. I am honored to see such support in finally taking action to help veterans in need of medical cannabis. With the opioid crisis raging across America, it is imperative to the health and safety of our veterans that we find alternative treatments for chronic pain and service-related injuries. Opioid prescriptions for veterans have increased by 270 percent since 2003, resulting in 68,000 veterans developing an opioid addiction and a two-fold increase in accidental opioid overdose deaths. This is unacceptable.⁸³⁹

Mr. Murphy speaks frequently and passionately about helping veterans and fighting the national scourge of opioids. He said: "Opioids kill 115 Americans every day in this county. We're on a

⁸³² <http://dailycaller.com/2018/01/03/roundup-all-the-evidence-trump-knows-who-boehner-is/>

⁸³³ <https://www.ncbi.nlm.nih.gov/pubmed/28858694>

⁸³⁴ <http://wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁸³⁵ <https://www.nytimes.com/2018/07/25/us/marijuana-veterans.html>

⁸³⁶ <https://www.prnewswire.com/news-releases/acreage-holdings-supports-nations-veterans-through-va-medicinal-cannabis-research-act-of-2018-300641639.html>

⁸³⁷ *Id.*

⁸³⁸ <https://www.congress.gov/bill/115th-congress/house-bill/5520/all-info#cosponsors-content>

⁸³⁹ <https://medium.com/congressman-lou-correa/rep-correas-veterans-cannabis-research-bill-passes-committee-ad476800e479>

crusade to change that statistic.”⁸⁴⁰ Mr. Murphy said: “Acreage is committed to providing access to medicinal cannabis to those in this country who can benefit from it. I do not know of a more deserving group than our military veterans. Cannabis represents a new frontier in medicine and we need to support veterans in both access and research. Introducing this bill is a necessary step to make that happen.”⁸⁴¹ George Allen, Acreage’s President, said: “When 20 percent of veterans do this, each of them put their VA benefits at risk. This is a community self-declaring that there’s a medical benefit to cannabis to treat anxiety and pain, not simply to get stoned. They want a consistent experience that’s reliable for a long period of time. This is where the industry is really evolving and that’s where we’re taking and running with it.”⁸⁴²

On July 23, 2018, Acreage announced that it had raised \$119 million in a private placement round, the largest cannabis funding round in US cannabis history,⁸⁴³ and one of the largest cannabis industry capital raises ever.⁸⁴⁴ Acreage received interest from a broad selection of high-net-worth individuals and family offices in the United States, Canada and other overseas markets.⁸⁴⁵ A large portion of Acreage’s investors are doctors.

Mr. Murphy said: “The response we received from our investor partners was profoundly encouraging. The combination of monies raised and the rollup [of Acreage-invested companies] cements Acreage as one of the best capitalized companies in the industry with a footprint that is second to none. This gives us an exceptionally strong investment proposition to bring into the public markets in our upcoming listing.”⁸⁴⁶

According to Mr. Allen, despite Acreage’s incredible fundraising success, untold billions remain on the sidelines: “I think there’s still some reticence to invest at the institutional levels, specifically pension funds or pension-fund backed investment vehicles. The reason for that largely remains that there’s an issue in the United States around banking prohibitions and the notion that an investment into Acreage Holdings can have downstream implications for whatever pension fund or investment vehicle that invests in us for the rest of their business. Until that gets cleaned up, our expectation is for the most part institutional investors will be sidelined from this opportunity.”⁸⁴⁷

⁸⁴⁰ <http://wsw.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁸⁴¹ <https://www.prnewswire.com/news-releases/acreege-holdings-supports-nations-veterans-through-va-medicinal-cannabis-research-act-of-2018-300641639.html>

⁸⁴² <https://familyofficeinsights.com/pir-qa/george-allen/>

⁸⁴³ <https://mjbizdaily.com/marijuana-operator-acreege-holdings-announces-landmark-119-million-funding/>

⁸⁴⁴ <https://www.bizjournals.com/newyork/news/2018/07/23/boehner-backed-cannabis-company-raises-big-cash.html>

⁸⁴⁵ *Id.*

⁸⁴⁶ <https://www.thestreet.com/investing/acreege-holdings-raises-119-million-in-funding-round-14658316>;
<https://www.greenmarketreport.com/acreege-holdings-raises-119-million-possibly-largest-private-round-in-u-s-cannabis-industry/>

⁸⁴⁷ <https://mjbizdaily.com/marijuana-operator-acreege-holdings-announces-landmark-119-million-funding/>

Investor interest in Acreage abounds in the US. According to Speaker Boehner, “There isn’t one day that has gone by since I joined Acreage that someone hasn’t stopped me to talk to me about investing in cannabis or their experience with cannabis.”⁸⁴⁸

This Fall, the company expects to be listed on the Canadian Securities Exchange through an RTO (reverse takeover) transaction. Mr. Murphy said: “We are planning on listing on the CSE for many reasons, including the positive reception that the Canadian institutional investment community has shown to the U.S. cannabis industry and to Acreage in particular. Additionally, the CSE has become the exchange of choice for U.S. companies like ours. The liquidity on the CSE is incredibly attractive to Acreage, and we know that retail investors in the U.S. have become comfortable with that exchange.”⁸⁴⁹

Cannabis industry investors and analysts have high expectations for Acreage’s public offering. According to one analyst: “I think Acreage Holdings stock has explosive upside potential. It received broad media coverage, including multiple TV appearances by its CEO. While some analysts believe that doesn’t matter, studies show that familiarity generates strong impressions in low-information contexts. So, it really does matter that Murphy was seen on Bloomberg and CNBC. Also, don’t forget about Boehner and Weld. Those two political insiders are—in addition to advising the company on legal and regulatory matters—giving a lot of credibility to what might just become a very successful IPO.”⁸⁵⁰

Whether Acreage will one day reach the Fortune 100 is anyone’s guess, but the company has the leadership team, foundation, positioning, and vision to be dominant in the US cannabis industry.

B. Cresco Labs

Chicago-based Cresco Labs is likely the second-largest cannabis company in the US. Cresco operates cultivation, extraction/processing, and dispensary facilities in six states: Illinois, Pennsylvania, Ohio, Nevada, California, and Arizona. Cresco’s footprint across those states includes over 88 million residents. Cresco has 760,000 square feet of cultivation capacity – estimated to be the largest in the US.⁸⁵¹ According to the company: “We are industry experts - leading the cannabis conversation with a dogged dedication to developing quality cannabis products, each one obsessively researched and refined. Our fixation on regulatory compliance, passionate product improvement, and innovation have made us one of the fastest growing companies in the industry.”⁸⁵²

⁸⁴⁸ <http://wsj.com/webcast/canaccord30/keynote2/?lobby=true&day=2>

⁸⁴⁹ <https://www.newcannabisventures.com/acreage-holdings-raises-119-million-ahead-of-fall-cse-listing/>

⁸⁵⁰ <https://www.profitconfidential.com/stock/acreage-holdings-stock/acreage-holdings-ipo-going-to-be-big-deal/>

⁸⁵¹ <https://www.newcannabisventures.com/multi-state-cannabis-operator-cresco-labs-expands-into-several-western-states/>

⁸⁵² <https://www.crescolabs.com/>

Cresco has won ten licenses in the most competitive, highly-regulated markets including the highest three scores in Illinois, the second highest score in Pennsylvania, and the seventh highest score in Ohio. Cresco has achieved 100-percent market penetration in Illinois and Pennsylvania, and the highest market share in both of those markets at 25 percent and 45 percent, respectively.

According to CEO Charles Bachtell: “We’ve been rewarded by focusing on our original mission – elevating and normalizing cannabis by committing to regulatory compliance and fundamental business practices. There’s no trick to it. We wanted to build the model for regulated cannabis, and we’re doing it.”⁸⁵³ Mr. Bachtell explained: “I was an attorney in the most scrutinized and regulated industry in America [mortgages] from 2007 to 2015 and now I’m an operator in the most scrutinized and regulated industry in America from 2015 going forward. It’s just a different subject matter. Arguably I’m a bit more passionate about this. While I liked mortgages, you’re not helping people deal with nausea from cancer, and you’re not part of a cultural shift. You’re not impacting the criminal justice system in the way this program allows you to.”⁸⁵⁴

Founded in Illinois, a state with a new but rapidly-growing medical cannabis program, Cresco has focused extensively on the medical aspects of cannabis. Cresco’s website contains a comprehensive guide for patients and doctors with information on research, products, cannabis-based treatments and animated how-to videos to answer patient questions.⁸⁵⁵

Cresco has also invested significantly in educating the public, especially in the Midwest, about the medicinal and wellness benefits of cannabis. In Illinois, in October 2015, Cresco launched a million-dollar “State of Relief” campaign, spending on print advertising, radio commercials, billboards, social media and in health-related publications to educate about Illinois’ medical cannabis program.⁸⁵⁶ Cresco won a Healthcare Marketing Report National Healthcare Advertising Award for the campaign, the first cannabis company to receive that honor.⁸⁵⁷

A day after Illinois Governor Rauner signed the Alternative to Opioids Act, on August 29, 2018 Cresco launched a multi-state awareness campaign with the message that cannabis is legal medicine in 30 states and a non-lethal, less-addictive option for treating pain than prescription opioids.⁸⁵⁸ As part of the campaign, Cresco is placing vending machines in high-traffic locations filled with replica narcotic pill bottles with messaging focused on #NOpioid and

⁸⁵³ <https://www.cannabisbusinessexecutive.com/2018/04/cresco-labs-oh-year/>

⁸⁵⁴ <http://www.chicagotribune.com/business/ct-cresco-labs-marijuana-bachtell-exec-qa-0122-biz-20170117-story.html>

⁸⁵⁵ <https://www.crescolabs.com/learn-about-cannabis/>

⁸⁵⁶ <https://www.newcannabisventures.com/the-million-dollar-medical-marijuana-ad-campaign-from-cresco-labs/>

⁸⁵⁷ <https://www.ganjapreneur.com/illinois-cresco-labs-first-mmj-company-to-win-healthcare-marketing-report-advertising-award/>

⁸⁵⁸ <https://www.marketwatch.com/press-release/narcotic-bottle-filled-vending-machine-promotes-medical-cannabis-as-pain-treating-alternative-to-harmful-opioids-2018-08-29>

#NObituary, accompanied by vignettes from people whose lives were changed when they switched from prescription opioids to cannabis.⁸⁵⁹

To guide its education and marketing strategy initially, Cresco identified two main groups in the Illinois market—the patients who had already accepted cannabis, and the ones who had never tried it before but who were recommended it by their doctors. “That made us look at what cannabis is, how cannabis should be marketed, how cannabis should be branded, how it should be packaged—it made us look at that differently than I think a lot of the existing operators in the existing markets needed to,” Mr. Bachtell said. “From day one, we worked on developing a brand suite, and we worked heavily—we put a ton of effort and focus and attention of developing messaging and marketing that was directed to the different market segments—the person who’s never tried it, the 65-year-old grandmother who swore she would never do this, to the consumer who’s already OK with it, to the connoisseur who’s going to participate in this program and is sophisticated and knowledgeable.”⁸⁶⁰

Cresco has 110,000 square feet of cultivation in Illinois in three facilities and operates a dispensary.⁸⁶¹ Some of Cresco’s 250 various cannabis products are sold in every one of the state’s 60 dispensaries.⁸⁶² Cresco’s product lines include:

- “Cresco” branded “elevated everyday cannabis. THC-focused products available in flower, vape pens, and multiple forms of extracts. Each product falls into one of three proprietary categories: Rise, Refresh, Rest, named and color-coded to help the user intuitively identify the desired effects of the relevant strain’s cannabinoid.”
- “Reserve” branded products designed for “more discerning palates, Reserve is a manifestation of the best efforts of our strains. Reserve products are made from our most premium and exclusive plants, and are the reward of years of selective breeding. Masterful cultivation techniques coax the ideal expression of each cultivar. These exceptional products are sought-after by premium cannabis connoisseurs.”
- “Remedi products are designed for the medically-minded patient, with forms reminiscent of traditional pharmaceuticals. All Remedi products are CBD or CBN forward with an emphasis on balanced THC levels. Remedi gives patients consistent, dependable relief. Options provide precisely-dosed non-combustible products including tinctures, capsules, salves, sublingual oils and transdermal patches.”

⁸⁵⁹ <https://chicago.suntimes.com/business/medical-marijuana-weed-cresco-labs-opioids/>

⁸⁶⁰ <http://www.cannabisbusinesstimes.com/article/cresco-labs-announces-expansion-three-new-markets/>

⁸⁶¹ <https://www.crescolabs.com/about-cresco/>; <https://www.cannabisbusinessexecutive.com/2018/04/cresco-labs-oh-year/>

⁸⁶² <https://www.usnews.com/news/best-states/pennsylvania/articles/2017-10-17/medical-marijuana-grower-gets-green-light-in-pennsylvania>

- “Mindy’s Edibles” products (created by James Beard Award Winning Chef Mindy Segal) sold in 56 of Illinois 60 dispensaries, and in Pennsylvania. That product line is expected to generate \$5 million in 2018 revenues and move into Nevada, California, and Ohio.⁸⁶³

In Pennsylvania, Cresco is the primary supplier for medical cannabis products to many of the state’s dispensaries, which have seen shortages due to excessive demand.⁸⁶⁴ For months in 2018, Cresco was the only operating cannabis grower and processor in Pennsylvania,⁸⁶⁵ supplying all of the state’s dispensaries with products.⁸⁶⁶ When Pennsylvania first allowed dry leaf cannabis to be sold in its medical cannabis dispensaries on August 1, 2018, a “game-changer” for medical cannabis in Pennsylvania,⁸⁶⁷ Cresco supplied all 16 of the state’s operational dispensaries with dry leaf cannabis including two of its own dispensaries in Pittsburgh and Bulter.⁸⁶⁸

Cresco’s Pittsburgh dispensary opened on June 27, 2018. The 8,000-square-foot facility is the largest in the state. It carried 100 different cannabis products before the addition of more than 30 strains of cannabis dry leaf in August. The dispensary can accommodate up to 400 patients per day and the dispensary complex also houses a cannabis education center.⁸⁶⁹

In Ohio, Cresco will complete construction on its purpose-built 50,000-square-foot facility in Yellow Springs, divided between cultivating and processing,⁸⁷⁰ in late August 2018.⁸⁷¹ After also winning a dispensary license in Ohio (there were 375 applications), Cresco is one of only five fully vertically-integrated operators in the state (population 11.7 million).⁸⁷²

In Nevada, Cresco owns cultivation and processing facilities, and one of the most productive adult-use dispensaries located just off the strip in Las Vegas.⁸⁷³ In California, Cresco partnered with one of the largest indoor commercial farming networks in California and will have immediate access to up to 600,000 square feet of already-constructed indoor cultivation facilities as product demand dictates. Cresco has also entered into a lease arrangement with Canna-Hub at

⁸⁶³ <http://www.chicagobusiness.com/article/20180517/ISSUE01/180519917/mindy-segal-disrupts-medical-marijuana-with-edible-candies>

⁸⁶⁴ <http://www.theintell.com/news/20180313/sellersville-medical-marijuana-dispensary-out-of-stock>

⁸⁶⁵ <https://triblive.com/news/healthnow/13313069-74/how-much-is-medical-marijuana-in-pennsylvania-prices-are-coming-into-focus>

⁸⁶⁶ <http://www.theintell.com/news/20180313/sellersville-medical-marijuana-dispensary-out-of-stock>

⁸⁶⁷ <http://www2.philly.com/philly/business/cannabis/medical-marijuana-flower-cannabis-buds-gov-wolf-20180726.html>

⁸⁶⁸ https://lancasteronline.com/news/local/watch-pennsylvania-company-cresco-yeltrah-process-medical-marijuana-video/article_75617c72-94ed-11e8-91cd-ef0da73fa32a.html

⁸⁶⁹ <https://www.nextpittsburgh.com/latest-news/crescoyeltrah-opens-in-the-strip-as-pas-largest-medical-marijuana-dispensary/>; <https://gantdaily.com/2018/08/01/cresco-yeltrah-delivers-a-dozen-strains-of-dry-leaf-medical-marijuana-to-pennsylvania-dispensaries/>

⁸⁷⁰ <https://www.daytondailynews.com/news/greene-county-medical-marijuana-grower-closer-opening-its-huge-new-facility-what-you-should-know/oQ9hiV49tKSExZy5fbxMwK/>

⁸⁷¹ <https://www.wdtn.com/news/local-news/yellow-springs-medical-marijuana-cultivator-to-open-soon/1340125592>

⁸⁷² <https://www.newcannabisventures.com/cresco-labs-awarded-ohio-medical-cannabis-dispensary-license/>

⁸⁷³ <https://www.crescolabs.com/cresco-labs-expands-into-several-western-states/>

their zoning-approved Mendota, California location where Cresco will operate their processing and manufacturing facility producing their full suite of award-winning concentrates, vape pens and infused edible line. In Arizona, Cresco owns a vertically-integrated license with cultivation, processing, and one dispensary location near Phoenix.⁸⁷⁴

Like other large US cannabis companies, Cresco is pursuing opportunities for acquisitions and aggregation of cannabis assets in additional states including New York, New Jersey, and Florida. Cresco plans to become publicly-listed on the Canadian Securities Exchange in the Fall 2018.

C. 4Front Ventures

4Front Ventures is another multi-state vertically-integrated US cannabis company, with licenses in four states: Illinois, Pennsylvania, Massachusetts, and Maryland.⁸⁷⁵ 4Front operates two of its Mission-branded dispensaries, one in Chicago and one in Allentown, Pennsylvania,⁸⁷⁶ and expects to have at least seven dispensaries open across the Northeast by the end of the 2018.⁸⁷⁷ 4Front is also pursuing opportunities for expansion in other states. The company has strong relationships with the leading US industry executives and supporters.

4Front is not as large as Acreage or Cresco, but it is a standout amongst the large multi-state vertically-integrated companies. According to 4Front: “Our team members care deeply about the promise of medical cannabis and we are putting conscious capital to work in order to create an inclusive and accountable industry that provides for the health and wellness of our patients, supports the communities where we do business, and creates respectable jobs. In order to stay true to this mission, each decision we make is informed by our guiding principles of integrity, compassion, and accountability.”⁸⁷⁸

In its early days, 4Front provided guidance through the regulatory and licensing process, having licensed the intellectual property from a company associated with Harborside, the largest dispensary in California founded by Steve DeAngelo.⁸⁷⁹ 4Front obtained 50 operating licenses for partners in some of the country’s most competitive markets.⁸⁸⁰ In 2015, the company decided to actively pursue acquiring its own licenses. 4Front’s co-founder and President Kris Krane is a lifelong drug policy reform advocate, previously holding executive positions at NORML and Students for Sensible Drug Policy. His drive to eliminate cannabis stigma and expand appropriate access is a big part of the company’s culture.⁸⁸¹ Mr. Krane is highly-respected in the

⁸⁷⁴ *Id.*

⁸⁷⁵ <https://www.newcannabisventures.com/4front/>

⁸⁷⁶ <https://www.newcannabisventures.com/4front-ramps-up-cannabis-dispensary-operations-and-prepares-to-go-public/>

⁸⁷⁷ <https://www.newcannabisventures.com/4front-adds-two-key-marketing-and-design-executives/>

⁸⁷⁸ <https://4frontventures.com/values.html>

⁸⁷⁹ <https://www.newcannabisventures.com/4front-ramps-up-cannabis-dispensary-operations-and-prepares-to-go-public/>

⁸⁸⁰ <https://4frontventures.com/>

⁸⁸¹ *Id.*

industry, and a thought leader and frequent writer.⁸⁸² 4Front recently added to its Board of Directors an early pioneer in the Canadian cannabis industry, Tom Flow, a co-founder of MedReleaf (sold to Aurora for more than \$2.5 billion),⁸⁸³ and the company completed a \$13.4 million private placement round.⁸⁸⁴

4Front's CEO Josh Rosen, formerly a vice president at Credit Suisse, said 4Front's people and heritage sets it apart,⁸⁸⁵ and his own transition from Wall Street to cannabis was motivated by the opportunity to apply his financial services and analytic acumen to affect social change.⁸⁸⁶ He said: "We are particularly excited about how dynamic the industry is proving to be and how we're seeing significantly greater traction both from a policy standpoint as well as just from an overall sentiment standpoint as it relates to providing safe and secure access to cannabis."

Like Acreage and Cresco, 4Front plans to list on the Canadian Securities Exchange this year.

D. iAnthus Capital

iAnthus Capital Holdings, Inc. (CSE:IAN; OTC:ITHUF) is a leading publicly-traded US multi-state, vertically integrated cannabis company. iAnthus became one of the first US cannabis companies with a multi-state strategy to go public when it listed on the Canadian Securities Exchange in September 2016. iAnthus CEO Hadley Ford laid out the company's vision:

We believe there is a significant opportunity to provide financing to the U.S. cannabis industry right now. This is an existing \$50 billion industry moving from a shadow economy to a legalized, highly-regulated business opportunity governed by individual state laws and regulatory systems. There is a serious lack of investment capital currently available to fund this industry transition. iAnthus is poised to fill that gap by sourcing capital through the Canadian public markets, thereby offering the opportunity to participate in the industry's growth to the investment community as well.⁸⁸⁷

Initially, the company focused its efforts on Colorado as an entry to the US market, but the company ultimately pivoted to the East Coast due to regulatory barriers for out-of-state owners in Colorado and, perhaps more importantly, the recognition that state markets with a limited number of licenses create a high barrier to entry, which guaranteed substantial market share once operational. "We typically look for states with large addressable markets," explained Mr. Ford.

⁸⁸² <https://www.forbes.com/sites/kriskrane/#3fafc4659ed1>

⁸⁸³ <https://business.financialpost.com/cannabis/aurora-closes-on-medreleaf-in-largest-cannabis-takeover-yet>

⁸⁸⁴ <https://www.prnewswire.com/news-releases/4front-raises-13-4m-in-series-d-funding-round-and-adds-to-board-of-directors-300674364.html>

⁸⁸⁵ <https://www.newcannabisventures.com/4front-ramps-up-cannabis-dispensary-operations-and-prepares-to-go-public/>

⁸⁸⁶ *Id.*

⁸⁸⁷ <http://www.marketwired.com/press-release/ianthus-capital-holdings-inc-commences-trading-on-canadian-securities-exchange-under-2156199.htm>

“So, that would start with a large population. A full rec program would be nice, but if it’s not full rec then we want to see a lot of indications and a lot of ingestion methods. And then also the ability to get a card to be treated. That’s how we pick our markets, and so far we’ve been very successful in these efforts.”⁸⁸⁸

iAnthus also opted to focus their expansion efforts on one of the most appealing aspects of certain US markets discussed above: vertical integration. “We’re vertically integrated,” Mr. Ford explains. “Investors have a choice to be north or south of the border. When you’re south of the border, you’re getting a retail margin; north of the border, you’re getting a wholesale margin. So I think people would be very excited in Canada if they could sell product at \$6.00 or \$7.00 a gram; we’re selling product at \$10.00, \$11.00, \$12.00 a gram, and we get to capture all that retail margin as part of the value for the investor.”⁸⁸⁹

Initially, iAnthus entered each of their state markets by partnering with an existing licensed operator by providing a loan facility and/or acquiring a minority interest in the company. Those opening investments were then converted to 100-percent ownership positions in four states: Florida (GrowHealthy Holdings, LLC), Massachusetts (Mayflower Medicinals), New York (Citiva Medical, LLC) and Vermont (Grassroots Vermont). iAnthus also has ongoing strategic investments in two more states— Colorado (Organix) and New Mexico (Reynolds Greenleaf & Associates)—with a partial ownership interest in each company.

Unlike other multi-state operators, all of iAnthus’ state licenses were acquired, rather than obtained by application. iAnthus has not sought any licenses by way of application—including in states like Ohio and Pennsylvania—though iAnthus will certainly be looking at neighboring New Jersey and other states.

iAnthus is currently focused on constructing and permitting of their cultivation, processing and retail facilities in all of their key markets, with a total of six dispensaries and four cultivation facilities operational at this time. The following is a brief summary of the status of each market:

Florida - In January 2018, iAnthus acquired 100-percent ownership of GrowHealthy Holdings, LLC, which holds one of only fourteen medical cannabis licenses currently issued in Florida.⁸⁹⁰ GrowHealthy—through its affiliate McCrory’s Sunny Hill Nursery LLC, which iAnthus has the right to purchase for a nominal fee upon state approval—is a vertically integrated cannabis operation licensed to cultivate, process, transport and dispense medical cannabis.⁸⁹¹

GrowHealthy’s cultivation operation is a partnership with four Central Florida nurseries, each with over 30 years of horticultural cultivation, operations and financial reporting experience and

⁸⁸⁸ <https://www.youtube.com/watch?v=4gcBuaByjSU&t=67s>

⁸⁸⁹ <https://www.youtube.com/watch?v=dYK6WF9SWJg&t=14s>

⁸⁹⁰ <https://www.ianthuscapital.com/news/press-releases/detail/56/ianthus-capital-acquires-medical-cannabis-business-of>

⁸⁹¹ *Id.*

expertise.⁸⁹² GrowHealthy's cultivation and processing facilities are centrally located in Lake Wales. Roughly 25,000 square feet of the facility has been operational since April 2017, with areas dedicated to vegetation, flowering, extraction, commercial kitchen and packaging.⁸⁹³ The cultivation operation is a state-of-the-art indoor hydroponic system, with an automated, palletized benching system.⁸⁹⁴ The facility has an additional 125,000 square feet available for expansion, a portion of which is under construction slated to be complete by Q2 2019.⁸⁹⁵

Florida sales commenced on November 13, 2017, through the company's state-wide delivery program.⁸⁹⁶ GrowHealthy now operates five delivery vehicles that service the entire state out of its West Palm Beach dispensary, which is not yet open to the public.⁸⁹⁷ The company recently reported that it has signed leases for seven dispensary locations, with another dozen prospects in the works. By the end of 2018, the company expects it will have fifteen signed leases.

The company initially expected to open its flagship West Palm Beach dispensary in July 2018,⁸⁹⁸ but that target was delayed to Q4 2018. Three dispensaries are scheduled to open in Q4 2018: West Palm Beach, Tampa and Orlando. Four more locations are leased—Miami, Deerfield Beach, Brandon and Sarasota—with a stated goal of opening two new dispensaries per quarter in 2019.⁸⁹⁹ GrowHealthy's license permits it to open as many as 25 dispensaries in Florida.

Massachusetts - iAnthus has been invested in the Massachusetts market for several years through its now wholly-owned subsidiaries Mayflower Medicinals, Inc. and Pilgrim Rock, LLC. Mayflower owns and operates a 36,000-square-foot cultivation and processing facility in Holliston, which is capable of producing 2,625 kg annually. The Holliston operation is billed as "a state-of-the-art cannabis cultivation, commercial kitchen and processing ... facility outfitted with sophisticated automated systems including lighting, fertigation, and environment controls that enable high production levels and quality while reducing labor and operating costs."⁹⁰⁰ The Holliston facility began production in January 2018,⁹⁰¹ undertook its first harvest and extraction cycle in April 2018,⁹⁰² and reached full operational capacity in July 2018.⁹⁰³

⁸⁹² <https://growhealthy.com/our-nurseries/>

⁸⁹³ <https://www.ianthuscapital.com/operations/core-operations/growhealthy>

⁸⁹⁴ <https://www.ianthuscapital.com/news/press-releases/detail/56/ianthus-capital-acquires-medical-cannabis-business-of>

⁸⁹⁵ <https://www.ianthuscapital.com/operations/core-operations/growhealthy>

⁸⁹⁶ *Id.*

⁸⁹⁷ <https://www.newswire.ca/news-releases/ianthus-highlights-cultivation-expansion-and-dispensary-plans-in-operational-update-for-growhealthy-690905011.html>

⁸⁹⁸ <https://www.ianthuscapital.com/news/press-releases/detail/56/ianthus-capital-acquires-medical-cannabis-business-of>

⁸⁹⁹ <https://www.newswire.ca/news-releases/ianthus-highlights-cultivation-expansion-and-dispensary-plans-in-operational-update-for-growhealthy-690905011.html>

⁹⁰⁰ <https://ir.ianthuscapital.com/press-releases/detail/53/mayflower-medicinals-receives-final-authorization-to-begin>

⁹⁰¹ *Id.*

⁹⁰² <https://ir.ianthuscapital.com/press-releases/detail/66/ianthus-completes-full-acquisition-of-pilgrim-rock>

⁹⁰³ <https://ir.ianthuscapital.com/press-releases/detail/77/mayflower-medicinals-opens-flagship-cannabis-dispensary-in>

Massachusetts medical cannabis sales commenced on June 25, 2018, through the company's patient home delivery program. Shortly thereafter, the company opened its first dispensary in the state on July 19, 2018. Located on Harvard Avenue, in the Allston neighborhood of Boston, this was the second dispensary opened in Boston.⁹⁰⁴ The location is currently a medical dispensary, though the company will convert it to adult-use sales as soon as permitted by the state following testing laboratory finalization, likely by the end of September.⁹⁰⁵

iAnthus has a second dispensary location in development in Lowell, for which the company has a signed lease and a provisional license from the state. The company has a third dispensary location in development, which management has suggested would be in Worcester.⁹⁰⁶ Given that Massachusetts' adult-use dispensary approval process has been plagued by regulatory delays,⁹⁰⁷ it is difficult to predict when the Lowell and Worcester sites might open.

New York - On February 1, 2018, iAnthus acquired 100 percent of Citiva Medical, LLC, which holds one of only ten vertically-integrated medical cannabis licenses in New York, for \$18 million.⁹⁰⁸ Citiva's license allows it to build and operate a cultivation and processing facility and four dispensaries.

Citiva's cultivation and processing facility is located on the grounds of the former Mid-Orange State Correctional Facility in the Town of Warwick, New York.⁹⁰⁹ The company began construction of this facility in late-July.⁹¹⁰ Phase 1 of the Warwick build-out was upsized from an initial footprint of 20,000 square feet to 39,500 square feet,⁹¹¹ in anticipation of statewide supply shortages in 2019.⁹¹² Completion of the upsized Phase 1 facility is expected in Q2 2019, with an anticipated production capacity of 2,400 kg annually.⁹¹³ The Warwick facility will be a state-of-the-art perpetual harvest facility. The property will support scaling up to 125,000 square feet of cultivation and processing space, with plans to begin a second build-out phase in 2020.⁹¹⁴ Given

⁹⁰⁴ *Id.*

⁹⁰⁵

https://d1io3yog0oux5.cloudfront.net/_12db4b0680fc5175f2daecec8854b28a/ianthuscapital/db/301/1283/conference_call_audio/3789726.mp3

⁹⁰⁶ *Id.*

⁹⁰⁷ <https://merryjane.com/news/massachusetts-slow-to-license-pot-shops-could-delay-recreational-sales-start>

⁹⁰⁸ <http://www.marketwired.com/press-release/ianthus-closes-acquisition-citiva-medical-citiva-usa-gaining-access-new-yorks-population-cse-ian-2245328.htm>

⁹⁰⁹ <http://www.warwickadvertiser.com/apps/pbcs.dll/article?AID=/20180524/NEWS01/180529986/Citiva-Medical-purchases-property-at-former-Mid-Orange-Correctional-facility-to-grow-medical-marijuana>

⁹¹⁰ <https://www.ianthuscapital.com/news/press-releases/detail/78/ianthus-subsiadiary-citiva-medical-announces-groundbreaking>

⁹¹¹ <https://ir.ianthuscapital.com/press-releases/detail/59/ianthus-closes-acquisition-of-citiva-medical-and-citiva>

⁹¹²

https://d1io3yog0oux5.cloudfront.net/_12db4b0680fc5175f2daecec8854b28a/ianthuscapital/db/301/1283/conference_call_audio/3789726.mp3

⁹¹³ <https://ir.ianthuscapital.com/press-releases/detail/59/ianthus-closes-acquisition-of-citiva-medical-and-citiva>

⁹¹⁴ *Id.*

that the Warwick site will not provide any product until Q2 2019, iAnthus will likely need to purchase product wholesale from an existing licensed cultivator to supply its dispensaries.⁹¹⁵

Citiva's medical cannabis license currently permits a total of four dispensaries, to be located in Brooklyn, Staten Island, Dutchess County and Chemung County. In February 2018, iAnthus secured a lease for its Downtown Brooklyn location, at 205 Flatbush Avenue, just across from the Barclay's Center and Atlantic Terminal, a very high-traffic location. Citiva's Brooklyn dispensary will be one of only two dispensaries permitted in the borough, which has a population of 2.6 million residents. The Brooklyn dispensary is nearing completion of build-out and is slated to open in Q4 2018.⁹¹⁶ Citiva's Staten Island location will be the only dispensary servicing the island's 500,000 residents. It is also slated to open in Q4 2018. Citiva's final two dispensaries will be located in Wappinger Falls (Dutchess County) and Big Flats (Chemung County), with tentative plans to open in 2019.

Vermont - GrassRoots Vermont Management Services, LLC is a wholly-owned subsidiary of iAnthus. Grassroots Vermont holds one of only five medical cannabis licenses in Vermont. The company recently upgraded their cultivation and processing facility to a total footprint of 6,900 square feet, including increased cultivation space, a commercial kitchen and improvements to processing equipment. The facility is now capable of producing 200 kg of cannabis annually. Grassroots Vermont has one operational dispensary in Brandon, with plans to begin construction soon on a second dispensary in Williston.⁹¹⁷

New Mexico - iAnthus has 24-percent equity ownership of Reynolds Greenleaf & Associates. In partnership with RG&A, iAnthus manages three cultivation facilities that collectively house 1,200 plants, a 10,000-square-foot manufacturing facility, and three Licensed Non-Profit Producers that collectively own six medical dispensaries with plans to add two more in the near future.⁹¹⁸ The financial results of Reynolds Greenleaf are not currently consolidated with iAnthus due to the minority ownership position.⁹¹⁹

Colorado - In December 2016, iAnthus acquired 100 percent of the real estate and non-cannabis assets of Organix, LLC. Organix is a medical and adult-use cannabis company with a 12,000-square-foot cultivation and processing facility in Denver and a retail dispensary in Breckenridge, which reportedly has an estimated 30 percent market share of Breckenridge.⁹²⁰ iAnthus owns all

⁹¹⁵ <https://www.ianthuscapital.com/operations/core-operations/citiva>

⁹¹⁶ <https://ir.ianthuscapital.com/press-releases/detail/60/ianthus-signs-leases-for-high-traffic-dispensary-locations>

⁹¹⁷ <https://www.ianthuscapital.com/operations/core-operations/grassroots-vermont;>
https://d1io3yog0oux5.cloudfront.net/_12db4b0680fc5175f2daecec8854b28a/ianthuscapital/db/301/1283/conference_call_audio/3789726.mp3

⁹¹⁸ <https://www.ianthuscapital.com/operations/strategic-partnerships/reynold-greenleaf-associates>

⁹¹⁹ https://d1io3yog0oux5.cloudfront.net/_12db4b0680fc5175f2daecec8854b28a/ianthuscapital/db/301/1283/conference_call_audio/3789726.mp3

⁹²⁰ <https://www.ianthuscapital.com/operations/strategic-partnerships/organix>

of the equipment, brand and intellectual property of Organix.⁹²¹ Because Colorado law prohibits out-of-state ownership of cannabis assets, iAnthus has not assumed 100-percent ownership of Organix. Organix financial results also cannot be consolidated onto iAnthus' books. Instead, profit generated by the company is paid to iAnthus through management and services agreements. All revenue generated by Organix to date has been re-invested in the company.⁹²²

iAnthus' expansion strategy involves building a dozen dispensaries, a brand-new cultivation facility in New York, and expansion of its existing cultivation facility in Florida, all by Q2 2019. This strategy will obviously result in substantial capital expenses. iAnthus estimates that capital expenditures, on average, for each dispensary build-out will be roughly \$500,000.⁹²³ Assuming iAnthus meets its near-term dispensary expansion goals, the company will construct seven dispensaries in Florida, four in New York, two in Massachusetts and one in Vermont between now and mid-year 2019, for a total dispensary capex estimate of \$7 million. Management estimated that the cultivation and processing facility in Warwick, NY would require roughly \$7 million,⁹²⁴ though this estimate was based on the initial design footprint which was later expanded by 45 percent. Finally, the estimated capex for the current expansion of the Lake Wales (FL) cultivation and processing facility is \$8.1 million.⁹²⁵ Combined, the capex needed for the company's stated expansion plans is roughly \$25 million.

iAnthus expects to cover these projected capital expenses, in part, with the proceeds of a recent investment by Gotham Green Partners, a New York-based private equity firm focused on deploying capital into cannabis and cannabis-related enterprises.⁹²⁶ This raise generated net proceeds of approximately \$46 million after fees and costs. A portion of those funds were used to pay off the remaining balance of a \$20 million loan. After payoff, net proceeds to iAnthus capital were expected to be roughly \$32 million. iAnthus intends to use this cash to fund their announced cultivation and dispensary build-outs and pursue expansion.⁹²⁷ Reflecting on the benefits of the raise, Mr. Ford said: "There are two things in the US world of cannabis that you find a dearth of in today's environment. One is money, the other is people. With Gotham Green, we find ourselves in the rare instance of having killed two birds with one stone. These are some exceptionally knowledgeable and savvy investors. They provide money, but they also bring a team that helps build great companies."⁹²⁸

⁹²¹ *Id.*

⁹²²

https://d1io3yog0oux5.cloudfront.net/_12db4b0680fc5175f2daecec8854b28a/ianthuscapital/db/301/1283/conference_call_audio/3789726.mp3

⁹²³ <https://soundcloud.com/reddit-user/ianthus-capital-holdings-conference-call-may-14-2018-recording/s-JX9tI>

⁹²⁴ *Id.*

⁹²⁵ <https://www.newswire.ca/news-releases/ianthus-highlights-cultivation-expansion-and-dispensary-plans-in-operational-update-for-growhealthy-690905011.html>

⁹²⁶ <https://www.newswire.ca/news-releases/gotham-green-partners-invests-us50-million-in-ianthus-to-accelerate-growth-initiatives-682577151.html>

⁹²⁷ *Id.*

⁹²⁸ <https://soundcloud.com/reddit-user/ianthus-capital-holdings-conference-call-may-14-2018-recording/s-JX9tI>

The Gotham Green capital raise added substantially to iAnthus' fully diluted share count. Currently, the company has 50,092,039 shares issued and outstanding plus an additional 58,485,090 reserved for issuance, for a fully diluted share count of 108,577,129. This places iAnthus Capital's fully diluted market cap at approximately \$600 million USD, based on a \$5.50 USD share price.

iAnthus reported its Second Quarter 2018 financial results on August 29, 2018. Given that the company is in full build-out mode, the report showed substantial increases to capital expenses and operating expenses. Looking forward to 2019, CEO Hadley Ford offered the following guidance:⁹²⁹

- [Cost of Goods COGS] varies widely depending upon which state you're in and which methods you're using, but it'll typically be between \$1.50 to \$2 a gram. And it'll be a little bit less if you're shifting towards green house. A bit more if you're indoor.
- We would expect to see EBITDA margins in the mid-to-low 30s, I would think, on a steady-state basis
- [Revenue ramp projections are] a little bit of a wild card because we're growing. We're building. So it's really, you know, when do you open? If you're opening in April vs. May that has a big impact for the year's revenues. But my guess would be between \$20M and \$30M of revenue in 2018, and that would ramp 3x or 4x going into 2019. Because that's all greenfield. A 48-million-person addressable market greenfield operation, that's going to be an incredibly fast ramp.

E. Other Companies

Chicago-based *Green Thumb Industries* (CSE:GTI; OTC:GTBIF) is another large multi-state vertically-integrated company, with operations in eight states, including eight manufacturing facilities, and interests in 13 dispensaries such as the popular Rise dispensaries (and 53 retail licenses overall). GTI became publicly traded on the CSE on June 13, 2018. As of September 5, 2018, its share price has nearly doubled.

CEO Ben Kovler, whose great-grandfather was an early investor in Jim Beam shortly after Prohibition,⁹³⁰ speaks thoughtfully about the potential of the cannabis industry, and the dynamics of the industry. He told CNBC's Jim Kramer on June 27, 2018: "Right now, there is a moat around our business. Both in the states and the country, the federal prohibition provides a moat around our business for us to execute. Us going public in Canada allows us access to capital, drives down that cost of capital to build scale in these markets because everybody wants in. Let's

⁹²⁹ <https://www.youtube.com/watch?v=dYK6WF9SWJg>

⁹³⁰ <https://www.bloomberg.com/news/articles/2018-05-14/jim-beam-heir-turns-to-pot-with-plan-to-build-a-cannabis-empire>

be real. There is a huge demand for this. The alcohol companies are seeing it, and you've seen evidence of them paying attention. We don't think history repeats, we think history rhymes. And right now, we think brands distributed at scale in cannabis is going to be very similar to what happened in alcohol.”⁹³¹

Canada-based *MPX Bioceutical Corporation* (CSE:MPX; OTC:MPXEF) is another company with operations in multiple US states, mainly in Arizona and Nevada, recently in Maryland, and expanding to Massachusetts. In June 2018, MPX acquired a Canadian licensed producer Canveda,⁹³² making it the only company with operational cannabis cultivation facilities in the US and Canada. MPX's COO Beth Stavola is a long-time supporter of New Jersey governor Phil Murphy. After signing an executive order mandating review of the of New Jersey's medical cannabis policies, Governor Murphy gave one the signing pens to Ms. Stavola saying: “Beth, you represent not just you but the whole industry as well.”⁹³³ MPX will be a strong candidate for one of six new licenses New Jersey will issue in November. On August 25, 2018, MPX opened its Bethesda, Maryland dispensary, less than ten miles from the White House and a mile from Walter Reed National Military Medical Center.⁹³⁴

California's *CannaRoyalty* (CSE: CRZ; OTC:CNNRF) is focused on the California market and is not yet a multi-state vertically-integrated operator like the other companies mentioned here. But CannaRoyalty is poised to be amongst the leaders in the California market with assets and investments in research, popular brands, and infrastructure in California and other states that provide the company with an extensive distribution network. CEO Marc Lustig and President Afzal Hasan are articulate, well-liked executives.

Liberty Health Sciences (CSE:LHS; OTC:LHSIF) is establishing a solid Florida footprint. The company is Aphria's “white knight in the US,” according to well-liked CEO George Scorsis.

Several other large private US multi-state vertically-integrated cannabis companies, including Curaleaf and Vireo, plan to become publicly-listed in the next six months.

⁹³¹ <https://www.cnbc.com/2018/06/27/gti-founder-anti-pot-laws-create-a-moat-around-marijuana-business.html>

⁹³² <https://globenewswire.com/news-release/2018/06/11/1519511/0/en/MPX-Completes-Acquisition-of-Canadian-Licensed-Producer.html>

⁹³³ <https://www.youtube.com/watch?v=fNuLGxucV5w>

⁹³⁴ <https://bethesdamagazine.com/bethesda-beat/business/first-medical-marijuana-dispensary-in-downtown-bethesda-aiming-for-aug-25-opening/>

IX. SUGGESTIONS FOR US CANNABIS INDUSTRY INVESTORS

One of the unique aspects of the cannabis industry, because it is still new, is the connections an investor can build with key players in the industry. At conferences and events, investors can hear from and speak with important industry participants making and shaping industry news. Another aspect that makes the cannabis industry particularly intriguing is the constantly evolving legal, political, and business landscape. By studying the industry and following thought leaders, investors can synthesize the extensive flow of information regarding important legal reforms and political and business developments.

Events and conferences – A great way to meet industry leaders and participants is to attend an annual or quarterly cannabis industry conference. Some are open to the public and some are geared to institutional investors and may require membership or an invitation. The best national conferences and events include MJBizCon, CWCB Expo, Cannabis Business Summit & Expo, Benzinga, Canaccord Genuity's conferences, Lift, Cannabis Science Conference, and CannaCon.⁹³⁵ In New York and New Jersey, monthly CannaGather meetings are a great way to become acquainted. The National Cannabis Bar Association (NCBA)'s Cannabis Law Institute events provide an in-depth look at legal issues affecting the industry. Certain aspects of the industry have their own focused conferences and many smaller events occur in cities across the country. People from every part of the industry and all walks of life attend industry events.

Websites, Social Media – While important cannabis industry news is increasingly receiving mainstream attention, visiting industry-specific websites and following key companies and figures on social media are an important component to keeping up with developments. Mainstream media articles often only scratch the surface, and many reporters do not understand the industry yet. If you invest with a company or are considering it, review the company's and its executives' social media activity. Facebook company investor groups can be a good way to track progress. Yelp, Google, and Weedmaps reviews give great insight into how patients and customers are reacting to dispensaries. Take a trip to see facilities being built and in operation.

The best US industry-focused websites include: New Cannabis Ventures, MJBiz Daily, Marijuana Moment, Cannabis Business Times, Green Market Report, Gangapreneur, Leafly, CannabisFN, Civilized, Vox, High Times, 420 Intel, and The Cannabist. Some individuals to follow on social media include: Tom Angell, Kyle Jaeger, Alan Brochstein, Kris Krane, John Morgan, Dr. David Bearman, Todd Harrison, Steve DeAngelo, Debra Borchardt, Brian Staffa, Keith Stroup, Save Stacks, Justin Zaremba, Dan Adams, Earl Blumenauer, James West, Mindy Segal, Beth Stavola, and Dr. David Nathan.

Reddit Weedstocks – Most significant industry developments are posted and discussed on Reddit's Weedstocks forum. The forum has more than 60,000 subscribers. Like the cannabis industry, it has grown rapidly in the past 18 months. As with any Internet forum, the quality of

⁹³⁵ <https://www.newcannabisventures.com/cannabis-industry-events/>

discussion and commentary varies, but there are expert investors and experts in the cannabis industry on the forum. A wide variety of cannabis investment-related topics are discussed. If time allows for checking only one resource for a day's news, Weedstocks often is a great source. A lot of the discussion especially historically is on the Canadian cannabis landscape, with many investors interested in Canopy and Aphria, but recently the focus is increasingly turning to the US industry. Searching the forum by keyword is a great way to learn about a company or topic.

Industry/Advocacy Associations – Cannabis industry business and advocacy associations allow investors to meet leaders in the industry and help advance industry interests. The National Cannabis Industry Association (NCIA) is the country's leading industry business association. Some states have their own Cannabis Industry Associations. Leading non-profit advocacy organizations include NORML, MPP, and SSDP.

Company Conference Calls/Presentations/Interviews/Podcasts – Public company quarterly conference calls are a great way to learn about companies and the US industry more broadly. Investor presentations from prior calls, conferences, and events are often available on YouTube on other industry websites. (See Reddit for links to many of these). Some presentations at the 38th Annual Canaccord Genuity Growth Conference in Boston on August 8-9, including a discussion with Acreage's Speaker John Boehner and Kevin Murphy, are available on Wall Street Webcasting.⁹³⁶ James West has interviewed many of the industry's leading executives and participants – the videos are available for viewing on the Midas Letter website. KCSA's Green Rush podcast often has insightful interviews, as does the Cannabis Business Minds podcast.

Elected Officials – Certain elected officials are forceful advocates for the industry like Reps. Earl Blumenauer (D-OR) and Dana Rohrabacher (D-CA). Follow their activities and announcements. Contact your local elected officials to ensure they are representing their constituents' views.

Connect – The cannabis industry is a welcoming industry. As a new industry, many of the key participants have not been involved for very long and are willing to help others meet new people and build connections. Great opportunities are often discovered through word-of-mouth. Personal relationships and reputations are as crucial in this industry as anywhere, if not more. Build a strong network to help you contribute and gain. There is much to be gained.

⁹³⁶ <http://www.com/webcast/canaccord30/>

About the Author

David Wenger is an attorney in New York and a diligent student of the US cannabis industry.

After earning degrees in finance and law, David worked in the New York City office of DLA Piper, one of the world's largest law firms, for nearly a decade, advocating for publicly-traded corporations and foreign governments in complex domestic and international contract disputes and advising on high-stakes cross-border contracts.⁹³⁷ He presently practices in the same areas.

In early 2017, David began researching the cannabis industry and investing in large and small Canadian cannabis companies. In January 2018, David shifted most of his portfolio to the US cannabis industry. He has become acquainted with many of the US industry's leading executives, professionals, financiers, and service providers. David is an investor in the companies profiled and in some of the companies mentioned.

David is a member of the National Cannabis Bar Association (nominated to the Board of Directors) and the New York Cannabis Bar Association. He is a senior editor of the Cannabis Law Digest. He has been quoted in media reports on the US cannabis industry, and presents at industry events. David is also an avid cyclist and a private pilot.⁹³⁸

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Adam Rosenberg, a student at the University of Michigan's Ross School of Business, and founder of Green Wolverine, helped edit and proofread, and with ideas for content. His assistance was invaluable and is appreciated. Adam can be contacted at: amrg@umich.edu. Kyle Barber, a private investor, also ably contributed.

⁹³⁷ <https://www.linkedin.com/in/david-wenger-42156713/>

⁹³⁸ www.bigapplecyclist.com