



Cannabis Benchmarks® Publication Special -- 2015 Year in Review

Ten factors that drove market trends in the past year at both the national and state level.

1. Section 538 of the 2015 Spending Bill (aka, the Rohrabacher-Farr Amendment) was upheld by Federal District Court Judge Charles Breyer. In October, Breyer, the brother of Supreme Court Justice Stephen Breyer, upheld the spending bill amendment prohibiting the DOJ from prosecuting businesses and individuals that are following state medical cannabis regulations. Despite the Rohrabacher-Farr Amendment, the DOJ had previously continued to pursue cases against some of the largest dispensaries in northern California under a narrow interpretation of the rule. Cannabis businesses in California - and across the country - have been subjected to unpredictable enforcement from federal agencies, a threat that this decision lessens.

2. The majority of cannabis businesses continue to be denied access to banking services.

Being forced to deal in all cash presents numerous difficulties for businesses and drives up operating costs, and risks, significantly. Normally routine tasks - such as paying employees, utility bills, and taxes - become potentially dangerous, time-consuming processes. Those companies that are able hire armed security and transport services, which are themselves quite expensive. Due to the high cost of professional security, many businesses allow such risky activities to fall to normal hourly employees. In Colorado, the state approved the charter of the Fourth Corner Credit Union (FCCU) to serve the cannabis industry. However, the Federal Reserve denied the FCCU's application for a master account, while the National Credit Union Administration (NCUA) denied insurance on deposits, preventing the FCCU from opening its doors. The FCCU is disputing the aforementioned decisions in federal District Court, where arguments are scheduled to be heard next week.

3. Section 280E of the IRS code appears here to stay until the federal government's stance on cannabis changes.

Numerous decisions by the US Tax Court this year upheld Section 280E of the IRS code, which prevents cannabis businesses from deducting normal operating expenses due to the fact that they are engaged in the trafficking of a federally illegal substance. 280E disallows deductions afforded customarily to other businesses, significantly increasing the tax burden of those companies involved in the growing, processing, transportation, or dispensing of cannabis. Ancillary companies that do not "touch the plant" are not subject to 280E.

The logo for New Leaf Data Services features the text "New Leaf Data Services" in a white, sans-serif font, centered over a background image of a forest with tall, thin trees and some autumn-colored foliage.

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4. Illegal pesticide use led to recalls in Colorado, implementation of stricter regulations in numerous states, and liability concerns for cultivators employing banned products. Those in the industry have been aware of the widespread use of chemical pesticides that are not rated for application on cannabis for some time. However, the issue gained particular urgency in March, when the Denver city officials quarantined over 100,000 plants due to the fact that they had been treated with products not approved by the Colorado Department of Agriculture. Subsequently, 15 product recalls have been issued by the Denver Department of Environmental Health due to pesticide contamination, while Colorado Governor John Hickenlooper issued an executive order mandating that cannabis or infused products found to have residues of banned chemicals be destroyed, as they are a threat to public health. Still, two Colorado residents filed a class-action lawsuit against LivWell, one of the largest companies in the state that was also among the first group of businesses to have their plants quarantined. Colorado's quandaries have led to stricter regulations for pesticide testing being passed in Oregon (to go into effect June 2016), and will likely continue to influence regulation across the country. Nevada has already implemented stringent standards for its medical program, in which every five-pound batch must be tested prior to being sold at a dispensary. The regulations led to extremely tight supply and even delayed some dispensary openings, as no compliant product was available to put on the shelves. Testing runs about \$700-\$1,000 per batch in Nevada, which is around 3% or less of the retail price for five pounds in that state.

5. The carbon footprint and high cost of indoor cultivation are becoming increasing concerns to regulators and cultivators. The proliferation of legal indoor cultivators in Colorado and the Pacific Northwest is straining power grids in those areas. Indoor growing is extremely energy intensive, as the majority of cultivators employ 1000 watt HID light fixtures, which in turn necessitate additional expenditures to cool and dehumidify grow spaces. While indoor-grown product continues to garner higher prices than cannabis grown outdoors or in greenhouses, the significantly higher cost of production means that warehouse cultivation can be less profitable than growing under the sun. Meanwhile, disputes over the relative merits of lamp-grown versus sun-grown product persist among cultivators and consumers. Many favor the more polished appearance of warehouse flower and argue that greater environmental controls produce higher quality product. Others assert that full-spectrum sunlight promotes greater cannabinoid and terpene production, leading to a superior experience for the patient or consumer. The continued expansion of the industry could also put states with legal cannabis at risk of running afoul of federally-mandated clean energy initiatives.



6. There is currently no standard model for reconciling new recreational markets with existing medical ones. Washington and Colorado are grappling with this issue in vastly different manners, and Oregon has begun to do so in advance of the rollout of their licensed recreational system late next year. Washington took the most extreme approach to this issue with Initiative 502, which requires that all businesses be licensed under the state’s recreational system, overseen by the state Liquor and Cannabis Board, by July 1, 2016. This has led to dozens of unlicensed medical dispensaries being shut down throughout the state, along with claims that Washington lawmakers are marginalizing the medical side in order to maximize revenue from the more heavily taxed recreational market. However, dispensaries can apply for “medical endorsements,” which allows them to sell larger quantities to medical patients at a lower tax rate. Colorado possessed a licensed system for commercial medical sales, unlike Washington’s, which was unregulated. Patient numbers have stayed relatively steady from 2014-2015 (just under 115,000) and medical sales are on pace to meet or slightly exceed last year’s total of over \$385 million. Colorado attempted to tighten practices around doctors making medical cannabis regulations, but ended up leaving the program essentially as-is after significant patient backlash. Medical businesses in Colorado were allowed to apply for recreational licenses and serve both markets simultaneously; both medical and recreational cannabis are governed by the Marijuana Enforcement Division.

7. Delivery services proliferated as state and local governments moved to shut down unlicensed dispensaries. California and Michigan - both states with longstanding, but unregulated, legal cannabis programs - saw an increase in cannabis distribution via delivery services. As state and local governments moved to close unlicensed dispensaries, delivery companies, frequently lacking any fixed address, moved in and filled the void. Such companies also gained traction in Washington and Nevada. Oregon and Alaska will look to regulate deliveries in their legal recreational systems that are expected to roll out next year, while California’s MMRSA will license delivery services as well. Currently, most delivery services are operating either in a legal gray area, or in direct contravention of state or local laws.

8. Anti-drug organization Safe Streets Alliance (SSA) employed RICO statutes to make life difficult for cannabis businesses. The SSA alleged that state-legal cannabis cultivation and distribution constituted ongoing criminal enterprises under federal law in numerous lawsuits against Colorado cannabis businesses. While the suits have not yet been decided, the tangible



result was that many traditional companies providing essential services - such as banking, bonding, and insurance - fled the cannabis industry. With fewer providers of such services, costs and premiums rose. Though not named in the SSA's RICO suits, Lloyd's of London, the largest underwriter of insurance policies for cannabis businesses, bowed out of the space in June by refusing to write new policies or renew existing ones.

9. Regulatory models for legal medical cannabis currently run the gamut from very minimal state regulation to strict command-and-control models, with widely divergent results. Many states that legalized medical cannabis early on put in place very lightly regulated systems that were frequently caregiver-based; California, Montana, and Michigan are prime examples. These models led to what some refer to as "Wild West" situations, in which businesses are frequently operating in legal gray areas with significant risk of law enforcement intervention, while also keeping margins high due to low or nonexistent regulatory costs. On the other hand, states such as Minnesota, Delaware, New York, and Florida have taken the approach of licensing a very small number of vertically-integrated operations, while also limiting qualifying conditions, which leads to a small patient base. Minnesota also went so far as to prohibit the sale of raw cannabis flower or any other smokeable products, an approach mimicked by New York and Florida's not-yet-underway programs. In Minnesota and Delaware, such strategies have led to each state having less than 1,000 registered patients, high retail price points, and, in the case of Minnesota at least, businesses that are looking at a long road to profitability. Even in Colorado and Oregon, which have taken a more market-based approach by not instituting state-level license caps, regulatory costs - such as licensing, taxes, compliant packaging, and plant-tracking - combined with the pressures of 280E and having to deal entirely in cash, have led to many businesses struggling to stay profitable.

10. The possibility of Native American cannabis ventures was met with great enthusiasm, but the experience of the Flandreau Santee Sioux dimmed the hopes of Tribes in states without legalization measures. The Flandreau Santee Sioux of South Dakota made waves this year by legalizing recreational cannabis on their reservation, establishing a cultivation operation, and announcing that a cannabis resort would be open on New Year's Eve. However, after ongoing dialogue with state and federal officials, the Tribe suspended the operation and destroyed their first crop in fear of a federal raid. In theory, Native American Tribes could significantly affect legal cannabis markets by virtue of their tax-free status, as well as the ability to set their own laws and regulations. However, thus far only Tribes in states with legal cannabis appear able to capitalize on the opportunity. This year saw two Washington Tribes - the Squaxin



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Island and Suquamish - open Native American-owned dispensaries on their reservations via compacts with the state government. The Warm Springs Tribe in Oregon recently approved a cannabis venture that is to consist of a cultivation operation and three dispensaries, and will work with the state in the coming year to bring those businesses online.

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