

The Recreational Cannabis Industry's Emerging Public Policies:

Best Practices in Public Safety, Consumer Protection,
Environmental Protection, and Public Research.

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I. Introduction

One of federalism's chief virtues, of course, is that it promotes innovation by allowing for the possibility that a single courageous 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.¹

Today, roughly 70 million Americans may legally possess and consume to cannabis and cannabinoid products in their homes.² That number is expected to rise in the next decade, as adult-use cannabis becomes an increasingly common ballot measure across the United States. Michigan, New Hampshire, and New Jersey, with a combined population of nearly 22 million, are projected to be the next states to pose the recreational cannabis question.³ By the end of 2019, possibly one in every four Americans could have access to a product that just seven years prior was non-existent as a marketable commodity. Recreational cannabis is now a multibillion dollar industry projected to reach annual sales of \$20 billion by 2021. In comparison, the centuries-old tobacco industry at \$80 billion from US consumers.⁴

While promising, the future of recreational cannabis cannot be measured by its tax revenue or economic gains alone. Recreational cannabis's success is tethered to the laws restraining and authorizing its existence. These statutes and regulations are measured by their success in three matters: organizing an efficient and coherent legal framework, avoiding collateral damage resulting from legalizing recreational cannabis, and achieving public policy goals.

Independent from each other, ten legislatures have promulgated recreational cannabis laws since 2012. Their resulting legal frameworks vary, though certain policies are becoming standard. For instance, cannabis testing laboratory directors in Alaska, Washington, and Nevada share identical minimum qualifications: either a doctorate's degree in chemical or biological sciences and two years of post-degree laboratory experience, a master's degree in chemical or biological sciences and four years of post-degree laboratory experience, or a bachelor's degree in chemical or biological

¹ *Gonzales v. Raich*, 545 U.S. 1, 42, 125 S. Ct. 2195, 2220, 162 L. Ed. 2d 1 (2005)(O'Connor, J., dissenting)(quoting *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311, 52 S.Ct. 371, 76 L.Ed. 747 (1932) (Brandeis, J., dissenting).

² Ben Gilbert. "One in 5 Americans Will Soon Have Access to Fully Legal Marijuana." Business Insider, 14 Nov. 2016, www.businessinsider.com/marijuana-in-america-20-of-americans-can-now-access-legal-weed-2016-11?r=UK&IR=T.

³ Tom Angell. "These States Are Likely To Legalize Marijuana In 2018." Forbes Magazine, 26 Dec. 2017, www.forbes.com/sites/tomangell/2017/12/26/these-states-are-likely-to-legalize-marijuana-in-2018/#13d10fe01032.

⁴ "10 biggest money wasters." Forbes Magazine, May 18 2011, http://money.cnn.com/galleries/2011/pf/1105/gallery.money_wasters/4.html.

sciences and six years of post-degree laboratory experience.^{5 6 7} Cannabis laboratory directors in California follow a similar standard, but require two fewer years of laboratory experience.⁸

Where regulatory language may be comparable, cannabis statutes have set markedly different policy issues in certain instances. The legality of cannabis social clubs has particularly been given dissimilar treatment across the states. In Washington, individuals may face felony charges by merely being involved with a broadly defined “marijuana club.”⁹ Other state legislatures have instead been vague on cannabis social clubs. For example, while Alaska statutorily prohibits the public consumption of cannabis, its regulatory law carves out an exception for public consumption in “area[s] on the premises of a licensed retail marijuana store designated for onsite consumption.”¹⁰ This rule is unique to the state, and its implementation has been shaky. Shortly after the Trump administration took control, the Alaska Marijuana Control Board (“MCB”) ordered Anchorage’s only cannabis social club to shut down in April 2017.¹¹ While the MCB held a hearing on-site consumption rules in November of that year, no revisions to the laws have been made as of March 2018. Other states that haven’t followed Washington’s bright-line ban have faced similar obstacles. The Maine legislature authorized the creation of cannabis social clubs.¹² This law was later repealed in early 2018, partially because no other state had permitted social cannabis venues, and the Maine legislature did not want to be the first.¹³

That first major step appears to have been made in Denver. Colorado law prohibits the “open and public” consumption of cannabis by statute, and consumption at retail locations is similarly prohibited by regulation.¹⁴ Regardless, residents of Denver passed a ballot measure in November of 2016 to permit cannabis “consumption areas” in businesses like cafes and bars.¹⁵ On February 26, 2018, the city of Denver issued a social-use marijuana permit license to The Coffee

⁵ Alaska Admin. Code tit. 3, § 306.630

⁶ Wash. Admin. Code 314-55-0995(3)(a)(i-iii).

⁷ Nev. Admin. Code 453D.195(2)(a-c).

⁸ Cal. Code Regs. tit. 16, § 5737(b)(1-3).

⁹ Wash. Rev. Code Ann. § 69.50.465 (West).

¹⁰ Alaska Admin. Code tit. 3, § 306.990(6)(C).

¹¹ Travis Khachatoorian, “State orders Anchorage marijuana social club to ‘cease operating’”, KTUU-TV, 20 Apr. 2017, <http://www.ktuu.com/content/news/State-orders-Anchorage-marijuana-social-club-to-shut-down--420035803.html>

¹² 7 M.R.S.A. § 2449(1).

¹³ Penelope Overton, “Panel’s marijuana regulation bill omits licensing of social clubs”, Portland Press Herald Feb. 22 2018, <https://www.pressherald.com/2018/02/21/committees-marijuana-regulation-bill-omits-licensing-of-social-clubs-in-maine/>; 0

¹⁴ Colo. Rev. Stat. Ann. § 18-18-406(5)(b)(II) (West); 1 Colo. Code Regs. § 212-2.402(K).

¹⁵ Jon Murray, *Update: Denver’s social marijuana use ballot measure passes*, The Cannabist, Mar. 2 2017, <https://www.thecannabist.co/2016/11/14/initiative-300-social-pot-use-denver/67596/>

Joint, a “cannabis entertainment and educational center.”¹⁶ States like Alaska and Maine, along with municipalities like Las Vegas are closely following Denver’s venture into social cannabis clubs in establishing their own policies.¹⁷

The issue of social cannabis clubs is one of many public policy questions posed by the legalization of recreational cannabis. And these questions are being asked and answered in ten different ways: Washington, Colorado, Oregon, the District of Columbia, Alaska, Nevada, California, Massachusetts, Maine, and Vermont have begun experiment of building an efficient and coherent legal framework on recreational cannabis. The remainder of the United States is closely monitoring the social impacts of this new industry to determine whether to participate as well. Although public policies for recreational cannabis are still being calibrated, enough data exists to begin evaluating the preliminary results of each jurisdiction in meeting their legislative goals while maintaining the safety of its constituents. By highlighting which laws and their rollouts have been successful, which haven’t, and which are becoming industry standards, the trajectory of the recreational cannabis industry is similarly calibrated. The best available answers to these many policy questions should be recognized early before states sink into disparate and inefficient laws. Success and uniformity across the growing number of states will guarantee recreational cannabis as a legitimate, sensible, and profitable enterprise.

To encourage that pursuit, this manual consolidates and reviews the statutory and regulatory development of cannabis law and its emerging best policy practices. The history of American cannabis law is organized into three phases, from its beginning in 2012 to its subsequent expansions in 2014 and 2016. For the sake of brevity, recreational cannabis’s impact in public policy is limited to five areas: public safety, land use, education, natural resource management, and consumer protection. The manual ends with a forecast of the industry’s overall future and legislative recommendations that promote the five public policy areas.

¹⁶ Mona Zhang, “Colorado Is Finally Getting Its First Cannabis Club”, Forbes, Feb. 27 2018, <https://www.forbes.com/sites/monazhang/2018/02/27/colorado-is-finally-getting-its-first-cannabis-club/#6796e9c96cdd>

¹⁷ See Chris Kudialis, “Las Vegas officials say no pot lounges until 2019, despite openings in Colorado, Massachusetts”, Las Vegas Sun, Mar. 5 2018, <https://lasvegassun.com/news/2018/mar/05/las-vegas-officials-say-no-pot-lounges-until-2019/>

II. **Timeline of Regulated Recreational Cannabis, 2012–2018**

A. **Phase One: 2012**

On November 6, 2012, Washington and Colorado became the first states to pass legislation on recreational cannabis through Initiative 502 and Amendment 64, respectively. Being the earliest to experiment with recreational cannabis policies, these states have set significant industry standards and have the most data on implementation. Washington and Colorado had over ten years of established medical marijuana dispensary laws and approved recreational cannabis through voter referendums. However, the differences between these states’ recreational cannabis rules highlight their distinct approach in creating cannabis policy. In Washington, laws prohibiting acts like home-growing cannabis and owning more than one license type in the cannabis supply chain have resulted in a restrictive cannabis legal framework.¹⁸ In Colorado, Amendment 64 has taken more liberal approach, such as allowing individuals to carry more than one type of cannabis license. These two states could be headed toward representing two different policy approaches to recreational cannabis: the restrictive Washington model and the liberal Colorado model.

1. **Washington**

Agency Overview

Regulating Agency:	Washington State Liquor and Cannabis Board (“LCB”)
Agency mission:	To ensure the highest level of public safety by continually improving and enforcing laws, regulations, and policies that reflect today’s dynamic environment.
Tracking System:	MJ Freeway (originally BioTrack THC)

Authorized cannabis uses and limits

Possession:	1oz dried, 16oz infused edible, 72oz infused liquid product, 7g concentrate
Purchase:	1oz dried, 16oz infused edible, 72oz infused liquid product, 7g concentrate
Sharing:	½oz dried, 8oz infused edible, 36oz infused liquid product, 3.5g concentrate
Personal grow:	No personally plants permitted.
Public use:	Unlawful to open or consume a cannabis product in view of the general public or in a public place.
Driving:	5 ng of THC per mL of blood sufficient to prove impairment per se.

Legislative Promulgation Timeline

November 6, 2012:	Initiative 502 passes with 55.7% of the vote.
December 6, 2012:	Initiative 502 becomes law, LCB is formed.
April 24, 2014:	SB 5052: “Cannabis Patient Protection Act” signed into law. SB 5121: “Establishing a marijuana research license” signed into law.

¹⁸ <https://www.brookings.edu/blog/fixgov/2014/07/08/legal-marijuana-comparing-washington-and-colorado/>

June 30, 2015: HB 2136: “Amends Regulations Regarding Recreational Marijuana” signed into law.

Regulatory Promulgation Timeline

May 16, 2013: LCB issues initial draft rules for comment period.
November 16, 2013: LCB enacts I-502 regulations.
March 5, 2014: LCB issues first recreational cannabis license.
July 7, 2014: LCB issues first cannabis retailer license to 24 businesses.
July 8, 2014: First day of recreational cannabis sales.

Notable Judiciary Decisions

Emerald Enterprises, LLC v. Clark Cty., Wash. Ct. App. 2018 WL 1280788 (Mar. 13, 2018) (municipal control).

The road to recreational cannabis in Washington State began with the New Approach Washington coalition. On July 8, 2011, the group started their campaign to enact State Initiative 502, Washington Marijuana Legalization and Regulation (I-502). By January 27, 2012, New Approach Washington collected nearly 278,000 signatures, representing nearly 7% of the state’s registered voters.¹⁹ I-502 was then certified by the Washington State Secretary and placed on the ballot. The measure was met with mixed reactions in Olympia. Washington Attorney General and 2012 gubernatorial candidate Rob McKenna openly opposed legalizing recreational cannabis during his campaign, arguing that promulgating such a law would lead to federal retaliation and unfair burdens on state law enforcement.²⁰ I-502 did receive several endorsements from other state actors like former head of the Seattle FBI Office Charles Mandigo, Seattle Mayor Michael McGinn, and U.S. Representative for Washington’s 7th Congressional District Jim McDermott.²¹

On November 6, 2012, Initiative 502 passed with 55.7% of the vote and was codified into thirty-nine new or modified statutes.²² Twenty-nine laws were included into the State Uniform Controlled Substance Act, five on traffic safety laws, and four on other traffic-related laws. To analyze the effectiveness of these statutes, the state legislature instructed the Washington State Institute for Public Policy to conduct cost-benefit evaluations for I-502’s implementation. The Washington State Liquor Control Board was assigned primary regulatory power and was retitled the Washington State Liquor and Cannabis Board (LCB). In 2015, two recreational cannabis bills, House Bill 2136 and Senate Bills 5052 were enacted into law to restructure the marijuana laws. Both

¹⁹ Using a registered voter population of 4,219,893. <https://www.sos.wa.gov/elections/research/age-demographics.aspx>

²⁰ <https://blog.seattlepi.com/seattlepolitics/2012/03/20/mckenna-takes-pot-shots-at-marijuana-initiative/>

²¹ <http://www.newapproachwa.org/content/502-endorsements>

²² As determined by a Westlaw Washington State statute search of “Initiative measure no. 502”.

made comprehensive reforms on the marijuana market and transferred regulatory authority over medical marijuana from the State Health Board into the LCB.

The newly structured board enacted forty-nine cannabis regulations on November 21, 2013 and began issuing recreational cannabis licenses by March of the following year.²³ On July 8, 2014, twenty-four recreational cannabis shops opened for business.²⁴ Unlike Colorado, the LCB used horizontal integration in structuring the recreational cannabis licensing scheme, limiting each license holder to only one role in the supply chain: producer, processor, retailer, transporter, or cooperator.²⁵ Medical and recreational cannabis law systems merged on July 1, 2016. This consolidation has since occurred in Nevada and California. By March of 2018, the LCB had adopted seventy-five regulations.

While Washington has adopted stricter rules than Colorado, it has recently been expanding its legal framework on recreational cannabis. In 2015, the LCB became the first state agency to issue licenses to conduct marijuana research. While none yet have been issued, marijuana research license holders will be permitted “to produce, process, and process marijuana to test for chemical potency and composition levels, to conduct clinical investigations of marijuana-derived drug products, and to conduct research on the efficacy and safety of administering marijuana as part of medical treatment, and to conduct genomic or agricultural research.”

If enough signatures are reached by July 6, 2018, Washington voters will vote on personal, noncommercial cultivation of cannabis through Initiative to the People - Measure No. 1603. Currently, Washington is the only recreational cannabis state to prohibit personal cannabis grow. The proposed law would permit Washingtonians to grow six live cannabis plants, in line with all other recreational cannabis states save Oregon.²⁶ Measure No. 1603 would also replace the words “marijuana” or “marihuana” in the state code, prevent employment discrimination based on cannabis use, and exempt Washington residents from drug tests for cannabis.²⁷

Washington has not been as influential in setting recreational cannabis policies as Colorado, though the two legal frameworks share certain characteristics. Washington’s mandatory horizontal integration regime has not been followed by other states, (which have adopted Colorado’s vertical integration approach) nor has its law against personal grow. In early 2018, Washington’s cannabis

²³ As determined by a Westlaw search for regulations under: “wac 314-55” & “11/21”.

²⁴ <https://lcb.wa.gov/pressreleases/lcb-issues-first-mj-retailer-licenses>

²⁵ http://www.ppic.org/content/pubs/report/R_416PMR.pdf

²⁶ https://www.sos.wa.gov/assets/elections/initiatives/finaltext_1460.pdf

²⁷ [https://ballotpedia.org/Washington_Marijuana_Provisions_Related_to_Non-Commercial_Growth_and_Use,_Employment_Policies,_Law_Enforcement,_and_Legal_Language_Initiative_\(2018\)](https://ballotpedia.org/Washington_Marijuana_Provisions_Related_to_Non-Commercial_Growth_and_Use,_Employment_Policies,_Law_Enforcement,_and_Legal_Language_Initiative_(2018))

tracking software Leaf Data Systems was hacked, leading to a three-day shutdown on all commercial cannabis transfers.²⁸ Despite setbacks like these, the state continues to meet its policy goals of reducing drug-related crimes and ensuring public health and safety.²⁹ As such, Washington’s conservative model is still a viable, and serves as a reliable alternative to Colorado’s.

2. Colorado

Agency Overview

Regulating Agency: Department of Revenue, Marijuana Enforcement Division (“MED”)
Agency mission: To promote public safety and reduce public harm by regulating the Colorado commercial marijuana industry through the consistent administration of laws and regulations and strategic integration of process management, functional expertise, and innovative problem-solving.
Tracking System: Marijuana Enforcement Tracking Reporting Compliance (“METRC”)

Authorized cannabis uses and limits

Possession: 1oz dried, 1lb infused edible, 72oz infused liquid product, 7g concentrate
Purchase: 1oz dried, 16oz infused edible, 72oz infused liquid product, 7g concentrate
Sharing: 1oz dried, 16oz infused edible, 72oz infused liquid product, 3.5g concentrate
Personal grow: 6 plants, only 3 mature at one time.
Public use: Unlawful to openly and publicly display, consume, or use marijuana.
Driving: 5 ng of THC per mL of blood sufficient to prove impairment per se.

Legislative Promulgation Timeline

November 6, 2012: Amendment 20 passes with 55.32% of the vote.
December 10, 2012: Amendment 20 becomes law.

Regulatory Promulgation Timeline

December 10, 2012: Task Force on the Implementation of Amendment 64 established.
May 28, 2013: Governor signs into law new regulations on cannabis.
September 9, 2013: Colorado Department of Revenue (DOR) adopts final regulations.
September 9, 2013: DOR adopts final regulations on cannabis businesses.
January 1, 2014: First day of recreational cannabis sales.

Notable Judiciary Decisions

People v. Zuniga, 2016 CO 52, 26, 372 P.3d 1052, 1059 (probable cause).
People v. Lente, 2017 CO 74, ¶ 23, 406 P.3d 829, 833 (unlawful personal use of cannabis)
People v. Boyd, 2017 CO 2, ¶ 7, 387 P.3d 755, 757 (retroactivity of Amendment 64)

On February 7, 2012, the Colorado Secretary of State approved “The Regulation of Marijuana like Alcohol Act of 2012” and placed the initiative on the fall ballot as Amendment 64. Organizations like Sensible Colorado, directed by Brian Vicente, promoted Amendment 64 as an

²⁸ <https://mjbizdaily.com/washington-state-marijuana-traceability-glitches-stem-mj-freeway-hack/>

²⁹ https://www.ofm.wa.gov/sites/default/files/public/legacy/reports/marijuana_impacts_update_2016.pdf

initiative to curtail black market drug trafficking, empower schools with tax revenue, and to experiment with a new approach to the state's overall drug policy.³⁰ Opponents to the proposed rule included Colorado Governor John Hickenlooper, who considered cannabis a gateway drug that can lead to “self-destructive behaviors.”³¹ Denver's mayor Michael Hancock was similarly apprehensive of Amendment 64, positing that recreational cannabis would impair Denver's attractiveness to investors and tourists.³²

One of the unique issues handled by Colorado was the inclusion of recreational cannabis in the Colorado constitution. Vicente, one of the co-drafters of Amendment 64, explained that incorporating cannabis into the state constitution guarantees its taxation.³³ This decision tracks Colorado's Amendment 20, which legalized medical marijuana through the state constitution. The Colorado Appellate Court interpreted medical marijuana's inclusion in the constitution in *Benior v. Industrial Claims Appeals Office*, as not creating a constitutional right to use cannabis but establishing “an . . . exception to prosecution for possession or use of marijuana.”³⁴ The significance, if any, of recreational cannabis as a state constitution issue has yet to be addressed by Colorado courts.

Amendment 64 was voted into law on November 6, 2012. On December 10, Governor Hickenlooper signed Amendment 2012 into law and created the Task Force on the Implementation of Amendment 24 to draft legislative and regulatory recommendations. By February, the group submitted fifty-eight proposals, a number of which are now industry standards, like requiring childproof, rigid cannabis containers and maxing out the potency of a THC-infused food product at 10mg per serving.³⁵ The Colorado General Assembly adopted three bills, largely reflecting the Task Force's proposals, which were signed into law on May 28, 2013. These new laws required Colorado's Department of Revenue (CDOR), through its Marijuana Enforcement Division (MED), to promulgate regulations and begin processing recreational cannabis licenses by the first of October.

The MED issued its final rulings on September 9, codifying ninety-two regulations administering the recreational cannabis industry. By the end of 2013, the department issued 348

³⁰ <http://www.fox21news.com/news/web-extras/breaking-down-the-pros-and-cons-of-amendment-64/866717061>

³¹ https://usatoday30.usatoday.com/news/nation/2005-11-03-pot_x.htm

³² https://www.huffingtonpost.com/2013/06/04/legal-weed-denver-city-co_n_3383471.html

³³ http://www.dailycamera.com/state-west-news/ci_21477445/colorado-lawmakers-warn-about-constitutional-hazards-marijuana-legalization

³⁴ *Benior v. Indus. Claim Appeals Office*, 262 P.3d 970, 979 (Colo. App. 2011) (Gabriel, J., dissenting).

³⁵ Zach Reichard, “Colorado Task Force Submits Their Final Report On The Implementation Of Amendment 64,” *Medical Jane*, Mar. 15, 2013 <https://www.medicaljane.com/2013/03/15/colorado-task-force-submits-their-final-report-on-the-implementation-of-amendment-64/>

recreational cannabis licenses to existing medical marijuana dispensaries.³⁶ On January 1, 2014, thirty-four cannabis retailers opened their doors to business.³⁷ Initially, Colorado followed the vertical integration framework, requiring recreational cannabis shops to also grow 70% of their inventory; this regulation was abolished by mid-2014.³⁸ The Colorado Office of Marijuana Coordination was created July 2014, to connect state agencies creating cannabis regulations with each other to ensure unified policies. By March of 2018, the MED had adopted about 128 regulations.³⁹

Colorado elected to oversee regulatory compliance of cannabis law through Franwell Inc.'s Marijuana Enforcement Tracking Reporting Compliance (METRC) System. When renewing Colorado's contract with Metrc in January of 2018, CDOR Executive Director Mike Hartmann remarked that because "public safety and health are [the department's] number-one concern, . . . [has made the Metrc] system a key piece of [the department's] regulatory scheme."⁴⁰ This tracking system has been picked up now by most other recreational cannabis states, including Alaska, D.C., Oregon, California, and most recently, Nevada.

The Centennial State has also taken the lead in setting early judicial precedents in recreational cannabis law enforcement. In *People v. Zuniga*, the Colorado Supreme Court found that cannabis odors can contribute to probable cause for a warrantless search despite that legal possession of an ounce or less of cannabis alone "could just as likely have been indicative of legal activity as of illegal activity."⁴¹ The court held that the odor of cannabis, "extreme nervousness", incongruent statements by the driver and passenger, and a canine alert of drugs together met the totality of circumstances approach to make an unwarranted search of the vehicle.⁴² This case has been positively cited in other states and was later reinforced a year later in *People v. Cox*, where the state Supreme Court denied a motion to suppress evidence with seized from a warrantless search based on more attenuated cannabis-related circumstances than those in *Zuniga*.⁴³

³⁶ <https://www.bizjournals.com/denver/news/2013/12/23/colorado-mails-approved-marijuana.html>

³⁷ <http://blog.norml.org/2014/01/01/new-year-new-world-legal-marijuana-sales-begin-in-colorado/>

³⁸ <https://mjbizdaily.com/colorado-welcomes-new-rec-entrepreneurs-abandons-vertical-integration/>

³⁹ As determined by a Westlaw search in Colorado regulations "'1 CCR 212-2" % repeal!?"

⁴⁰ <https://www.colorado.gov/pacific/sites/default/files/FINAL%20Press%20Release%20METRC%20Contract%202018.pdf>

⁴¹ *People v. Zuniga*, 2016 CO 52, ¶ 19, 372 P.3d 1052, 1058.

⁴² *Id.* at 1059-1060.

⁴³ *People v. Cox*, 2017 CO 8, ¶ 1, 401 P.3d 509, 510.

One of the next major legal issue in Colorado is the question of cannabis clubs.⁴⁴ In 2016, the residents of Denver voted to initiate the first social-use pilot program for recreational cannabis and on February 26, 2018, Denver granted its first cannabis consumption license. If Denver’s test-run is effective and safe, Colorado would be the first state to issue cannabis consumption licenses, the effort previously seeing false-starts in states like Alaska⁴⁵ and Maine.⁴⁶

Colorado’s rollout of recreational cannabis laws has been successful and will most likely continue to be an influential template for future states who adopt laws on recreational cannabis. John Hudak, Deputy Director of the Brookings Institute Center for Effective Public Management has attributed the “Colorado model” to its implementation of an initial task force, interagency coordination, the leadership of Governor Hickenlooper, administrative diversity, a comprehensive regulatory system, and the state’s culture and perspective.⁴⁷

B. Phase Two: 2014

On November 4, 2014, Oregon, Alaska, and the District of Columbia joined Washington and Oregon in legalizing the possession of small amounts of cannabis. This second phase can be characterized as moderately expanding upon and applying new approaches to recreational cannabis policy. For example, each jurisdiction granted greater leeway in how much cannabis an individual may possess, D.C. permitting two ounces, Alaska with four, and Oregon with eight. All three are experimenting with different regulatory schemes, like Oregon’s wholesaler license and Alaska’s required marijuana handler permit. And while the D.C. law has taken the unique decision to prohibit recreational cannabis sales altogether, a loophole has created a questionable, but thriving, gift economy.⁴⁸

The Colorado model has been influential to Oregon, Alaska, and D.C. Personal cultivation, the possibility of social consumption, and vertical integration are all characteristics adopted in this second phase of recreational cannabis legislation. While these features have not caused any noticeable complications yet, it is still early to determine how effective these states have been in

⁴⁴ <https://www.forbes.com/sites/monazhang/2018/02/27/colorado-is-finally-getting-its-first-cannabis-club/#2cdd25e06cdd>

⁴⁵ <https://www.leafly.com/news/politics/cannabis-social-clubs-illegal-alaska-ag-says>

⁴⁶ <https://www.pressherald.com/2018/02/21/committees-marijuana-regulation-bill-omits-licensing-of-social-clubs-in-maine/>

⁴⁷ John Hudak, *Colorado's Rollout of Legal Marijuana Is Succeeding: A Report on the State's Implementation of Legalization*, 65 Case W. Res. L. Rev. 649, 652 (2015)

⁴⁸ <https://talkingpointsmemo.com/news/buying-selling-illegal-marijuana-gift-economy-thriving-dc>

setting good public policy on recreational cannabis. Obstacles such as Oregon’s formidable black market industry, Alaska’s ongoing troubles with substance abuse, and D.C.’s struggle with racially-biased cannabis enforcement will need to be overcome by policy makers before achieving the public interest needs necessary for recreational cannabis to succeed in these jurisdictions.

1. **Oregon**

Agency Overview

Regulating Agency: Oregon Liquor Control Board (“OLCC”)
Agency mission: To support businesses, public safety, and community livability through education and the enforcement of liquor and marijuana laws.
Tracking system: METRC

Authorized cannabis uses and limits

Possession: 8oz dried, 1lb infused edible, 72oz infused liquid, 5g concentrate
Purchase: 1oz dry, 1lb infused edible, 72oz infused liquid, 5g concentrate
Sharing: 1oz dry, 1lb infused edible, 72oz infused liquid, 5g concentrate
Personal grow: Up to 4 plants
Public use: Unlawful to engage in the use of marijuana items in a place to which the general public has access and includes, but is not limited to, hallways, lobbies, roads, schools, places of amusement, parks, playgrounds, and areas used in connection with public passenger transportation.
Driving: Impairment proven through Drug Recognition Experts.

Legislative Promulgation Timeline

November 4, 2014: Measure 91 passes with 56.11% of the vote.
July 1, 2015: Measure 91 becomes law.
July 9, 2015: SB 844 signed into law, establishing a task force on cannabis.

Regulatory Promulgation Timeline

May 1, 2015: OLCC creates Recreational Marijuana Rules Advisory Committee
April 29, 2016: OLCC issues first recreational cannabis license.
October 1, 2016: First day of recreational cannabis sales.

Notable Judiciary Decisions

N/A

On July 22, 2014, the Oregon Secretary of State certified the Oregon Legalized Marijuana Initiative, or Measure 91, on the November 4 ballot. Headed by New Approach Oregon, the campaign for Measure 91 benefited greatly from Washington and Colorado’s previous implementation of the law. Oregon’s Governor Kitzhaber was an early advocate for recreational cannabis legislation, stating in January of 2014: “I hear the drumbeats from Washington and

Colorado . . . I want to make sure we have a thoughtful regulatory system.”⁴⁹ While polls consistently indicated that Measure 91 would be affirmed by Oregonian voters, a number of policy experts voiced their apprehension. Mark Kleiman, a professor of public policy at UCLA, commented that while he supported the initiative, Measure 91’s proposed regulatory framework was not stringent enough.⁵⁰ The measure was ultimately approved with 56.11% of the vote. Following Washington, Oregon handed primary regulatory authority to the Oregon Liquor Control Commission (OLCC).

Oregon’s laws on recreational cannabis took several departures from the precedents set in Washington and Colorado. At eight ounces, Oregon currently permits its residents the most ounces of personal dried cannabis. The state is also unique in issuing wholesaler licenses, which the legislature defined as “a person that purchases marijuana items in this state for resale to a person other than a consumer.”⁵¹ While not a mandatory feature in Oregon’s vertical integration licensing scheme, cannabis wholesalers take on a similar role to Colorado and Washington’s transporters in that they purchase cannabis products from cultivators in bulk and resell them to retailers. Wholesaler licenses add flexibility to Oregon’s cannabis business structures by permitting cultivators and processors to hold and distribute a wider variety of cannabis products.

Also unlike its predecessors in Washington and Colorado, the OLCC took a slower pace in promulgating its recreational cannabis laws. Where the two states’ cannabis laws went into effect about a month after their passage, Measure 91 went through nine months of regulatory development before becoming law on July 1, 2015. During that time, the OLCC held monthly meetings and eleven public input sessions throughout the state. OLCC Chairman Rob Patridge remarked that “[the] OLCC is committed to a transparent and inclusive public participation process to help . . . implement the law in a way that protects children, keeps our communities safe, promotes economic opportunity and brings the recreational marijuana industry into the regulated market.”⁵² Oregon’s slower pace did result in several delays, however. While the OLCC scheduled to begin licensing recreational cannabis in early January of 2016, it was not until April 29 that the agency issued its first cultivator license, and its first retailer license on October 1, which was also Oregon’s first day of recreational cannabis sales.

⁴⁹ http://www.oregonlive.com/politics/index.ssf/2014/01/no_liquor_on_oregon_grocery_sh.html

⁵⁰ <https://www.vox.com/2014/10/20/6953771/weed-legalization-alaska-florida-oregon-washington-dc-vote>

⁵¹ Or. Rev. Stat. Ann. § 475B.015 (West)

⁵² http://www.oregon.gov/olcc/docs/news/news_releases/2015/nr_03_04_15_NewportPDXSessions.pdf

Since then, both the Oregon legislature and OLCC have not passed any significant recreational cannabis laws or regulations. Similarly, Oregon’s court systems have yet to critically engage with the state’s new cannabis rules. Like Washington, Oregon has kept a tight leash on the industry, and much of the proposed legislation on issues like cannabis clubs has been pigeonholed.

Oregon has moved cautiously and conservatively in developing its recreational cannabis legal framework. Its laws share more in common with its northern neighbor than Colorado, though it has adopted liberal policies of its own, including the unmatched eight ounce at-home limit and flexible vertical licensing structure.

However, the current condition of Oregon and recreational cannabis is not encouraging. The Oregon State Police reported that driving under the influence of cannabis more than doubled in 2016 as compared to Colorado.⁵³ Another major issue Oregon faces is the problem of overproduction. As of early 2018, a confluence of factors, primarily rampant illegal grows in southern Oregon, has caused cultivators in the state to produce three times the amount of cannabis than is consumed.⁵⁴ Some retailers are even anxious about whether they can stay in business.⁵⁵ Unless Oregon’s legislature or the OLCC responds and solves these issue, Oregon could possibly be the nation’s first illustration of a failed recreational cannabis state.

2. **Alaska**

Agency Overview

Regulating Agency: Marijuana Control Board (“MCB”)
Agency Mission: To ensure implementation of AS 17.38 in a manner that is consistent with maintaining the safety of our communities and state.
Tracking System: METRC

Authorized cannabis uses and limits

Possession: 1oz dried⁵⁶, 7g concentrate.
Purchase: 1oz dried, 7g concentrate.
Sharing: 1oz dried
Personal grow: 6 plants, only 3 mature at a time.
Public use: Unlawful to consume marijuana where a substantial group of persons have access, including roads, schools, places of amusement, and portions of apartments not designed for actual residence, excluding cannabis retail stores that have a consumption endorsement issued by the MCB.
Driving: Impairment proven through Drug Recognition Experts.

⁵³ http://www.oregonlive.com/marijuana/index.ssf/2016/06/oregon_marks_1_year_anniversar.html

⁵⁴ <https://reason.com/blog/2018/02/08/oregons-us-attorney-does-not-plan-to-shu>

⁵⁵ <https://mjbizdaily.com/week-review-oregons-cannabis-oversupply-marijuana-job-growth-hemp-lawsuit/>

⁵⁶ Under Ravin v. State, which is controlling through AS § 17.38.010(c), 4oz of cannabis is permitted at one’s residence.

Legislative Promulgation Timeline

November 4, 2014 Measure 2 passes with 53.23% of the vote.
February 24, 2015 Measure 2 becomes law.

Regulatory Promulgation Timeline

February 24, 2015: Alaska Alcoholic Beverage Control Board begins drafting recreational cannabis regulations.
May 12, 2015: MCB is formed.
February 24, 2016: MCB begins taking license applications.
September 9, 2016: MCB issues first licenses.
October 29, 2016 First day of recreational cannabis sales.

Notable Judiciary Decisions

Murphy v. State, 2016 WL 4937865, at *2 (Alaska Ct. App. Sept. 14, 2016) (public consumption)
Jordan v. State, 367 P.3d 41, 52 (Alaska Ct. App. 2016) (measuring culpability)

Before voting recreational cannabis into law in November of 2014, the state of Alaska wrestled with personal cannabis use for nearly four decades. In 1975, Alaska’s Supreme Court held that, as a matter of a residence’s special privacy protections, “the possession of marijuana by adults at home for personal use is constitutionally protected.”⁵⁷ The ruling prompted the state legislature to decriminalize up to four ounces of personal cannabis possession in 1982. Since then, Alaska flipped on the issue four times; recriminalizing cannabis in 1990, striking the recriminalization down in 2003, making possession of four ounces of cannabis a felony in 2006, and finally made legal in 2014 through the passage of Ballot Measure 2.

In keeping with Alaskans’ volatile history with cannabis, the campaign for Ballot Measure 2 was similarly heated. Polls were inconclusive and expressed a sharply divided populous.⁵⁸ The group Big Marijuana. Big Mistake Vote No On 2 argued that the measure was funded by outside corporations seeking a profit off Alaskans and that the state, which already struggles with substance abuse, was particularly vulnerable.⁵⁹ The group also feared the measure “left too much up to the regulatory process” and that there were “many questions unanswered in the initiative’s language[.]”⁶⁰ In their statement of support for Measure 2, supporters claimed that the measure would both curtail the cannabis black market and end the state’s expensive and ineffective enforcement against it.⁶¹

⁵⁷ *Ravin v. State*, 537 P.2d 494, 511 (Alaska 1975).

⁵⁸ <https://www.adn.com/cannabis-north/article/marijuana-polls-show-alaskans-split-over-whether-legalize-or-not/2014/10/09/>

⁵⁹ <http://www.bigmarijuanabigmistake.org/facts>

⁶⁰ <https://www.adn.com/cannabis-north/article/polls-close-legalized-pot-remains-question-mark-alaska/2014/11/05/>

⁶¹ http://www.elections.alaska.gov/doc/oep/2004/2004_oep_reg_1.pdf

Tim Hinterberger, a professor of biological diversity at UAA and co-sponsor of Measure 2, ran an editorial in the Anchorage Daily News, writing: “Since Alaska has the highest marijuana use rates in the country already, it makes far more sense to put responsible businesses in charge of this multimillion-dollar market rather than leave it in the hands of criminals.”⁶² The measure gained nationwide attention in September of 2014 when KTVA news anchor Charlo Greene revealed on-air that she was the owner of the Alaska Cannabis Club and announced: “F*ck it, I quit.”⁶³ A video of her live resignation went viral on Youtube, reaching almost fifteen million views as of early 2018.

On November 4, 2014, Measure 2 passed with a narrow 53.23% of the vote and was codified into law in the following February. The legislature initially tasked the Alcohol Control Board to develop the new industry’s regulations before establishing the Marijuana Control Board (“MCB”) in May of 2015. Like Colorado, Oregon, and later Nevada, Alaska adopted the vertical integration approach. Unlike its companion states, Alaska requires all recreational cannabis license holders to receive a marijuana handler permit by completing an educational course on cannabis safety.⁶⁴ After nearly twenty months of setting up the licensing scheme, Alaska had its first day of sales on October 29, 2015 in the remote city of Valdez.⁶⁵

Because tourism plays a major role in Alaska’s economy, the public use of cannabis question has been particularly urgent. Alaska has gone further than any other state in leaving the door open for cannabis social clubs. While public consumption of cannabis is a \$100 violation, the MCB carved an regulatory exception to licensed recreational cannabis retailers with board-approval for onsite consumption in designated areas. However, fearing “unwanted attention from federal authorities,” the MCB has yet to move forward with this regulation.⁶⁶

Like Oregon, Alaska was cautious in creating recreational cannabis laws. How the state evolves this industry will be something to keep a look out for. Alaska’s unique incentive in drug tourism along with ardent voices looking to expand recreational cannabis in the state will most likely lead the state in promulgating creative rules and programs. For example, the MCB recently established a working group to review and make recommendations on cannabis testing regulations,

⁶² <https://www.adn.com/commentary/article/vote-yes-ballot-measure-2-end-alaskas-failed-prohibition-marijuana/2014/11/01/>

⁶³ <https://www.youtube.com/watch?v=rYcSqIuqkz4>

⁶⁴ Alaska Admin. Code tit. 3, § 306.700

⁶⁵ <http://time.com/4550501/alaska-pot-marijuana-shop-herbal-outfitters/>

⁶⁶ <http://www.ktuu.com/content/news/State-orders-Anchorage-marijuana-social-club-to-shut-down--420035803.html>

which plans to publish its report in the summer of 2018.⁶⁷ As for public consumption, the state's next step is defining the term "marijuana consumption area."⁶⁸

3. **Washington, D.C.**

Authorized cannabis uses and limits

Possession:	2oz dried.
Purchase:	No cannabis sales.
Sharing:	1oz dried.
Personal grow:	6 plants, only 3 mature at one time.
Public use:	Unlawful to consume cannabis in a public space, including any road, vehicle, and any place in which the public is invited, unless that place is a private residence.
Driving:	Impairment proven through Drug Recognition Experts.

Legislative Promulgation Timeline

November 4, 2014:	Initiative 71 passes with 64.87% of the vote.
February 26, 2015:	Initiative 71 becomes law.
July 1, 2016:	Law 21-138 passes, clarifying the term "private club."

Notable Judiciary Decisions

Washington v. United States, 111 A.3d 640 (D.C. 2015) (retroactivity of decriminalization)

McRae v. United States, 148 A.3d 269, 275 (D.C. 2016) (weighing intent to distribute)

Perhaps the most unique of all jurisdictions in regulating cannabis, the District of Columbia created a statutory scheme that forgoes the recreational cannabis industry and instead focuses primarily on the complimentary policies of freeing up police resources and combatting the disproportionate impact cannabis enforcement has had on D.C.'s African American community.⁶⁹

On August 4, 2014, the D.C. Board of Electors certified for the ballot Initiative 71, Legalization of Possession of Minimal Amounts of Marijuana for Personal use Act of 2014. The initiative, spearheaded by the D.C. Cannabis Campaign, found massive support from D.C. voters with one poll indicating a two-to-one margin.⁷⁰ Beyond this grassroots-led movement, the D.C. City

⁶⁷ <https://www.commerce.alaska.gov/web/Portals/9/pub/Homepage/PR17026MJTesting.pdf>

⁶⁸ <https://aws.state.ak.us/OnlinePublicNotices/Notices/View.aspx?id=186831>

⁶⁹ https://wamu.org/story/15/05/01/an_uncomfortable_link_between_race_and_marijuana_arrests_in_dc/

⁷⁰ <https://www.reuters.com/article/us-usa-marijuana-districtofcolumbia/washington-d-c-voters-back-legal-pot-by-2-1-margin-poll-idUSKBN0HD2M220140918>

Council was similarly enthusiastic about decriminalizing cannabis.⁷¹ Mayoral candidates David Catania and Muriel Bowser also supported Initiative 71.⁷²

Initiative 71 passed with 64.87% of the vote, becoming the widest-margin passage for recreational cannabis.⁷³ Without establishing a market, the initiative created a much simpler statutory scheme, which primarily sets limits on possession, distribution, and cultivation of cannabis. Nevertheless, a loophole in the law created a quasi-legitimate recreational cannabis economy as free souvenirs to customers.⁷⁴ Another ambiguity led to a similar gray area for cannabis social clubs. Despite this uncertainty, the city council has been barred by Congress from moving forward in establishing a market that most council members and residents believe necessary for fully realizing their policy objectives of curtailing the black market and reducing the racially disproportionate effects of law enforcement.⁷⁵

Without a market to provide a secure place to purchase cannabis, underground vendors and those working within the law have together amplified the number of cannabis-related arrests, almost three-hundred percent in 2016 and the majority of which involving black and other minority defendants.⁷⁶ Officers attribute these arrests to a growing number of complaints being lodged against those in the recreational cannabis industry.⁷⁷ To ease these damaging ambiguities, D.C.'s council codified an amendment to Initiative 71 in July 2016 which clarified that a public space essentially includes any place outside of a private residence.⁷⁸ However, this clarity will likely be negligible in curbing racially-motivated law enforcement, given that these protections are not extended to people living in apartments or affordable housing. Until Congress lifts its prohibition against the recreational cannabis market, Washington, D.C. will likely continue to struggle with its current system.

⁷¹ <https://www.theatlantic.com/politics/archive/2014/09/heres-what-stands-in-the-way-of-marijuana-legalization-in-washington-dc/451392/>

⁷² <https://www.vox.com/2014/10/7/6858167/marijuana-legalization-decriminalization-yes-no-on-71-district-of-columbia>

⁷³ https://www.dcboe.org/election_info/election_results/2014/November-4-General-Election

⁷⁴ <https://www.thecannabist.co/2017/09/28/washington-dc-marijuana-gift-legal/88893/>

⁷⁵ <https://www.leafly.com/news/politics/why-washington-dc-police-are-cracking-down-on-cannabis-gifting>

⁷⁶ https://www.washingtonpost.com/local/want-to-see-proof-of-institutional-racism-let-weed-open-your-eyes/2017/08/22/099bd7740-8751-11e7-a94f-3139abce39f5_story.html?utm_term=.457ac1eb81d4

⁷⁷ <https://www.leafly.com/news/politics/why-washington-dc-police-are-cracking-down-on-cannabis-gifting>

⁷⁸ <https://code.dccouncil.us/dc/council/laws/21-138.html>

C. Phase Three: 2016

California, Nevada, Massachusetts and Maine passed legislation on recreational cannabis on November 8, 2016. California's passage of Proposition 64 was a particularly major breakthrough, bringing regulated cannabis to the highest-populated state. Despite being major step forward, this phase has been marred with obstacles. The shift toward the more conservative Sessions-era federal justice department marked the beginning of recreational cannabis states shifting their focus from policy experimentation to the possibility of federal retaliation. Fearing federal retaliation, states like Massachusetts and Maine have hesitated in promulgating rules and regulations on recreational cannabis. Excluding California's Jerry Brown, the governors leading states adopting cannabis laws opposed their respective measures.

1. Nevada

Agency Overview

Regulating Agency: Nevada Department of Taxation ("DOT") (no dedicated board)
Agency Mission: No specific agency mission on cannabis.
Tracking System: METRC

Authorized cannabis uses and limits

Possession: 1oz dried, 1/8oz concentrate.
Purchase: 1oz dried, 1/8oz concentrate.
Sharing: 1oz dried, 1/8oz concentrate provided that the transaction is not advertised or promoted to the public.
Personal grow: 6 plants per member of a household, 12 max.
Public use: Unlawful to consume cannabis in an area to which the public is invited or which the public is permitted regardless of age, a retail marijuana store, or in a moving vehicle.
Driving: 2 ng of THC or 5 ng of 11-OH-THC per mL of blood sufficient to prove impairment per se.

Legislative Promulgation Timeline

November 8, 2016: Question 2 passes with 54.47% of the vote.
January 1, 2017: Question 2 becomes law.
Mar 27, 2017: AB 422 signed into law, granting the DOT control over medical marijuana.
June 12, 2017: SB 344 signed into law, creating advertising and labeling laws.

Regulatory Promulgation Timeline

February 2, 2017 Task Force on the implementation of Ballot Question 2 is established.
May 20, 2017 Task Force final recommendations issued.⁷⁹
June 22, 2017 DOT files emergency regulations on recreational cannabis regulations.
July 1, 2017 First day of recreational cannabis sales.

⁷⁹ https://tax.nv.gov/uploadedFiles/taxnv.gov/Content/Boards/Retail_Marijuana/NVRM%20Reportv1.25.pdf

July 7, 2017

Governor Sandoval issues a state of emergency for cannabis regulations.

Notable Judiciary Decisions

N/A

The campaign in Nevada for regulating recreational cannabis lasted longer than any other state, being certified as a measure on December 8, 2014 and going to vote on November 8, 2016. During that time, Question 2 split Nevadans much like what occurred in Alaska and what was also occurring in Maine and Massachusetts, with polls hovering between 47% and 53% in support of Question 2. The Coalition to Regulate Marijuana like Alcohol in Nevada and the Marijuana Policy Project of Arizona led the Yes on Question 2 campaign, reasoning that by replacing the current underground market with a highly regulated and transparent one, passing Question 2 would enhance public safety generate tax revenue, and create thousands of new jobs for the state.⁸⁰ In contrast, Nevada Governor Brian Sandoval and Attorney General Adam Laxalt spoke out against the measure. Laxalt warned that Nevadans should not “make the same grave mistake as Colorado,” which he critiqued had, by passing Amendment 64, “brought foreign cartel activity into their state, increased marijuana-related road fatalities by thirty-two percent, doubled pot-related visits to the ER by children and increased by five times the number of calls to poison control.”⁸¹

Question 2 eventually passed with 54.47% of the total votes and went into effect on January 1, 2017. In February, Governor Sandoval formed a task force to make legislative and administrative recommendations, which submitted their report four months later. On June 22, the Nevada Department of Taxation completed their final emergency regulations on recreational cannabis sales. The resulting laws closely follows the Colorado model; both states share the same personal, sale, share, and grow limits, along with vertical integration licensing.

Being a state recognized for its efficient and pro-business licensing processes, especially in vice goods, Nevada was quick to begin its market. On July 1, 2017, Nevada’s recreational cannabis market opened for business, six months before legally required. At just under nine months, Nevada boasts the quickest preparation time between passing its recreational cannabis law and beginning sales. A major contribution to this accelerated timeline was the DOT’s decision to permit medical

⁸⁰ <http://vegascannabismag.com/news/recreational-marijuana-question-2-nevada/>

⁸¹ [https://ballotpedia.org/Nevada_Marijuana_Legalization,_Question_2_\(2016\)](https://ballotpedia.org/Nevada_Marijuana_Legalization,_Question_2_(2016)) (original Youtube video has been removed)

marijuana dispensaries in good standing with the state to begin selling recreational cannabis first, before issuing new licenses.⁸²

Nevada's new market experienced a brief setback when state alcoholic beverage wholesalers filed a lawsuit to enjoin the state to issue distribution licenses exclusively to their organization as per Question 2's law. The state defended its decision to grant distribution licenses to non-alcohol vendors due to the unexpectedly high demand for cannabis distributors. But for this regulatory hiccup, Nevada appears to have been successful so far in its implementation of recreational cannabis laws.

2. **Massachusetts**

Agency Overview

Regulating Agency: Cannabis Control Commission (CCC)
Agency mission: To honor the will of the voters of Massachusetts by safely, equitably and effectively implementing and administering the laws enabling access to medical and adult use marijuana in the Commonwealth.
Tracking System: BiotrackTHC.

Authorized cannabis uses and limits

Possession: 1oz dried, 10oz dried at home, 5g concentrate.
Purchase: 1oz dried, 5g concentrate.
Sharing: 1 oz dried, 5g concentrate so long as the transfer is not advertised or promoted to the public.
Personal grow: 6 plants per member of a household, 12 max.
Public use: Unlawful to consume marijuana in a public place or smoke marijuana where smoking tobacco is prohibited. This subsection shall not apply to a person who consumes marijuana or marijuana products in a designated area of a marijuana establishment located in a city or town that has voted to allow consumption on the premises where sold.
Driving: Impairment proven through Drug Recognition Experts.

Legislative Promulgation Timeline

November 8, 2016: Question 4 passes with 53.66% of the vote.
December 15, 2016: Question 4 becomes law.
December 28, 2016: Legislature delays start date of sale from January 1, 2018 to July 1, 2018.
July 28, 2017: H. 3818 is signed into law, revising laws passed by Question 4.

Regulatory Promulgation Timeline

September 1, 2017: CCC is formed, given until March 15, 2018 to develop regulations.
March 9, 2018: CCC adopts final regulations.
April 2, 2018: CCC begins issuing licenses.

⁸² <https://mic.com/articles/181887/heres-why-nevada-is-running-out-of-weed-just-10-days-after-legalization#.p7UkJbnq7>

Notable Judicial Decisions

Hensley v. Attorney Gen., 474 Mass. 651, 53 N.E.3d (2016) (initiative language construction).

Massachusetts began its path to regulating recreational cannabis when Question 4, approved for the ballot on July 6, 2016 as Question 4. Two days later, the Supreme Judicial Court held that the measure’s language was misleading and changed the title of Question 4 from “marijuana legalization” to “legalization, regulation and taxation of marijuana.”⁸³ In their official argument on in the voter guide, the Yes on Four campaign argued that Question 4 replaces the black market with a “tightly-controlled regulatory system” that will shift law enforcement’s attention toward more serious crimes.⁸⁴ Massachusetts Governor Charlie Baker, Attorney General Maura Healey, and Boston Mayor Marty Walsh opposed the measure, issuing a joint statement asserting that the tax revenues gained from Question 4 would not cover the medical expenses resulting from regulating cannabis.⁸⁵

Question 4 passed on November 8, 2016 with 53.66% of the vote. Shortly after, the state legislature amended the law to delay the first day of sales from January 1, 2018 to the first of July. A legislative overhaul of Question 4, H. 3818, was passed on July 28, 2017. The amendments promote small-scale cultivation by creating a unique recreational cannabis license type called “craft cooperatives” which allows small-scale cultivators to mitigate registration and taxation fees by joining under a single license to cultivate and process cannabis. The new laws also introduced rules on cannabis social clubs. Massachusetts, along with Maine, has taken a conservative pace in promulgating cannabis regulations, making it still too early to analyze Massachusetts’s recreational cannabis regulatory scheme.

3. **Maine**

Agency Overview

Regulating Agency: N/A, expected to be the Maine Department of Agriculture
Agency mission: N/A
Tracking System: Flourish Software.

⁸³ *Hensley v. Attorney Gen.*, 474 Mass. 651, 669, 53 N.E.3d 639, 655 (2016).

⁸⁴ http://www.sec.state.ma.us/ele/elepdf/IFV_2016.pdf

⁸⁵ Boston Globe, "Mass. should not legalize marijuana," March 4, 2016, <http://www.bostonglobe.com/opinion/editorials/2016/03/04/mass-should-not-legalize-marijuana/njYep84wtERutHNIIHByu4J/story.html>.

Authorized cannabis uses and limits

Possession:	2.5oz dried, 5g concentrate.
Purchase:	2.5oz dried,
Sharing:	2.5oz dried, 5g concentrate.
Personal grow:	6 plants, 12 immature plants.
Public use:	Unlawful to consume cannabis or cannabis products in an area generally accessible to the public.

Legislative Promulgation Timeline

November 8, 2016	Question 1 passes with 50.26% of the vote.
January 27, 2017	Legislature adopts a moratorium on implementing recreational cannabis sales until at least February 2018.
January 30, 2017	Question 1 becomes law.
October 23, 2017	Legislature submits LD 1650, bill to tax and regulate recreational cannabis to Governor LePage who vetoes it.

Regulatory Promulgation Timeline

N/A

Notable Judicial Decisions

N/A

Of all the states that have passed recreational cannabis laws, Maine is having perhaps the most arduous time setting up its statutory and regulatory framework. Its road began on April 27, 2016, when the Maine Marijuana Legalization Measure was placed on the fall ballot as Question 1. Like in Alaska, the campaign was fraught with zealous opinions on both side of the issue. As in Massachusetts and Nevada, Maine’s Governor Paul LePage and Attorney General opposed the measure. Governor Lepage warned that passing Question 1 would lead to increases in opioid abuse, child endangerment, and traffic fatalities.⁸⁶ Other state actors, like Attorney General Janet Mills similarly opposed the bill.⁸⁷ An article in Bangor Dailey News noted that Maine was not prepared for recreational cannabis and that passing Question 1 would only exacerbate the state’s ongoing addiction crisis.⁸⁸ In response, proponents of the measure claimed that regulating cannabis use would make communities safer by replacing the dangerous underground market, bolster the economy, and end the needless incarceration of cannabis users.⁸⁹

⁸⁶ https://www.youtube.com/watch?time_continue=41&v=Dg9wHovN5FI

⁸⁷ <https://bangordailynews.com/2016/05/04/the-point/what-stands-between-maine-and-legal-marijuana-use/>

⁸⁸ <http://bangordailynews.com/2016/10/14/opinion/editorials/no-on-1-its-not-in-maines-best-interests-to-make-it-easier-to-access-marijuana/>

⁸⁹ <https://www.mpp.org/states/maine/>

Question 1 passed by the narrowest margin of any jurisdiction at 50.26% of the vote. Governor LePage threatened to challenge the result depending on how the newly elected Trump administration would respond, but eventually backed down.⁹⁰ While the law went into effect on January 30, 2017, the state legislature has not since finalized laws on the recreational cannabis market. Maine came close in October of 2017 when the state house and senate approved the bill LD 1650. This bill would have also amended Question 1 in a few controversial ways, perhaps largest being an opt-in provision, which would require cities to vote whether to permit cannabis businesses in their jurisdiction.⁹¹ LD 1650 was vetoed by Governor LePage, remarking in his veto letter that states that have legalized recreational cannabis have suffered “serious negative effects” and that Maine needs assurances from the federal government before it permits the sale of cannabis.⁹² The state now projects that it will settle on recreational cannabis’s rules and regulations by Fall of 2018.

4. **California**

Agency Overview

Regulating Agency: The Bureau of Cannabis Control (“BCC”)
 Agency mission: To protect the public and consumers which is carried out through various regulatory licensing, enforcement and disciplinary activities.

Authorized cannabis uses and limits

Possession: 1oz dried, 8g concentrate.
 Purchase: 1oz dried, 8g concentrate.
 Sharing: 1oz dried, 8g concentrate.
 Personal grow: 6 plants.
 Public use: Unlawful to consume cannabis where visible from a public place.

Legislative Promulgation Timeline

November 8, 2016: Proposition 64 passes with 57.13% of the vote.
 November 8, 2016: Proposition 64 becomes law.
 June 27, 2017: SB94 “Medical and Adult-Use of Cannabis Regulation and Safety Act passes, granting BCC authority over medical marijuana.

Regulatory Promulgation Timeline

October 4, 2017: Dept. of Consumer Affairs creates Cannabis Advisory Committee
 November 16, 2017: BCC adopts emergency regulations.
 December 14, 2017: BCC begins taking license applications.

⁹⁰ <http://www.pressherald.com/2016/11/14/foes-moving-ahead-with-recount-request-for-maine-pot-legalization-vote/>

⁹¹ <https://merryjane.com/news/founder-of-legalize-maine-supports-governor-lepage-veto-of-recreational-cannabis-bill>

⁹² <https://bangordailynews.com/2017/11/03/politics/lepage-vetoes-bill-to-regulate-marijuana-sales-in-maine/>

January 1, 2018: First day of recreational cannabis sales.

Notable Judiciary Decisions

N/A

Proposition 64's passage in California was a watershed moment in the recreational cannabis legalization. With the United States' largest population and economic power, California is poised to host the world's biggest recreational cannabis market.⁹³ For decades, the Golden State has been the nation's top producer of cannabis, and the question of creating a recreational cannabis market has been on the state's radar since 1972. In 1992, San Francisco became the first U.S. municipality to legalize medical marijuana with the rest of the state following suit four years later and sparking the trend of cannabis deregulation nationwide. For California, and especially its Emerald Triangle, the regulation of medical marijuana created a rush of cannabis growers, reaching nearly seventy thousand by 2018.⁹⁴ In 2015, California's legislators asserted its authority over the gestating "gray market" with the Medical Marijuana Regulation and Safety Act, which expanded the state's oversight and control over the industry.

California's next step was to join its Pacific states with regulating recreational cannabis, beginning with the certification of Proposition 64 on July 2, 2016. In the months that followed, polls indicated that California residents generally supported legalizing cannabis a highly-regulated product. The proposed law drew a great deal of criticism as well. U.S. Senator Dianne Feinstein – a longtime advocate against drug reform and co-author of the official argument in opposition of Proposition 64 – contested that the initiative was untenable for five reasons: it would double highway fatalities, preclude local control by permitting cultivation near schools and parks, increase black market drug activity, advertise to children on television, and disproportionately harm low-income neighborhoods.⁹⁵ Surprisingly, the Libertarian Party of California joined in opposition. Sharing the concerns of many medical marijuana growers in the Emerald Triangle, The Libertarians starkly opposed Proposition 64's imposition of restrictive and overburdensome cannabis regulations.⁹⁶ Scott Chipman, founder of Citizens Against the Legalization of Marijuana,

⁹³ <https://www.bizjournals.com/sanfrancisco/news/2017/12/14/california-cannabis-marijuana-regulations-2018.html>

⁹⁴ Scott Wilson, "California's 'outlaw' cannabis culture faces a harsh reckoning: legal marijuana" *The Washington Post*, Mar. 18, 2018 https://www.washingtonpost.com/news/national/wp/2018/03/16/feature/californias-outlaw-marijuana-culture-faces-a-harsh-reckoning-legal-weed/?utm_term=.9166a35e4ac5

⁹⁵ <http://vig.cdn.sos.ca.gov/2016/general/en/pdf/complete-vig.pdf>

⁹⁶ <https://ca.lp.org/2017ab64/>

condemned recreational cannabis as an addictive gateway drug and the leading cause of “death, destruction, and economic cost” in the country.⁹⁷

The campaign supporting Proposition 64, led by Yes on 64, defended Proposition 64 as creating a comprehensive system that protects the youth from the black market and unburdens California’s law enforcement in cannabis enforcement.⁹⁸ The coalition in support of Proposition 64 was the largest for a recreational cannabis initiative and included national politicians like Governor Gary Johnson and Senator Bernie Sanders. Associate Dean Steven Bender of the Seattle University School of Law praised Proposition 64 as a vehicle for social justice, going “beyond other state legalization approaches to begin to undo, and even repair, the damage of ongoing structural racism in the criminal justice system[.]”⁹⁹ Bender highlighted the proposition’s expungement of previous cannabis offenses and creation of a community reinvestment grant program, which directs a portion of the cannabis revenue tax toward services like job placement assistance and substance use disorder treatment in communities most affected by drugs and drug-related law enforcement policies.¹⁰⁰

Proposition 64 passed on November 8, 2016 with 57.13% of the vote. The Bureau of Marijuana Control, which had managed the state’s medical marijuana laws, was retitled the Bureau of Cannabis Control (BCC) and directed to regulate the new industry. In June of the following year, California’s legislature updated and integrated its 2015 medical marijuana laws into its new recreational cannabis laws through the Medical and Adult Use of Cannabis Regulation and Safety Act (MAUCRSA). The BCC created the Cannabis Advisory Committee in October to advise the bureau on the development of best practices and guidelines to protect public health and diminish the black market. The committee is made up of twenty-four members and represents experts in labor policy, law enforcement, community equity, public health, the alcohol board, the private industry.¹⁰¹ The BCC adopted emergency final regulations by early November and recreational cannabis retailers opened shop on January 1, 2018. The resulting rules have largely followed the Colorado model in permitting vertical integration, maxing personal cultivation at six live plants, and emphasizing municipal control over cannabis’s presence in a community.

⁹⁷ “Meet Scott Chipman – Founders of ‘Citizens Against the Legalization of Marijuana’” *TNM News*, <https://thenationalmarijuananeews.com/meet-scott-chipman-founder-citizens-against-legalization-of-marijuana/>

⁹⁸ *Id.*

⁹⁹ Steven W. Bender, “The Colors of Cannabis: Reflections on the Racial Justice Implications of California’s Proposition 64” 11, 18 *UC Davis Law Review Online* <https://lawreview.law.ucdavis.edu/online/vol50/Bender.pdf>.

¹⁰⁰ *Id.*

¹⁰¹ “Cannabis Advisory Committee Members” http://bcc.ca.gov/about_us/committee_members.html

By creating a licensed recreational cannabis market, the BCC has the uphill battle of reigning in California's thriving yet controversial gray market. The agency is hitting the ground of an industry already running at full steam, and will need to resolve its many outstanding issues, such as the environmental degradation of Northern California's redwoods,¹⁰² the future of nonprofit distribution of cannabis,¹⁰³ and the role of online advertising websites like Weedmaps and Leafly.¹⁰⁴ The California legislature is also expected to pass a number of cannabis-related bills, most significantly being SB 930, which if passed would provide cannabis businesses banking services through access to cannabis-limited charter banks and credit unions. As in Denver and Anchorage, California's cities are tackling the question of cannabis social clubs. Coachella Valley's Cathedral City and Palm Springs have recently adopted ordinances permitting these lounges, applying the BCC's onsite consumption rule mirroring Alaska's MCB carveout for cannabis consumption in designated areas at retail stores.

The future of recreational cannabis rests with its success in California. Legislators in states like Michigan, Illinois, and New Jersey are waiting for the dust to settle in the Golden State before moving forward with adopting cannabis laws. BCC head Lori Ajax is optimistic about California cannabis in the Golden State and anticipates her bureau's role as leading the future interstate commerce of cannabis once it is federally legal.¹⁰⁵

III. **Best Practices by Policy Area**

A. **Public Safety**

State agencies tasked with implementing recreational cannabis regulations must ensure that the public is not put in an unreasonable risk of danger. Black's Law Dictionary defines public safety as "[t]he welfare and protection of the general public, usually expressed as a governmental responsibility."¹⁰⁶ The most pressing public safety duties of these states involve road traffic safety, youth health, and the ongoing war on drugs. In this early stage of recreational cannabis

¹⁰² See Daniel Wayne Rinn, "Will licensed marijuana cultivation hurt California's redwoods?" *The Mercury News*, April 16, 2018 <https://www.mercurynews.com/2018/04/16/will-unlicensed-marijuana-cultivation-hurt-californias-redwoods/>

¹⁰³ See Ellen Holland, "Free Weed: The Potential Death of California Cannabis Compassion" *Cannabis Now*, Mar. 29, 2018 <https://cannabisnow.com/free-weed-the-potential-death-of-california-cannabis-compassion/>

¹⁰⁴ Brooke Staggs, "California threatens Weedmaps over promotion of illegal cannabis shops" *The Orange County Register*, Mar. 7, 2018 <https://www.ocregister.com/2018/03/07/state-tells-weedmaps-to-stop-promoting-illegal-marijuana-businesses-or-face-criminal-civil-penalties/>

¹⁰⁵ Sean Planck, "The Cannabis Czar: Lori Ajax tackles the daunting task of regulating California's legal cannabis market." *Palm Springs Life*, Apr. 13, 2018 <https://www.palmspringslife.com/lori-ajax/>

¹⁰⁶ PUBLIC SAFETY, Black's Law Dictionary (10th ed. 2014).

development, the National Highway Traffic Safety Association (NHTSA) has strongly encouraged states which have adopted a form of recreational cannabis laws to establish data collection systems on cannabis-related law enforcement to best equip state agents against challenges specific to their communities.¹⁰⁷

a. *Road traffic safety*

Law enforcement, regulating agencies, and legislators are still developing policies on cannabis's ultimate impact on road traffic safety. Studies on this question have offered very different conclusions. The Drug Policy Alliance reported that cannabis has had a negligible effect on crash risks and fatalities.¹⁰⁸ Conversely, the NHTSA argues that cannabis significantly impairs one's ability to safely operate a motor vehicle due to its various psychological effects on the driver.¹⁰⁹ However, the NHTSA found in a separate study that, when adjusted for demographics, cannabis use can be correlated to a "not statistically significant" 5% increase in vehicle crashes.¹¹⁰ The accuracy of this statistic is also suspect, given the presence of other drugs in the system and time elapsed between a traffic stop and chemical testing. Regardless, most states and law enforcement have drawn hard lines on cannabis and road traffic safety.

i. *Open Container Rule.*

Colorado was the first to set laws on improper cannabis use in a vehicle. By statute, drivers and most passengers in Colorado are prohibited from possessing cannabis in a vehicle unless it is closed and unsealed; in the trunk of a vehicle; or, if the vehicle does not have a trunk, in an area not directly accessible to the driver.¹¹¹ However, the law does make an exception for paying customers in the back seat of a privately-hired car, which has led to business enterprises from party busses to airport shuttles.¹¹² In 2015, Washington legislators added a similar statute but, taking the conservative approach, omitted the privately-hired car exception.¹¹³ Oregon and Alaska have not drafted statutes on cannabis possession in a vehicle, but the city Anchorage has followed Colorado's

¹⁰⁷ <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf> p. 30

¹⁰⁸ https://www.drugpolicy.org/sites/default/files/dpa_marijuana_legalization_report_v8_0.pdf

¹⁰⁹ Couper, Fiona, J, and Logan, Barry Drugs and Human Performance Fact Sheets National Highway Traffic Safety Administration., page 11. April 2004.

¹¹⁰ <https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf> at p 25

¹¹¹ C.R.S.A. § 42-4-1305.5.

¹¹² <https://www.duidefenseatters.com/resources/marijuana-faqs>; <https://elevatedrental.com/420-friendly-transportation-but-what-about-uber/>

¹¹³ Wash. Rev. Code Ann. § 46.61.745 (West).

law, including its exception, possibly in response to the city's influx of tourists.¹¹⁴ California and Nevada have followed the Washington method, though entrepreneurs in Las Vegas are lobbying their city officials to carve an exception to permit cannabis possession in privately-hired vehicles.¹¹⁵ The emerging best practice on cannabis in vehicles could be that a state or city should authorize cannabis possession in a privately-hired vehicle if it would result in a significant economic impact.

ii. Cannabis Detection

The standard for detecting cannabis is growing toward impairment detection and away from the *per se* precedent set in Washington and Colorado. Both states ruled that a driver is impaired when he has five nanograms or more of THC per one milliliter of blood. Colorado, taking the liberal approach, considered the five nanogram per milliliter merely a permissible inference subject to a defense of non-impairment.¹¹⁶ The only other state to adopt a *per se* standard was Nevada, which took an even more detailed approach. In Nevada, impairment is tested separately for THC and 11-OH-THC, the main active metabolite in THC responsible for much of its psychoactive effects. The nanogram per milliliter of blood cap in Nevada is two for THC and five for 11-OH-THC. In contrast, states like Oregon and California continue using effects-based impairment tests, including the National Standardized Field Sobriety Test (FST). The Oregon Liquor Control Commission reported that “[l]ittle evidence exists to compel a significant change in status quo policy or institute a *per se* intoxication standard for THC.”¹¹⁷ One study concluded Washington and Colorado's *per se* standard misses 70% of cannabis-impaired drivers.¹¹⁸ Researchers mostly agree that officers using impairment tests over any *per se* standard are more effective in correctly identifying impaired cannabis use and maintaining road safety.¹¹⁹ Likely due to these findings, the impairment standard is becoming the norm for most states in cannabis detection.

While a better approach, this approach is still a work in progress, and many experts are divided on applying the Standardized Field Sobriety Tests (FST) model. Two studies found FSTs somewhat effective at best in determining cannabis-related impairment.¹²⁰ However, Massachusetts' Supreme Court recently defended FSTs as legitimate and probative evidence in identifying cannabis

¹¹⁴ <https://www.adn.com/anchorage/article/anchorage-drivers-be-required-keep-cannabis-trunk-car/2015/08/26/>

¹¹⁵ <http://cordilleramontana.worldnow.com/story/35995603/las-vegas-marijuana-party-bus-tours-on-hold>

¹¹⁶ Colo. Rev. Stat. Ann. § 42-4-1301(6)(a)(IV) (West).

¹¹⁷ http://www.oregon.gov/olcc/marijuana/Documents/HB3400_2015_DUIILegislativeReport.pdf

¹¹⁸ <https://www.mpp.org/issues/criminal-justice/marijuana-and-dui-laws/>

¹¹⁹ See <https://www.mpp.org/issues/criminal-justice/marijuana-and-dui-laws/> ;

https://www.drugpolicy.org/sites/default/files/dpa_marijuana_legalization_report_v8_0.pdf ;

¹²⁰ Rubenzer, Steven, The Standardized Field Sobriety Tests: A review of scientific and legal issues, 32 Law & Hum. Behav. 293 (2007).

impairment. The court held that an officer must only testify as to his observations of the defendant during an FST, which would then be analyzed through a drug recognition expert and weighed by the jury.¹²¹ Research is underway to develop a modified FST specifically for cannabis detection, which will likely focus on head movement, the nose-touch test, and pupil constriction.¹²²

b. *Youth health*

There is a consensus amongst states that strong public policy exists to mitigate and rehabilitate youth consumption of cannabis. Scholars agree this is a serious concern; one article stated that individuals who consumed cannabis before the age of seventeen were seven times more likely to commit suicide, and eight times more likely to use addictive drugs later in life.¹²³ A recent study indicated that cannabis use by youth has remained stable since 2012, and in 2016 use among 8th and 10th graders dropped to its lowest level in more than two decades.¹²⁴ Recreational cannabis states have all adopted the twenty-one years minimum age, but vary on how they organize minors. In California for example, minor possession penalties are bifurcated between those under the age of eighteen and those between eighteen and twenty-one.¹²⁵ While states differ on specific regulatory gaging, all have penalized any furnishing of cannabis to a minor as a felony offense. Also, all states have been at least moderately successful in preventing an increase of cannabis use by the youth. Moving forward, the Police Foundation encourages states to employ public education campaigns emphasizing scientific studies on the harmful effects of cannabis to counter the growing perception among youth that cannabis is safe.¹²⁶

B. **Consumer Protection**

State agencies have largely approached their duty to protect consumers against the dangers of recreational cannabis use by requiring businesses to comply with product testing, labeling, and advertising requirements. Whether and how a consumer can litigate against harmful cannabis products is a burgeoning question which will likely refine the cannabis-consumer protection policies.

a. *Product Testing*

¹²¹ *Commonwealth v. Gerhardt*, 477 Mass. 775, 787, 81 N.E.3d 751, 762 (2017).

¹²² Hartman, Richman, Hayes, & Heustis, *Drug Recognition Expert (DRE) Examination Characteristics of Cannabis Impairment*, 92 *Accident Analysis and Prevention* 219, 226 (2016) (Hartman).

¹²³ Silins, E., Horwood, L.J., Patton, G.C., Fergusson, D.M., Olsson, C.A., Hutchinson, D.M., . . . Mattick, R.P. (2014). *Young adult sequelae of adolescent cannabis use: An intergrative analysis*. *The Lancet Psychiatry*, 1(4), 286-293. doi: [http://dx.doi.org/10.1016/S2215-0366\(14\)70307-4](http://dx.doi.org/10.1016/S2215-0366(14)70307-4)

¹²⁴ <https://www.drugabuse.gov/publications/drugfacts/monitoring-future-survey-high-school-youth-trends>

¹²⁵ Cal. Health & Safety Code § 11357 (West).

¹²⁶ https://www.nccpsafety.org/assets/files/library/Legalized_Marijuana_Practical_Guide_for_Law_Enforcement.pdf

There is strong uniformity amongst recreational cannabis states on cannabis testing facilities. Every state requires these facilities to remain independent and maintain zero interest in any other business in the supply chain. Additionally, cannabis testing licensees are required to pass proficiency testing at least once per year to retain their license; in conservative Washington, these tests are required twice a year.

All inhalable cannabis is tested for potency and pesticide; most states additionally test for moisture, residual solvents, microbial contaminants, mycotoxins, and foreign matter. Third phase states have expanded upon the types of contaminants tested for in inhalable cannabis, including terpenoids, herbicides, salmonella, and plant growth regulators. States mandate that if a sample cannabis tests positive for a contaminant, its entire batch must be disposed.

The rollout of these testing procedures have been mixed. Oregon, despite boasting the most comprehensive regulatory scheme on cannabis product testing, still struggles with contaminated cannabis reaching consumers.¹²⁷ The adequacy of Oregon's independent cannabis testing facilities have come into question.¹²⁸ This problem is not exclusive to Oregon; investigators have put California under scrutiny for cultivating "dirty cannabis."¹²⁹ However, California is still issuing new testing regulations and is set to possibly have the strictest cannabis standards in the nation. It's an uphill battle in Alaska, where only two cannabis testing laboratories are in operation. In early 2018, the MCB issued a public consumer alert, warning that inconsistencies in cannabis testing has left unknown amounts of cannabis infested with mold.¹³⁰ State enforcement supervisor James Hoelscher acknowledged that, while all cannabis states are grappling with defective products, Alaska's testing crisis is the most severe.¹³¹

In response to these false steps in Oregon, California and Alaska, states are moving toward highly regulated and intensive cannabis testing regulations. Washington State, which has avoided most criticism in testing, has invested over a million dollars in new testing equipment.¹³² In 2017, the state created a "first of its kind" dedicated state-controlled cannabis pesticide testing lab.¹³³

¹²⁷ http://www.oregonlive.com/marijuana/index.ssf/2017/06/contaminated_marijuana_still_r.html

¹²⁸ <https://hightimes.com/news/report-dirty-contaminated-weed-still-being-sold-in-oregon/>

¹²⁹ <https://www.leafly.com/news/politics/leafly-investigation-california-dirty-cannabis-problem>

¹³⁰ <https://www.adn.com/alaska-marijuana/2018/01/04/alaska-marijuana-board-issues-consumer-alert-amid-testing-issues/#>

¹³¹ Id.

¹³² JOHNSON Associated Press, G. (2016, Sep 16). Washington state to increase testing pot for pesticides. Associated Press News Service, The. Retrieved from

<http://infoweb.newsbank.com/resources/doc/nb/news/15F6EA35DB246510?p=WORLDNEWS>

¹³³ https://lcb.wa.gov/sites/default/files/publications/annual_report/2017-annual-report-final2-web.pdf

Given the frequent inconsistencies of the private laboratories across the board, it is possible that states will follow suit in taking the reigns of cannabis product testing. Considering that testing license holders are already prohibited from being financially tied to other cannabis businesses and under constant oversight by the state, a transition to state-run cannabis testing facilities would not be a drastic change, and doing so may result in better public health and consumer protection.

b. *Product Labeling and Packaging*

Similarly, most states have adopted uniform regulations regarding labeling and packaging recreational cannabis products. Looking at inhalable cannabis specifically, every recreational cannabis state has enacted labeling regulations that require the identifying the retailer, cultivator, and name of the product; its THC and CBD potency and net weight; and warning statements. While the warning statements vary, most include language like “This product may have intoxicating effects and may be habit forming,” “Marijuana can impair concentration, coordination, and judgment. Do not operate a vehicle or machinery under the influence of this drug” and “keep out of reach of children.”¹³⁴

States also share similar restrictions on cannabis packaging, mostly to protect against youth consumption. Included in each recreational cannabis states’ regulations, the emerging best practice in cannabis packaging bars companies from displaying cartoon characters and bright colors, using terms like candy or similar words, and purposefully designing the product to appear like children’s merchandise. All states also require that cannabis products are contained in child-resistant packaging.

These trends are likely to consolidate further. Massachusetts and Maine, which are still developing their regulations on product labeling, have offered similar proposed regulations. The next stage in public policy development will be adopting a universal warning symbol for cannabis. Washington, Colorado, California and Oregon have unveiled designs for their state, but which is likely to influence future states is still unclear.

C. Environmental Protection

States regulations play a significant role in mitigating cannabis’s impact on natural resources and the environment, particularly in setting policies on cultivation types, water use, and waste management. Overall, cannabis’s environmental impacts generally parallel the impacts of other

¹³⁴ WAC 314-55-105; 3 AAC 306.345; NAC 453A.510.

types of small-scale commercial horticulture.¹³⁵ However, being a light-intensive product, cannabis energy costs skyrocket as cultivation moves indoors. One study estimates that the energy cost differential between outdoor to greenhouse to indoor results in a shift from 0 to 1 to 78.¹³⁶ Greenhouses strike an “ideal environmentally sustainable middle ground” as their negligible rise in energy costs is offset by their significant reduction of water loss through evaporation.¹³⁷ Beyond greenhouses, an environmentally-sound cultivation policy should also prioritize approving licensing applications as a means of enforcing regulatory compliance.¹³⁸ For example, California’s cannabis cultivation license applications and annual renewals require applicants to submit comprehensive waste management plans.¹³⁹ However, California’s uniquely meticulous environmental regulation on cannabis is in response to a uniquely urgent threat. Because cannabis cultivation is such a major industry in the state, the BCC has set the most comprehensive regulations on water and waste management in cannabis cultivation and are therefore likely the emerging best practices in this field.

a. *Case Study: The Emerald Triangle*

California produces 75% of all cannabis seized by the federal Drug Enforcement Agency,¹⁴⁰ and California’s Emerald Triangle, containing Humboldt, Mendocino, and Trinity counties, is the nation’s – and perhaps the world’s - most condensed, entrenched, and remote cannabis cultivation region. The Emerald Triangle presents a worst case scenario of long-term, and rampant outdoor and unregulated cannabis cultivation. A 2017 study by the Ecological Society of America found the region’s rate of outdoor cannabis cultivation has resulted in a significant hike in poisoned animals, dewatered streams, soil erosion, and deforestation.¹⁴¹ The report concluded that the total amount of landscape change in Northern California between 2000 to 2013 was three times more likely to have

¹³⁵ Michael O’Hare, “Environmental Risks and Opportunities in Cannabis Cultivation” BOTEC Analysis Corp., Jun. 28, 2013, https://lcb.wa.gov/publications/Marijuana/SEPA/BOTEC_Whitepaper_Final.pdf

¹³⁶ April Mulqueen, Rebecca Lee, Marzia Zafar, “Energy Impacts of Cannabis Cultivation” *California Public Utilities Commission*, p. 17, April 20, 2017, [http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/PPD_Work/PPD_Work_Products_\(2014_forward\)/PPD%20-%20Prop%2064%20Workshop%20Report%20FINAL.pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/About_Us/Organization/Divisions/Policy_and_Planning/PPD_Work/PPD_Work_Products_(2014_forward)/PPD%20-%20Prop%2064%20Workshop%20Report%20FINAL.pdf)

¹³⁷ *supra*. at 16.

¹³⁸ O’Hare at 8, (out of these features, licensure is the most indicative of an environmentally-sound cultivation site.)

¹³⁹ Cal. Code Regs. tit. 16, § 40131(j)(5).

¹⁴⁰ Maureen Meehan, “75 Percent of Indoor Pot Plants Come From California,” *High Times*, Oct. 5, 2017, <https://hightimes.com/news/75-percent-indoor-pot-plants-california/>

¹⁴¹ Ian J. Wang, “Cannabis an emerging agricultural crop, leads to deforestation and fragmentation,” *The Ecological Society of America*, Oct. 12, 2017, <https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1002/fee.1634>

been caused by cannabis cultivation than the timber industry.¹⁴² Water diversion and pesticide use have threatened wild animals like salmon, fishers, rodents, and spotted owls.¹⁴³

The environmental report from northern California assigns partial responsibility to California's longstanding one-acre limit on outdoor cultivation sites, which the study argues has led to inefficiency and fragmentation of cannabis grows.¹⁴⁴ While the state has yet to finalize its rules on cannabis cultivation size caps, California defends the one-acre limit as a vehicle to encourage licensure from small business and to restrict the ecological damage of large, industrial-scale outdoor sites. California has taken a distinctive effort to promote small-scale cannabis cultivation by issuing specialty cottage cultivation licenses for micro-cultivation. This approach is inherently antithetical to conservation biology principles that an ecosystem is better protected the less its management is fragmented. Still, California makes a net environmental gain by encouraging the many unlicensed, small-scale, and environmentally damaging northern Californian cultivators to voluntarily engage in the state's demanding water and waste management regulations. As a compromise, California's cultivation licensing scheme does not reflect of best practices in environmental policy but rather a solution to its unique challenge of attempting to control the large number of unlicensed cultivators in the Emerald Triangle. However, states with urgent or heightened environmental concerns should look to California's strict licensure requirements in setting ideal environmental regulations on cannabis.

b. *Mixed-light greenhouse cultivation preferred.*

There has been a recent push toward using greenhouses as an energy-conserving compromise between indoor and outdoor sites. Indoor sites are not preferred. Cannabis grown indoors demands large amounts of artificial light. One study estimates that cannabis cultivated under HID bulbs generate about thirty milligrams of mercury pollution per kilogram.¹⁴⁵ If that same amount of mercury were infused into a kilogram of cannabis, the crop would be in violation of the EPA's minimum toxicity standards.¹⁴⁶ Conversely, outdoor cultivation exposes the surrounding region to toxic contamination, as evident in northern California.

Highly efficient greenhouses strike the fairest balance between environmental and energy costs. A Belgian study stated that, relative to the interior of a building, greenhouses can reduce a

¹⁴² supra.

¹⁴³ <https://www.motherjones.com/environment/2014/03/marijuana-weed-pot-farming-environmental-impacts/>

¹⁴⁴ Wang, supra.

¹⁴⁵ O'Hare, supra at p.18.

¹⁴⁶ 40 C.F.R. § 261.24 (adopted by all states with recreational cannabis).

cultivator's energy costs by 99%.¹⁴⁷ Cannabis work group Denver Environmental Health promotes greenhouse-based cannabis cultivation and encourages states to adopt regulations and policies in favor of this method.¹⁴⁸ The California Department of Food and Agriculture reached a similar conclusion in its Program Environmental Impact Report on cannabis cultivation. The report concluded that natural light and low-intensity greenhouse light as the environmentally superior options to “substantially [reduce] energy use and related air quality and greenhouse gas emissions associated with indoor cultivation.”¹⁴⁹

c. *Water*

Water management policy generally falls under two doctrines in the United States: riparianism in the east and prior appropriation in the west. As recreational cannabis has only recently become regulated in states like Massachusetts, Maine and Vermont, this section primarily applies cannabis-water policy through the prior appropriation scheme. While prior appropriation-based doctrines do not transfer wholly in the east, the heightened urgency of setting conservation-facing water policies inherently elevate the western cannabis-water policies to the gold standard in best practices for water regulation.

The scarcity and fragility of water access in the west necessitates more comprehensive and restrictive rules and practices. In brief, prior appropriation applies two major practices to achieve this end, a seniority system for water-right holders and a requirement that waters appropriated from running streams be put to beneficial use.¹⁵⁰ Because of the “first in time, first in right” system, incoming western cannabis cultivators in the west face an obstacle absent in the more holistic riparian east. States have set the parameters for beneficial use widely; but such use generally involves “that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made.”¹⁵¹

In California, the doctrine of beneficial, reasonable and efficient use of water is closely scrutinized in cannabis cultivation. The BCC grants the State Water Resources Control Board and

¹⁴⁷ De Cock, L., “Monitoring Energy Consumption in Belgian Glasshouse Horticulture” Ministry of Small Enterprises, Trades and Agriculture. 1999.

¹⁴⁸ <https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/EQ/MJ%20Sustainability/Draft%20Cannabis%20Environmental%20BMP%20Guide.pdf> p. 14

¹⁴⁹ “CalCannabis Cultivation Licensing: Executive Summary, Final Program Environmental Impact Report”, California Department of Food and Agriculture, p. ES-14, Nov. 2017
https://www.cdafa.ca.gov/calcannabis/documents/ExecSummary_Final.pdf

¹⁵⁰ See *Irwin v. Phillips*, 5 Cal. 140, 140 (1855).

¹⁵¹ Colo. Rev. State. § 37-92-103(4) (2014).

Department of Fish and Wildlife wide authority to preclude licensure if granting such would cause a significant adverse impact on a watershed or other geographic area.¹⁵² California's State Water Resources Control Board issued an exhaustive cannabis cultivation policy guideline which consisted of over one-hundred directives and rules required for a cultivator to remain compliant with the state's water laws.¹⁵³ In particular, the board encourages cultivation sites to capture and store rainwater to best unburden their drain on water resource.

For other states, the issue of water use is less urgent. Looking at cannabis cultivation generally, a prevailing standard sets the water demand at one to three gallons of water per cannabis plant, per 150 days of cultivation.¹⁵⁴ While many factors also play into a single plant's maximum yield, an experienced cultivator can harvest a pound of cannabis per plant.¹⁵⁵ And applying an estimated single dosage of roughly a quarter-gram, a single serving of inhaled cannabis exerts between .08 to .25 gallons of water.¹⁵⁶ In comparison, twenty-eight gallons of water are required for a serving of beer, thirty-four gallons for wine, and 110 gallons per quarter-pound burger.¹⁵⁷

However, these reports on water usage rely on self-reporting from largely reputable and transparent cultivators. Water consumption for unregulated black market cannabis grows can vary greatly, and in regions like Northern California, the water use has reached fifteen gallons of water per plant per day.¹⁵⁸ Incentivizing illicit cannabis cultivators to enter the regulated and licensed cannabis industry, and harshly punishing those who remain unlawful, will greatly diminish the negative impact of cannabis on water. For the roughly fifteen-thousand growers in Humboldt County alone, this policy looks to reduce their population by two thirds.¹⁵⁹ Only once a state has a

¹⁵² 3 CCR § 8216.

¹⁵³ "Cannabis Cultivation Policy: Principles and Guidelines for Cannabis Cultivation," California State Water Resources Control Board, Oct. 17, 2017 https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/final_cannabis_policy_with_att_a.pdf.

¹⁵⁴ Chris Roberts, "Dry High: Despite Law Enforcement Reports, Marijuana Is Relatively Water-Friendly," S.F. WKLY. NEWS, Apr. 29, 2015, <http://www.sfweekly.com/sanfrancisco/chem-tales-san-francisco-marijuana-weed-cannabis-water-drought-police/Content?oid=3574066>

¹⁵⁵ "How much Marijuana Does a Marijuana Plant Yield?" The Weed Blog, Jan. 21, 2014

<https://www.themaven.net/theweetblog/growing/how-much-marijuana-does-a-marijuana-plant-yield-QvouJnNoRU2AajtNpr4vSg/?full=1>

¹⁵⁶ Using high-tolerance dosage estimates from Erowid.com https://erowid.org/plants/cannabis/cannabis_dose.shtml.

¹⁵⁷ Roberts, *supra*.

¹⁵⁸ Ryan B. Stoa, "Weed and Water Law: Regulating Legal Marijuana," 67 Hastings L.J. 565, 576 (2016).

¹⁵⁹ Gary Pitzer, "AMID 'GREEN RUSH' OF LEGAL CANNABIS, CALIFORNIA STRIVES TO CONTROL ADVERSE EFFECTS ON WATER," Water Education Foundation, Apr. 20, 2018

<http://www.watereducation.org/western-water/amid-green-rush-legal-cannabis-california-strives-control-adverse-effects-water>

quantifiable record of businesses appropriating water for cannabis cultivation can it take the next step in determining whether the business is using it for a beneficial use.

d. *Waste Management*

From the crop itself to pesticides, plastics, water, lightbulbs, and other materials incidental to its cultivation and sale, the cannabis industry has a noticeable waste footprint that has been largely unprioritized by state rule makers. Cannabis is a highly regulated product and conflicting public policies are both unavoidable and unpredictable; state lawmakers have ultimately sacrificed a number of positive waste management practices in pursuit of policies like public safety and quality assurance.

Cannabis waste can be categorized by two events: wastes incident to the production of cannabis to wastes incident to the packaging of cannabis. Each event is monitored and recorded by state agencies as cannabis products move down their supply chains, empowering agencies a superior position to analyze, regulate, and enforce waste management. In both events, the major policy behind waste management is public safety. Waste incident to production is usually an unnecessary mix of compostable cannabis and non-compostable materials to prevent disposed cannabis from entering the black market. Waste incident to the packaging of cannabis is usually unnecessarily high both to ensure that the cannabis product is child-resistant and because the limited size of cannabis products leads to inefficient packaging.

i. *Wastes incident to production.*

Cannabis production creates a large amount of waste which could be substantially diminished if composted instead. When composted, cannabis and other organic waste releases carbon dioxide, a greenhouse gas twenty-three times less damaging to the o-zone than the methane that landfills emit.¹⁶⁰ Cannabis cultivators and processors need only dispose cannabis, papers, cardboard, food, soil, and sawdust separately from non-compostable materials common in cannabis production, like plastics, grease, and oil. The compost can either remain on the business premises or removed by a compost collection service.

However, with little to no state incentivization or promotion, few cannabis businesses compost their organic waste. Since cannabis markets opened in 2014, Washington State has generated roughly two million pounds of compostable cannabis waste.¹⁶¹ There have been no

¹⁶⁰ Myhre, G., et. al., “Global Warming Potential Values,” *Greenhouse Gas Protocol*, 2013, http://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf

¹⁶¹ Lester Black, “Washington’s Weed Industry Has a Million-Pound Waste Problem,” *The Stranger*, Jul. 26, 2017, <https://www.thestranger.com/weed/2017/07/26/25307388/washingtons-weed-industry-has-a-million-pound-waste-problem>

legislative or agency campaigns in Olympia to encourage alternative methods of cannabis disposal and some industrial compost businesses are unsure whether federal law permits them to collect organic cannabis waste.¹⁶²

Beyond being merely an unrewarded hassle, state regulations incidentally discourage sorting between compostable and non-compostable waste. All recreational cannabis states require cannabis be rendered unusable prior to its disposal to keep cannabis unfit for sale from being consumed in the black market. To make the product unusable, Colorado, Washington Alaska and California require cannabis waste to be mixed with at least equal parts non-cannabis waste, which may or may not also be compostable. A large amount of non-cannabis waste is needed to meet the large amount of cannabis waste, which encourages businesses to include inorganic wastes to best dilute the cannabis. By rendering the cannabis waste non-compostable, cannabis businesses can better ensure they are compliant with the mixing waste mixing law.

Cannabis work group Denver Environmental Health recommends cannabis producers to dispose of their cannabis through either a compost service or composted on-site through bokashi fermentation.¹⁶³ This carbon-neutral compost method seals cannabis compost into a drum containing bokashi compost activator for two weeks to become nutrient-rich fertilizer.¹⁶⁴ While popular in Japan, bokashi fermentation is not well known in the United States but could become an industry standard not only for cannabis but for all agricultural products.¹⁶⁵ It's intersection with cannabis likely originated in Colorado, where companies like Innovative Organics LLC have begun introducing bokashi fermentation to cannabis cultivators and processors successfully within the state.¹⁶⁶

ii. Wastes incident to packaging.

Plastic and other forms of cannabis packaging waste also strain landfills and climate change. Recyclable and reusable packaging would mitigate these environmental harms, but state regulations make sustainable packaging an expensive and at times impossible feat. The small size of cannabis products allowed to be sold, coupled with their extensive labeling requirements, makes cannabis

¹⁶² *supra*.

¹⁶³ “Cannabis Environmental Best Management Practices Guide” *Denver Environmental Health*, at p. 40, Aug. 1., 2017, <https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/EQ/MJ%20Sustainability/Draft%20Cannabis%20Environmental%20BMP%20Guide.pdf>

¹⁶⁴ *supra*. at 39.

¹⁶⁵ Daniel Jitchaku, “Bokashi could revolutionize weed growing, and maybe agriculture in general,” *Colorado Springs Independent*, Jan. 17, 2018, <https://www.csindy.com/coloradosprings/bokashi-could-revolutionize-weed-growing-and-maybe-agriculture-in-general/Content?oid=9904069>

¹⁶⁶ “Innovative Organics,” *Cannabis Training University*, <https://cannabistraininguniversity.com/innovative-organics/>

packaging oversized. Also, mandatory packaging security imposes both more and costlier packaging materials, as all states require that cannabis products must be both tightly sealed and protected by at least one layer of child-resistant packaging. Washington goes further in securing cannabis products, requiring all cannabis products to be completely sealed and ready for sale before reaching retailers, precluding consumers from reusing cannabis containers.¹⁶⁷ California goes even further and requires all cannabis products to be in both sealed and child-resistant containers before reaching retailers.¹⁶⁸ In contrast, states like Oregon and Colorado permit retailers to purchase cannabis flower in bulk containers.¹⁶⁹

Unlike waste management, cannabis companies have less discretion to change their packaging habits and the current state packaging regulations will likely remain. The underlying principles of public health and crime reduction were key to passing state recreational cannabis laws. When stacked against these goals, waste management and environmental conservation as a whole takes lower priority. Still, state regulators can mitigate cannabis's ecological burden without impeding countervailing public policies a number of ways, including the promotion of licensure, greenhouses, large cultivation sites, and bokashi fermentation.

D. Public Research

A growing number of states are financing research institutes to study recreational cannabis, particularly on issues like addiction, cognitive development, and its medicinal values. Leading in this effort are Washington, Colorado and California, which currently invest a portion of their retail cannabis excise tax revenue to their state university systems for cannabis research and testing. Oregon, while not reserving tax revenue for cannabis research, created a task force in 2015 to report on the current state of cannabis research and strongly encouraged that more research was needed in the area.¹⁷⁰ Because the Controlled Substance Act prohibits nearly all research on cannabis, very little scientific data exists in the United States on now-pertinent questions like cannabis's impact on cognitive development. The only federally-sanctioned research is permitted at the University of

¹⁶⁷ Lester Black, "No Other State with Legal Weed Has This Dumb Rule About Packaging," *The Stranger*, Apr. 19, 2017, <https://www.thestranger.com/green-guide-spring-2017/2017/04/19/25083328/no-other-state-with-legal-weed-has-this-dumb-rule-about-packaging>

¹⁶⁸ Lester Black, "Will new pot packaging rules make California's weed less green?" *Emerald Report*, Mar., 8, 2018, <http://www.emeraldreport.com/will-new-pot-packaging-rules-make-californias-weed-less-green/>

¹⁶⁹ *supra*.

¹⁷⁰ See <http://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/CHRONICDISEASE/MEDICALMARIJUANA/PROGRAM/Documents/sb844taskforce/SB844Report.pdf>

Mississippi, though the Drug Enforcement Administration has expressed its willingness to grant research licenses to other organizations.¹⁷¹

Perhaps more than any other aspect of state-regulated cannabis, the public research of cannabis is highly suspect to federal enforcement. Rather than issuing licenses or auditing businesses for state compliance, it could be argued that state-run research institutes and universities directly place a Schedule I drug in the hands of a state actor. Whether doing so creates a positive conflict with the Controlled Substance Act is still an open question in federal courts. A similar issue was posed by the Supreme Court of Oregon regarding law enforcement. The court found that because “an officer returning marijuana to an acquitted medical marijuana patient will be delivering and transferring a controlled substance[,] . . . based on the CSA definition . . . they distribute marijuana in violation of the CSA.”¹⁷² However, U.S. Deputy Attorney General James Cole reassured states in 2013 by precluding federal cannabis-related prosecution in states with “strong and effective regulatory and enforcement systems.”¹⁷³ This directive, which likely contributed to the expansion of cannabis states in 2014 and 2016, was replaced in early 2018, restoring the federal government’s earlier enforcement policy of prosecutorial discretion. While the consequences of this policy whiplash are still unraveling, the Cole-era state developments are already set in motion.

Washington was the first recreational cannabis state to spend a portion of its recreational cannabis tax revenue on research. The state legislature set aside annually a minimum of \$1,021,000 to the University of Washington and \$681,000 to Washington State University to study the short-term and long-term effects of cannabis use and to develop methods of measuring cannabis impairment. Washington is currently the only state issuing cannabis research licenses. While none have been granted yet, licensees of this type will conduct cannabis potency testing, research marijuana as a medical treatment, clinical investigations of cannabis-derived drug products, and genomic or agricultural research. They will also have access to conduct research alongside the two state universities on cannabis research.

In 2015, the residents of Pueblo County, Colorado voted to direct \$270,000 of their cannabis excise tax to the Institute of Cannabis Research (ICR) at Colorado State University, Pueblo to research the medicinal benefits of cannabis and create a cannabis-related community impact study. The next year, the Colorado state legislature passed a bill authorizing \$900,000 to the ICR and

¹⁷¹ <https://www.statnews.com/2016/08/10/marijuana-medical-research-dea/>

¹⁷² *People v. Crouse*, 2017 CO 5, ¶ 14, 388 P.3d 39, 42.

¹⁷³ <https://www.justice.gov/iso/opa/resources/3052013829132756857467.pdf>

ultimately awarded the institute a \$1.8 million dollars.¹⁷⁴ The ICR is currently studying a variety of issues, including industrial hemp and cannabis's effects on epilepsy patients and mice.¹⁷⁵

California, distributed a portion of its cannabis tax revenue to the University of California system to establish the California Cannabis Research Program to study and evaluate the implementation of effect of Proposition 64. The ten-year California Cannabis Research Program has a budget of \$10 million a year and will be the only state-funded cannabis research institute to primarily review the societal impacts of state cannabis laws. California is also adding \$2 million to the scientific-based Center for Medicinal Cannabis Research at the University of San Diego, which has been operating since 1999. With its large investments and two-pronged approach, California is teeing up to become one the largest cannabis research institutes in the world.

IV. **Conclusion**

Good public policy reflects and hinges upon the needs and expectations of the people it affects. With the increasing diversity of states adopting recreational cannabis regulations comes new policy questions and new considerations to ongoing issues. So far, state lawmakers have mostly eyed Washington and Colorado as policy trendsetters. With the passage of Proposition 64, that focus has shifted to California and the regulatory framework and procedures chosen by the BCC.

Recreational cannabis policies bring unique challenges to states. With federal law ranging between hostile to ambivalent, states are left to develop a product and its market without any unifying directives through federal agencies like the FDA or the CDC. However, this absence creates a rare landscape upon which, regardless of whether or how the federal government adjusts its laws, the states will collectively define the terms and limits on recreational cannabis. The state-exclusive backdrop in regulating this product exemplifies the state-as-laboratory principle echoed by Justice O'Connor's dissent in *Gonzales v. Raich*.

Laws affecting cannabis influence a wide host of pertinent public interest issues, many of which have gone unresolved for decades. The innovative standards states establish during these formative years will set the permanent trajectory of cannabis law. The policies set today must consider and reflect their future impact.

¹⁷⁴ <https://www.csupueblo.edu/institute-of-cannabis-research/2017-conference/>

¹⁷⁵ <https://www.csupueblo.edu/institute-of-cannabis-research/research/index.html>