

### **EXECUTIVE SUMMARY**

# CANNABIS INDUSTRY ANNUAL REPORT: LEGAL MARIJUANA OUTLOOK 2017

**Pre-Release Press Preview** 

Rev. 3/6/2017



### **Overview**

The 2017 Cannabis Industry Annual Report provides the latest, up-to-date perspective on the growth and transformation of the legal cannabis industry. With elements including sales growth forecasts through 2025, analysis of the key trends shaping the industry's evolution, and an exploration of the state-specific regulations which influence the performance of individual markets, the report leverages New Frontier Data's advanced analytics along with the breadth of newly available industry data to deliver fresh insight to the latest realities and expansive possibilities of legalized cannabis.

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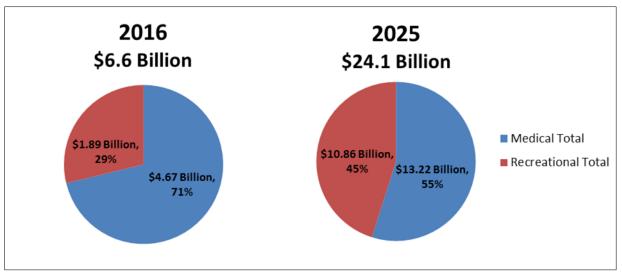
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### MARKET GROWTH CONTINUES TO EXCEED EXPECTATIONS

### Adult Use Demand Continues to Soar, Eroding the Illicit Market

The legal cannabis market was worth an estimated \$6.6 billion in 2016, and is projected to grow at a compound annual growth rate (CAGR) of 16% to reach more than \$24 billion by 2025.

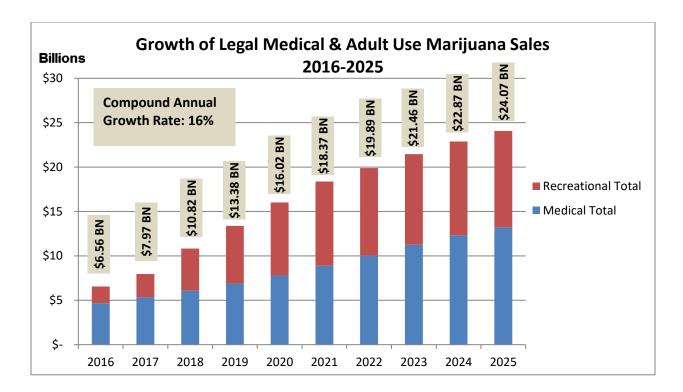


Source: New Frontier Analytics

The medical market is projected to grow at 12% CAGR through 2025, growing from \$4.7 billion in 2016 to an estimated \$13.3 billion in 2025. During the same period, adult use sales are projected to grow at a 21% CAGR, from \$1.9 billion to \$10.9 billion (through projections based solely on the markets having passed medical and adult use legalization initiatives as of January 2017, but not including assumptions for additional states which may yet pass legalization measures before 2025).

Such projections do not include assumptions about potential major changes to federal policy before 2025. It remains possible that there will be sweeping changes to federal cannabis laws within the next decade, including rescheduling cannabis from its current status as a Schedule I substance – included in the ranks of the most dangerous drugs – to Schedule II or III status, or even a complete de-scheduling, which would bring cannabis regulations closer to those for alcohol than for prescription medications. However, the unpredictability of the timing for the change to federal policy coupled with the uncertainty about the nature of the changes to the law, prevent any reliably accurate prediction of the extent to which the national market will grow following the changes.





The dramatic industry expansion is fueled by two parallel forces – addition of new legal markets as more states pass laws permitting cannabis use, and sustained growth in demand in legal states as consumers transition from the illicit to the legal market.

While competitive forces and economies of scale should continue to drive down both wholesale and retail prices, the continued growth in consumer demand ought meanwhile to insure sustained positive growth overall through 2025. Furthermore, the strong demand for concentrates and edibles, which are eroding the share of flower as the primary consumption method, will create some buoyancy in prices as these value-added products typically retain their premium pricing better than flower, which is much more vulnerable to pricing pressure as supply increases.

### **Public Support to End Criminalization Reaches New Highs**

To better understand public attitudes and perception of cannabis use and regulatory policy, New Frontier Data worked with market research firm Full Circle Research to conduct a nationally representative survey of 1,671 adults between Jan. 12 and 15, 2017.

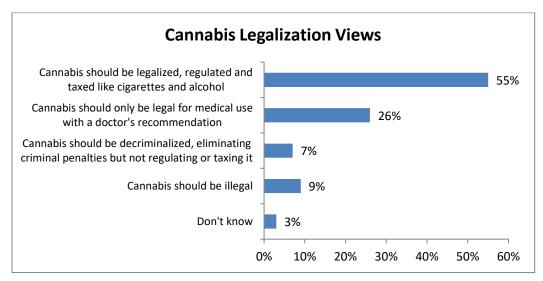


### Highlights from the survey include:

### A Strong Majority Does Not Believe Cannabis Should be Illegal

Only 9% of respondents believed that cannabis should be illegal, though views varied about what cannabis policy should include. A majority (55%) believed that it should be legalized, regulated and taxed like cigarettes and alcohol, while one-quarter (26%) felt it should only be legal for medical use. Meanwhile 7% thought it should be decriminalized--eliminating not only the criminal penalties for possession and use, but also any regulation by the government.

The strength of support for alternatives to prohibition suggests that cannabis law reform will continue to see strong support in markets that have not yet legalized adult use. It also puts cannabis prohibitionists outside the mainstream of public opinion, suggesting that prohibitionists' historically strong influence on cannabis policy will further wane in the face of broad-based popular support for legalization.



Source: New Frontier Data 2017 Cannabis Attitudes Survey

### Most Believe Government Should Legalize Cannabis, End War on Drugs

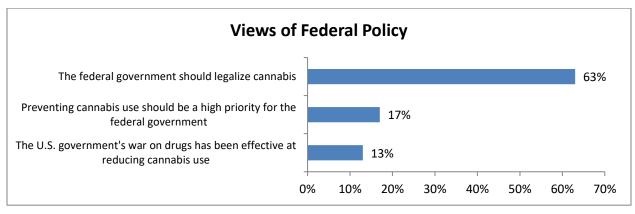
Nearly two-thirds (63%) believed that the federal government should legalize cannabis--a striking contrast to the strong continued resistance within the executive branch and among many Congressional lawmakers against federal legalization of cannabis.

Meanwhile, only 17% agreed that cannabis prohibition enforcement should be a priority for the federal government, with 13% believing that the federal war on drugs has been effective toward preventing cannabis use.

With the majority of the public now supporting full adult use, and a strong majority believing that the government's cannabis enforcement efforts have been ineffective, pressure will continue to build for



either Congress or the White House to adopt a federal policy more in line with public opinion. The perceived failure of the government's war on drugs may align with the Trump administration's efforts to reduce the size of government by targeting programs it deems to be ineffective.



Source: New Frontier Data 2017 Cannabis Attitudes Survey

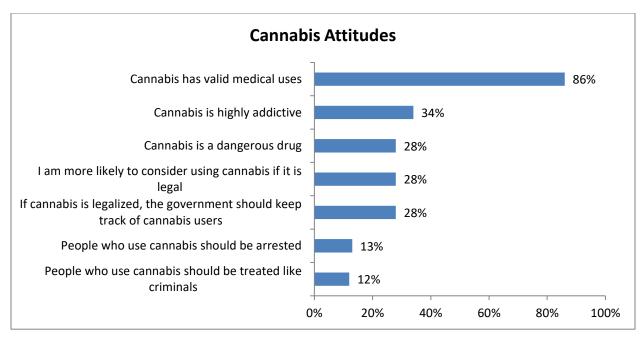
### A Strong Majority Supports Medical Use Opposes Criminalization of Cannabis Users

Nearly nine among 10 respondents (86%) believe that cannabis has valid medical uses, underscoring how medical cannabis has become a national consensus issue. The strength of its support looks to make it extremely difficult for politicians opposed to medical cannabis legalization to find constituencies with whom such a message would resonate.

However, there remain concerns associated with cannabis that may yet undermine public support for expanded legal access. Roughly one-third (34%) of respondents believed that cannabis is highly addictive, and 28% considered it a dangerous drug. As such views are not held by the majority, they suggest a significant potential opportunity to educate the public about safe uses and benefits of cannabis versus associated risks, leveraging the research done to date which shows that cannabis is relatively safer than alcohol, tobacco, or most illicit drugs.

Despite whatever perceptions about the dangers of cannabis, the overwhelming majority of respondents said they do not support criminalization of cannabis users. Only 12% of those surveyed felt that cannabis users should be arrested or treated like criminals, indicating that even those harboring concerns about health risks from cannabis did not believe that criminal penalties are the most effective way to deter use or protect the public's health.





**Source:** New Frontier Data 2017 Cannabis Attitudes Survey

### AS AN ENGINE FOR NEW JOB CREATION

### Activation of Legal Industry Stimulates Direct and Indirect Job Creation

In Colorado alone, the cannabis industry has created approximately 18,000 jobs since adult use was legalized there in 2014, according to analysis by the Marijuana Policy Group (MPG). Of those, nearly 13,000 were direct, full-time employment (FTE) positions within the industry, with the rest being indirectly added through sectors peripheral to the industry, or induced jobs created through the economic activity spurred by legalization. Furthermore, due to the highly-diversified nature of the legal cannabis industry, those created jobs span a range of sectors: MPG estimated that more than one-third of the jobs (35%) were created in the retail sector, with 22% in administrative roles, 16% in manufacturing, and 12% in agriculture.

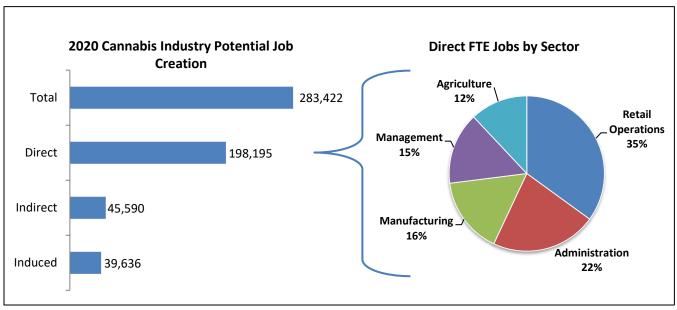
Using MPG's estimates, New Frontier developed a model for the number of jobs created in the adult use and medical sectors of the Colorado's market, including the value of annual market sales supported by each employee in each sector.

To develop an estimate for the number of jobs that could be created nationally in currently legal medical and adult use markets, New Frontier Data applied the estimates for revenue per employee to the medical and adult use revenue forecasts for each market. While this approach assumes other markets will mirror Colorado's growth and business environment, it does provide a useful illustrative guide for



the number of jobs that could be created if all markets adopted a similar regulatory structure to Colorado.

Based on this modeling, New Frontier Data estimates that by 2020 the legal cannabis industry could potentially create over 280,000 jobs in states which currently have medical or adult use laws on the books.



Source: New Frontier Data

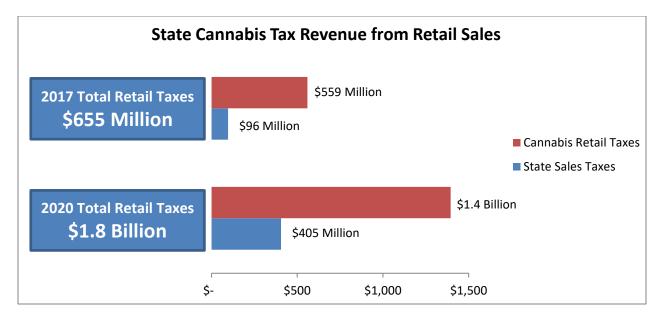
### **CANNABIS TAXES AS KEY REVENUE SOURCES**

#### **Cannabis Taxes Are a Boon for State Coffers**

Based on New Frontier Data's sales forecasts, we estimate that in 2017 states where medical and adult use cannabis is legal will generate \$655 million in taxes on retails sales, of which \$559 million will be from cannabis specific taxes, such as Washington's 37% cannabis retail tax rate. The remaining \$96 million will earned from state sales taxes that are applied on all retail sales. By 2020, tax revenues from cannabis will grow to \$1.8 billion states of which \$1.4 billion will be from cannabis-specific taxes.

These forecasts underscore the important role the cannabis taxes will play in driving new revenue for the government, generating funds to cover the costs of administering the cannabis programs in addition to supplementing states' general tax funds.





Source: New Frontier Data

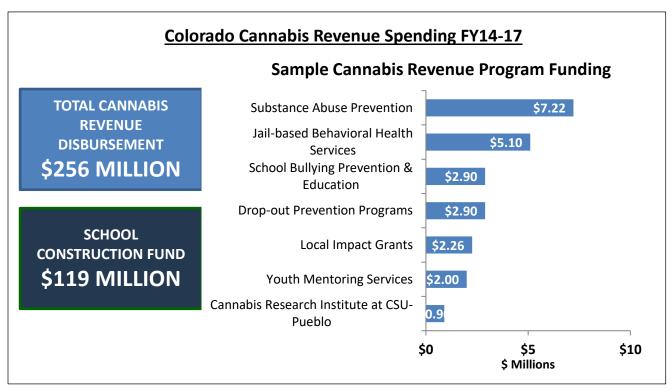
It is worth noting that these revenue estimates do not include taxes levied by county or municipal governments, nor do they include the taxes levied on producer and processor sales. Consequently, the total tax revenues generated in the states will be significantly higher than what is collected solely from the retail sales taxes.

### **Education Programs the Biggest Beneficiaries of Cannabis Revenues**

Since adult use cannabis became legal in Colorado in 2014, the state has raised more than \$367 million from taxes on medical and adult use sales, significantly exceeding the state's own projections for collected revenue. From that windfall, the state government has disbursed \$256 million to a range of programs, most notably directing \$119 million to the state's school construction fund. Likewise, cannabis tax revenues have provided for substance abuse prevention programs (\$7.2 million), jail-based services (\$5.1 million), and advanced research studies through the Colorado State University Cannabis Research Institute (\$900,000).

Realizing the impacts from such significant revenues, lawmakers increasingly recognize the value which legal cannabis represents both in stimulated economic activity statewide and through the valuable cannabis-specific taxes which can be generated and directed toward underfunded or unfunded state programs. The industry's taxes have also been applied to its own regulatory agencies, making cannabis one of the few sectors whose oversight is funded primarily by the revenues it generates.





Source: Colorado Marijuana Enforcement Division/Colorado Department of Revenue

### CAN CANNABIS HELP COMBAT THE OPIOID EPIDEMIC?

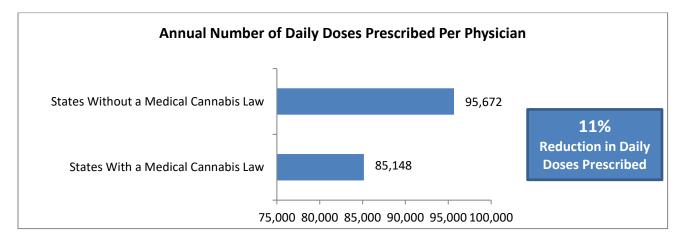
### Research Finds Cannabis Effective for Pain and Reducing Rates of Opioid Use

Americans are suffering through an opioid abuse epidemic fueled by the surging numbers of pain medication prescriptions throughout the past 30 years. Approaching a threefold increase, the number of opioid pain relievers prescribed in the U.S. jumped from 76 million in 1991 to 207 million in 2013, while accounting for nearly 100% of the hydrocodone (i.e., Vicodin) sales and 81% of oxycodone (i.e., Percocet) sales worldwide.

With the explosive growth in opioid use has come a parallel increase in opioid-related fatalities. In 2015 opioids were involved in 33,091 deaths, a fourfold increase since 1999, accounting for 63% (or nearly two-thirds) of all drug-related fatalities. For the first time in American history, drug-related deaths exceeded the number of nationwide fatalities from automobile accidents. Cannabis offers some available solution: As presented last month, a new report by the National Academies of Sciences,



Engineering, and Medicine (NAS) has found conclusive and substantial evidence that cannabis can be effective in treating the systems associated with chronic pain, the primary reason for which opioids are prescribed. Furthermore, a 2016 study by the University of Georgia found an 11% reduction in annual drug prescriptions in states legalizing medical cannabis as compared to those which prohibit it.



Source: Medical Marijuana Laws Reduce Prescription Medication Use In Medicare Part D, Ashley C. Bradford & W. David Bradford, Health Affairs 35, No. 7 (2016)

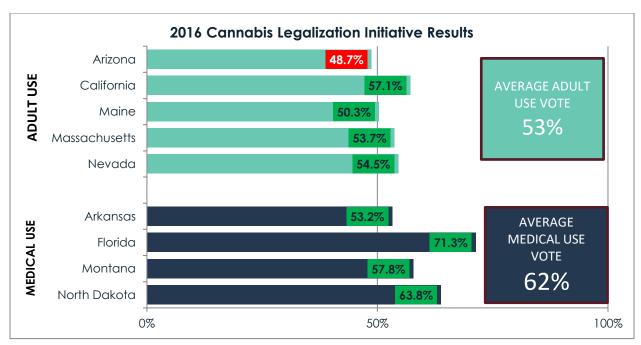
The evidence that cannabis is effective at treating chronic pain is especially important since pain patients account for a majority of the participants in medical cannabis programs which permit it as a qualifying condition. For instance, pain patients in Arizona account for 81% of the state's medical cannabis patients, while in Hawaii they account for 76% of them.

### 2016: TURNING POINT FOR CANNABIS LEGALIZATION

### Significant Legalization Victories Dramatically Expand U.S. Legal Markets

The November 2016 election cycle represented a watershed achievement for the cannabis industry. Legalization initiatives passed in eight of the nine states which had them on the ballot, exceeding the expectations of even the most optimistic industry insiders. The significance lay not just in the number of states which passed measures, but also in *which* states they passed.

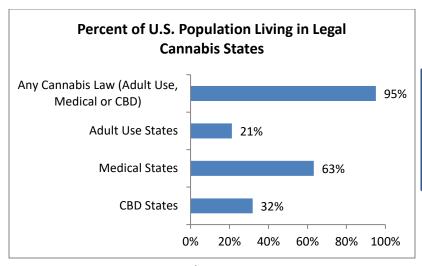




Source: State Secretaries of State

With passage of adult use measures in California, Massachusetts, Maine, and Nevada, the industry achieved three important advances: First, it increased the number of legal adult use states to eight, plus the District of Columbia. Second, with California cannabis is now legal in the most populous state in the country, dramatically increasing the total potential size of the industry while establishing legal adult use markets across the entire U.S. Pacific coast given the legalized states of Washington and Oregon. Third, the industry can establish a beachhead in the Northeast region after successful measures in Massachusetts and Maine. One result already has been to fuel reform debate in the neighboring states of Connecticut, Vermont and Rhode Island, each of which have proposed bills to legalize adult use in 2017. If approved, cannabis would be legal in nearly all of New England, marking a dramatic expansion of legal markets.





31%
American Population Living In
States with Newly Expanded Access
to Legal Cannabis Since 2016

Source: New Frontier Data analytics

Other successful legalization initiatives in 2016 included those passed in Pennsylvania and Ohio, expanding medical cannabis to two more of the country's seven most populous states.

Taken together, with four new adult use markets and six new medical markets, 2016 marked the most consequential year for the expansion of access to legal cannabis in the two decades since California embraced medical cannabis in 1996.

### 2016 Election Results Underscore Bipartisan Support for Legalization



Source: New Frontier Data analytics

Also, notable among the 2016 election results were the successes of legalization initiatives in states which voted for Donald Trump. Historically, Republicans in general have supported cannabis legalization



at rates far lower than among Democrats. Yet in the 2016 cycle, states including Florida, Montana and North Dakota all voted for Trump and passed medical use legalization by comfortable margins. Such vote-crossover demonstrates how medical cannabis legalization has become less a partisan issue than one which enjoys increasingly universal support.

Additionally, such support for cannabis legalization during a time of deep political divisions on many other issues suggests that the legalization of cannabis may be one area where lawmakers and the public can agreeably cooperate toward common ground in advancing more equitable reform policies.

# CANNABIS FACES AN UNCERTAIN FUTURE UNDER A NEW ADMINISTRATION

### The Election of Donald Trump Presents Unknowns for the Direction of Federal Policy

Despite important legalization victories at the state level, the election of President Donald Trump and the subsequent appointment of Jeff Sessions for attorney general has raised significant concerns within the industry about the future of federal policy under the Trump administration and a Republican-led Congress.

While the president had gone on record during the 2016 campaign to say that he was "in favor of medical marijuana 100%," and also in favor of leaving legalization up to the states despite his personal skepticism about cannabis, the first public comments made by his newly appointed Attorney General Jeff Sessions raised reflexive concerns to speculators. As recently as April 2016, Sessions, the new "top cop" chiefly responsible for enforcing federal policy, had taken the Obama administration to task for its hands-off policy toward cannabis legalization, saying, "I think one of [Obama's] great failures... is his lax treatment in comments on marijuana."

Sessions, a former prosecutor, went on to notably opine that it was important for the federal government to adopt a position making it clear that cannabis "is dangerous, you cannot play with it, it is not funny, it's not something to laugh about . . . and to send that message with clarity that good people don't smoke marijuana."

Less than a year later, during his confirmation hearing in January 2017, Sessions was much more measured about cannabis. Choosing his words carefully, Sessions said that his job would be to enforce federal law, and that "it is not so much the attorney general's job to decide what laws are enforced," reminding lawmakers that "Congress has made the possession of marijuana in every state and distribution of it an illegal act."



Sessions further noted that if federal enforcement of prohibition "is something that is not desired any longer, then Congress should pass a law to change the rule." He also struck a chord of pragmatic resignation by noting that the department's prosecutorial priorities boil down to "a question of resources" about going after taxpayers in states where marijuana use has been formally adopted.

Yet the next month, in his first major speech after being appointed, Sessions told the National Association of Attorneys General that "crime does follow drugs," which "today are more powerful and more addictive." Regarding cannabis specifically, he added that "I am dubious about marijuana; I am not sure we're going to be a better, healthier nation if we have marijuana being sold at every corner grocery store."

Suffice it to say that the industry will pay close attention throughout 2017 to the actions of the Trump administration toward cannabis. If the administration adheres to the status quo, upholding the Cole Memo and allowing state markets to operate unmolested, the industry will continue to experience strong growth in the years ahead. Conversely, if the administration adopts an aggressive stance against the industry, with real threats of raids and confiscation, growth will be more muted as entrepreneurs, investors, big businesses and financial institutions will naturally become more hesitant to enter or expand in the industry.

### REGULATORY COMPLIANCE REMAINS A SIGNIFICANT CHALLENGE FOR LEGAL CANNABIS BUSINESSES

### Regulatory Compliance Takes On New Urgency in the Face of Increased Federal Enforcement

The cannabis industry represents one of the most highly regulated business environments in the world, on par with financial services, gaming, and healthcare in terms of depth and complexity within regulatory frameworks. However, the overwhelming majority of cannabis companies continue to struggle to achieve full regulatory compliance.

Toward better understanding of the complex compliance environment, New Frontier Data partnered with Adherence Compliance, an industry-leading compliance software provider which has aggregated more than 275,000 operational compliance data points across nearly 500 cannabis compliance inspections in multiple states since 2014. These data provide rich insights into areas regarding which business segments are most likely to fail in meeting their regulatory obligations.

Notably, among some 500 inspections completed, <u>only one license holder has received a perfect score</u>, meeting every element of their regulatory requirements.



Understanding the pitfalls which businesses face toward adhering to state and local regulations is especially important as the federal government hints at increased cannabis enforcement as non-compliance with state law has historically been used as a justification for intervention in state cannabis markets. States too are stepping up inspection and enforcement efforts and businesses who fail to meet the letter of the law face not only stiff fines and penalties, but are also subject to suspension or revocation of their business licenses.

### **Cannabis Business Compliance Varies Widely by Market**

Analysis of compliance performance across markets revealed that operators in Illinois were most compliant, with a state-wide average score of 97 on a 100-point scale. A score of 100 means the businesses has met every requirement specified by the state's cannabis regulations. Comparatively, businesses in California and Washington were least compliant, with average scores of 74.4 and 77.3 respectively.

Note: While all businesses should be scoring 100 on the compliance assessment, the higher the score the less likely the businesses are to face punitive action by the state.

The table below highlights the average compliance scores by license type for a few select states:

U.S. Compliance Statistics at a Glance						
Average Compliance Scores of Compliant Cannabis Companies						
	Colorado	California	Illinois	Nevada	Washington	
Medical Dispensary	84.6	76.8	96.9	85.2	74.7	
Medical Cultivation Producer	83.2	75.7	97.3*	82.9	73.6	
Medical Infused Processor	81.8	72.1	97.3*	77.7	71.1	
Retail Store	85.2	N/A	N/A	N/A	81.5	
Retail Cultivation Center	82.1	N/A	N/A	N/A	82.4	
Retail Infused Producer	80.7	N/A	N/A	N/A	81.4	
Average Compliance Scores	82.9	74.4	97	81.2	77.3	

### Adherence Compliance SCORE App Results Guide:

The SCORE App rates cannabis businesses on a scale of 0-100 based on weighted scores for each area of regulatory compliance. The scoring guide is as follow:

- 91-100 Good to Great Compliance; Low closure risk
- **81-90** Average Compliance; Low to Medium Closure risk
- 71-80 Poor Compliance; High Closure Risk
- **Below 71** Immediate Closure Risk

Source: Adherence Compliance



### **How Do Marijuana Businesses Fail?**

Based on frequency of occurrences among all inspection types, the top five infraction areas across 15 categories of cannabis compliance that Adherence Compliance monitors include:

	Percentage of Businesses Failing At least One Compliance Requirement				
1.	76%	Inventory and Financial: Incudes failure to reconcile all inventory on hand at the close of the business day, and over-/underreporting inventory in the state's traceability system.			
2	72%	Security and Surveillance: Includes failure of security systems to have an unobstructed view of all activity on the premises, or failure to maintain a current list of all employees and service personnel with access to the premises.			
3	67%	Labeling, Packaging and Product Safety			
4	64%	Business Records Required			
5	53%	Transport and Storage			

### Why Newer Markets are Performing Better

Among the reasons for wide market variability is that in well-established but loosely regulated markets, such as Colorado and Washington, businesses find it more difficult to transition their operational processes to meet the new regulatory requirements. Conversely, in newly legal states where businesses are being built from the ground up, operators have greater flexibility to design their operational processes and developing staff training processes from the ground up to more seamlessly reflect the regulatory requirements.

### The Costs and Risks of Non-Compliance

Failure to meet regulatory requirements can be costly: Since adult use legalization in 2014, Colorado has levied more than \$1.9 million in fines for operator violations in the medical and adult use industries. Additionally, in 2016, a total of 70 operators, or 3% of licensed businesses in the state, had their licenses suspended for non-compliance

The imperative to achieve full compliance has taken on new urgency as statements by the Trump administration have indicated there may be increased enforcement of federal prohibition in legal adult use markets. Businesses which are least compliant now face the highest risk of federal enforcement action, in addition to increased state-level enforcement activity as states become more aggressive in ensuring licensed operators meet the letter of the law.



# LEGAL MARKET EXPANSION PRESENTS GROWTH OPPORTUNITIES, NEW CHALLENGES

Additional Themes in the 2017 Cannabis Industry Annual Report include:

- Federal Policy Trends: Developments in national cannabis policy within Congress and key executive branch agencies including the Drug Enforcement Administration, and National Institutes of Health
- **International Market Expansion:** Key developments in the international markets that are best positioned to adopt new cannabis laws in 2017, including Canada which is poised to become the first developed country to adopt a national cannabis policy; Israel which has been home to many of the world's leading cannabis medical researchers and technology innovators
- **Energy Use and Sustainability:** The soaring demand for energy use in cannabis cultivation, and the role that new energy efficient solutions are playing in improving the bottom line and strengthening competitive positioning.
- **Delivery Services:** New insights into the behaviors, preferences and profiles of cannabis delivery services users in California. Through a partnership with GreenRush, the leading platform on which dispensaries list their offerings, the report includes new insight into trends in the cannabis delivery environment.
- New Product Innovation: The role that technological and design innovation are playing in transforming the industry, from revolutionizing cannabis cultivation to creating highly customized cannabis consumption experiences through advanced biochemical formulations.
- **Canna-tourism:** Opportunities within the fast-evolving market for cannabis-focused hospitality and tourism, including ways in which the newly legal states can capitalize on their existing tourism infrastructure to develop unique tourism offerings.
- The Cost of Prohibition: The social impact of cannabis prohibition, including the numbers of
  people arrested and incarcerated for cannabis offenses, even in states which have been
  proactive in easing cannabis enforcement. The analysis also explores the wide racial
  discrepancies in the people arrested and incarcerated for cannabis offenses.
- New Cures From Cannabis: Medical cannabis therapies and treatments are speeding toward the market as new federal and state policies encourage a rise in public and private research funding.
- **Legal Market Results:** Adult use states are finding that the health of citizens and the area's economy are improving even as some social problems like opioid addiction and crime drop, contrary to the warnings of anti-adult use groups.



### **ABOUT THE REPORT**

### **Partners and Contributors**

#### **Data & Research Partners:**

- Adherence Compliance
- Dr. Guillermo Moreno Sanz
- Full Circle Research
- GreenRush
- LeafLogix

### **Industry Interviews**

### Interviewees:

- Bob Hoban, Hoban Law Group
- Charles Jones, Chooze/Lucid Moods
- Eli Duffy, Grownetics
- Evan Arteaga, Mobius Fulfillment
- James Slatic, Med-West
- Jim McAlpine, 420 Games/PowerPlant Fitness/New West Summit
- Luke Stanton, Frontera Group
- Rob Kampia, Marijuana Policy Project
- Tripp Keber, Dixie Elixirs

### **Data Overview**

The data included in this report is sourced from a wide range of sources including:

- Government Agencies: We obtained data from federal, state, and municipal agencies, on topics ranging from tax revenues and medical marijuana patient participation rates, to the rates of illicit marijuana use among school-aged children, and arrest and incarceration data for marijuana-related offenses.
- Private Companies: Businesses operating in this industry have been a critical source for insights into the growth and performance of this industry. In addition to data on investments, sales growth, and product performance, interviews with business owners and staff and yielded invaluable insights into the challenges and opportunities facing operators in this market.
   Additionally, interviews conducted with investors have illuminated the evaluation criteria used to determine their investment decisions.
- Cannabis Law Reform Advocates: The projections on the states most likely to legalize in the next four years were based on extensive discussions with leading drug law reform advocates



who have been central in the national and state-level campaigns to legalize cannabis. Their input was critical in informing our understanding of the arc of the national legalization movement, as well as the local political and legislative dynamics that could influence the growth and performance of each market.

Academic and Medical Institutions: Research conducted by a broad range of academic
instructions, medical centers, think tanks, and universities provided rich insight into issues
including health effects of cannabis consumption, medical applications of the plant, and the
socioeconomic costs and outcomes of both cannabis prohibition and legalization.

### **Market Projection Methodology**

Using these data, New Frontier Data has developed a proprietary model for estimating the size of the legal cannabis industry, which is continually refined based on new data inputs, expansion of legalization into new markets, changes in state regulations, and other market-disrupting events.

The market growth projections in this report include both adult use and medical markets, and are focused exclusively on retail sales to medical patients and adult use consumers. These projections do not include wholesale transactions between producers, processors, and retailers.

The growth models were developed based on analysis of key inputs including:

- Size and growth of the total population within each state
- Size and growth of the adult population within each state
- Rates of illicit cannabis use with each state market
- Monthly growth rates of adult use sales in Colorado, Washington, and Oregon since each market's activation
- Size and growth of the tourism population in states with adult use sales and medical use states that offer reciprocity to cardholding medical patients from other states
- Monthly growth and saturation levels of patient populations for each medical market which tracks the number of enrolled patients since the activation of the medical programs
- Number and types of qualifying medical conditions accepted in the states which track patient registration growth and patient saturation levels since the activation of the medical program
- Monthly growth in medical cannabis sales in the states which track this data
- Monthly growth in medical cannabis expenditures per patients in the states which track this data
- Monthly growth in expenditures per person in adult use states which track this data
- Interplay between medical and adult use sales in states where adult use sales are legal
- Analysis of each state's regulatory model to identify similarities and differences in each market's structure
- Time between passage of each state's legalization measure and launch of sales in the state



Based on these inputs, we applied an economic growth model to project the size of the current legal markets through 2025. The projections are based on estimated sales per capita in both medical and adult use markets, and the model is iteratively refined as additional data is collected on each market.



#### **DISCLAIMERS & OTHER INFORMATION**

Cannabis is illegal under federal law.

Among other things, the Controlled Substances Act (CSA) regulates the cultivation, possession and distribution of certain controlled substances, including cannabis. This is true regardless of whether it is possessed for legitimate medical purposes as provided for in certain state medical cannabis laws, or possessed within the few states that permit non-medicinal adult use. In many jurisdictions cannabis is also illegal under state law.

Determining how best to navigate this complex legal environment can be challenging. There is nothing in this report written to offer any legal advice or to suggest any actions or choices the reader may make regarding participation in the industry. This report is for informational purposes only.

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