

# EVALUATING CANNABIS LEGALIZATION

June 8-11 • Washington State



**EVALUATING CANNABIS LEGALIZATION**  
**Rapporteur's Report of the ACLU-WA/WOLA Workshop**  
**Seattle, Washington**  
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For drug policy analysts, these are extraordinary times. Across the globe, a public consensus is forming around the notion that the dominant drug policy paradigm is broken, particularly with regard to cannabis. In response, governments and civil society actors are increasingly advocating the abandonment of prohibition in favor of an approach that prioritizes public health, public safety, and regulating markets in the public interest.

Appropriately, this paradigm shift is most apparent in the countries of the Americas, which has for more than 40 years been the main theater in the “war on drugs.” In the United States, which has led the charge on this front for decades, public opinion has shifted dramatically against federal law and toward support for the legalization of cannabis.<sup>1</sup> Since Colorado and Washington passed ballot initiatives legalizing recreational cannabis in November 2012, voters in Alaska, Oregon, and the District of Columbia have followed suit. Similar ballot measures are moving forward for 2016 in Arizona, California, Massachusetts, Nevada and elsewhere.

This trend is also playing out across the countries of Latin America and the Caribbean. In December 2013, the South American nation of Uruguay became the first country to pass legislation regulating every level of the market for cannabis, and is implementing the law in deliberate, calculated steps. In Colombia, possession of small amounts of cannabis and other drugs has been officially decriminalized since 2012, lawmakers are debating proposals to legalize medicinal marijuana, and the national government has issued a decree under current statutes that regulates production, commercialization, and prescription of cannabis for medical purposes. The push for alternative marijuana policies has also made important gains in Mexico and Chile, where decriminalization bills have been presented at the national and local levels, and the latter country has begun to authorize limited medical use. In the Caribbean, Jamaica implemented reforms in early 2015 that allow possession and decriminalize the drug for medicinal purposes. Governments in nearby Trinidad and Tobago, St. Vincent and the Grenadines, and Puerto Rico are also debating the issue.

As the governments of the hemisphere continue to pursue cannabis policy reform, the experience of those countries and localities that have legalized the substance will inform the future of similar initiatives. Indeed, while the approaches of Colorado, Washington, Uruguay, Oregon, Alaska, and the District of Columbia differ on issues like medicinal use, home cultivation, distribution, and restrictions on cannabis-infused products, their successes or failures hold the key to crafting smarter, more effective legalization measures. Because of their

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<sup>1</sup> *Washington Post*, “A majority favors marijuana legalization for first time, according to nation’s most authoritative survey,” March 4, 2015. <http://www.washingtonpost.com/blogs/wonkblog/wp/2015/03/04/majority-of-americans-favor-marijuana-legalization-for-first-time-according-to-the-nations-most-authoritative-survey/>

experimental nature, these policies are destined to face high-level public scrutiny and criticism. For drug policy researchers and analysts, the goal is to ensure that this scrutiny is based on a careful evaluation of the facts, and not politicized rhetoric or hyperbole.

With this goal in mind, from June 8-11 the American Civil Liberties Union of Washington (ACLU-WA) and the Washington, D.C.-based Washington Office on Latin America (WOLA) sponsored a joint workshop in Seattle designed to bring together the leading scholars, analysts, and government officials working on implementing and monitoring cannabis policies across the hemisphere. Participants came from the U.S. states of Alaska, Colorado, Washington, Oregon, Vermont, California, and District of Columbia, as well as the countries of Canada, Colombia, Jamaica, Mexico, and Uruguay. Over three days, the workshop was marked by rich policy discussions, and resulted in a rigorous exchange outlining the current state of cannabis policy in the United States and abroad. This report is intended to help synthesize the debate during the workshop itself, as well as to inform future discussions as international momentum continues to build around cannabis legalization.

After a brief introduction of the global cannabis policy landscape, the workshop was comprised of four structured sessions and a final open session meant to summarize key conclusions that emerged from each preceding session. In order to create a confidential setting and to encourage candid discussion, the workshop was conducted under the Chatham House Rule,<sup>2</sup> under which participants may use the information received but may not reveal the identity nor the affiliation of the speaker or the participants at the meeting. Annexed to this report is a list of participants, excluding the names of those who, under Chatham House Rule, requested to remain anonymous. Also annexed is a collection of suggested readings provided to participants prior to the seminar.

The first session looked at the state of cannabis laws and regulatory systems; the second discussed cannabis policy from a public health perspective; the third explored the intersection of cannabis policy and public security; the fourth focused on regulating cannabis markets in the public interest; and the final session—meant to identify challenges, lessons learned, and recommendations coming out of the previous sessions—led to a diverse discussion of the necessary “next steps” in laying out a research and regulatory agenda on effective and informed cannabis policy.

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<sup>2</sup> “When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.” Chatham House, the Royal Institute of International Affairs (1927). <http://www.chathamhouse.org/about/chatham-house-rule>.

## **Introduction**

The workshop began with an overview of the current state of cannabis policy, in which organizers delivered an assessment of reform efforts over the last several years.

To be sure, the success of reform movements has generated much excitement among those following cannabis policy, in both the advocacy and policy communities. During introductory remarks, one organizer referred to the recent wave of legalization measures as a “protean moment.” Another addressed the importance of drug policy reform in terms of basic human rights, stressing its link to social issues like mass incarceration and inequities in criminal justice.

However, organizers were careful to stress that the purpose of the workshop lied outside the realm of advocacy, focusing on objective policy analysis. As one put it, if this wave of reforms is to spread and be successful at replacing criminal prohibition with public health-based policies, it will require learning from the experiences of those who are paving the way on cannabis legalization. Doing so will depend on the free exchange of ideas based on observation of facts, hence the importance of engaged discussion and face-to-face communication at the workshop. Ultimately, one organizer exhorted participants to conceive of the outcomes of the event in terms of four fields: “knowledge gained, ideas inspired, relationships fostered, and opportunities opened.”

In this spirit of rigorous analysis and debate, the workshop’s session themes were organized to first provide an overview of the regulatory mechanisms in place to implement various cannabis legalization measures, then address three pillars of any successful cannabis policy: public health, public safety, and market regulation.

### **Session 1—Overview of New Cannabis Laws and Regulatory Systems**

The first session provided a useful point of departure for the latter sessions, with presenters from various countries and localities that have legalized cannabis offering participants a broad look at the legal and regulatory frameworks behind their laws. During this session, participants looked at the particular features of cannabis laws in Colorado, Washington, Uruguay, Alaska, and Oregon, as well as their overarching policy objectives and the biggest obstacles to their achievement. Particular focus was given to evaluation indicators, measurability, and budgetary implications of legalization.

Multiple presenters remarked on the fact that this explosion in academic focus in cannabis policy is a new phenomenon. Prior to 2010, the field was highly limited and lacked significant variation in terms of implementation. By contrast, many researchers find themselves lost amidst the wide variety in today’s local and international cannabis measures, and in the different approaches they are adopting, pointing to the need for broad overviews like this one to keep researchers grounded in the current state of affairs.

## **Colorado: Amendment 64**

**Home grows:** 6 plants, only 3 in flower

**Maximum personal possession quantity:** 28.5 grams

**Drugged Driving Limit:** 5ng THC / mL blood

**Traceability:** Seed to sale (METRC)

**Production/Distribution Regulations:** Until October 2014, establishments made to grow at least 70 percent of marijuana sold, and sell no more than 30 percent of product grown to other outlets.

**Medical Marijuana:** Yes, predates current law<sup>3</sup>

The presenter from Colorado gave an optimistic but mixed evaluation of the state's cannabis policy. Ultimately, the presenter stressed the governor's office dual aims of legalizing recreational cannabis use without causing any negative consequences in terms of public health or public safety. In 2000, voters in the state passed Initiative 20, which legalized the use of cannabis for medicinal purposes. This included creating a registry system for patients, as well as licensed care-givers whose possession of cannabis was covered by the law. In 2007, a high court ruling found that under the law, caregivers would be allowed to provide medicinal cannabis to any number of patients that needed their help, a decision which paved the way for the creation of cannabis dispensaries in the state. When President Obama's Deputy Attorney General David W. Ogden issued a memorandum stating that prosecuting medical marijuana patients was not a wise use of federal resources, the state's cannabis experiment enjoyed even further legitimacy, a development which led to the establishment of more detailed state regulations on the drug.

In November 2012, Colorado became the first U.S. state to vote for ending marijuana prohibition, with about 55 percent of the state's electorate voting in favor of the ballot initiative known as Amendment 64. In the next twelve months, the state established a task force of stakeholders to outline the best practices for implementing the law. Since then, the state has built a definition of success based on a data-heavy approach to public safety, public health, and use among youth. As part of these efforts, the state has paid special attention to seed to sale tracking, age compliance checks in stores, and a commitment to applying the same regulations to cannabis as those that exist for alcohol.

While Colorado has witnessed success, it has still seen its share of challenges. Caregivers, a largely under-regulated legacy of the state's previous medicinal cannabis law, account for roughly a third of cannabis sales in the state, and serious questions remain about how to properly regulate edible forms of cannabis in terms of dosage guidelines and access restrictions. Additionally, while some have expressed hope that the law could prove an important source of tax revenue, this has so far not been the case. And because the majority of

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<sup>3</sup> For a more detailed breakdown of these state/country laws, see:

[http://www.cicad.oas.org/Main/Template.asp?File=/drogas/cannabis/comparativeLegalAnalysis\\_ENG.asp](http://www.cicad.oas.org/Main/Template.asp?File=/drogas/cannabis/comparativeLegalAnalysis_ENG.asp)

revenue generated by legalization is earmarked for prevention efforts, reports of the revenue benefits of cannabis legalization in Colorado may prove to have been overstated.

### ***Washington: Initiative 502***

***Home grows:*** Not authorized

***Maximum personal possession quantity:*** 28.5 grams

***Drugged Driving Limit:*** 5ng THC / mL blood

***Traceability:*** Seed to sale (BioTrackTHC)

***Production/Distribution Regulations:*** Three different licenses allowed: producers, processors and retailers. While producers and processors may hold joint licenses, retailers may not. The maximum limit of retail licenses has been set at 334

***Medical Marijuana:*** Yes, predates current law

A presenter from Washington State provided a frank overview of the regulatory challenges facing its cannabis measure. Since commercial sales of recreational cannabis began in July 2014, more than 160 retail locations have opened up across the state.

Like Colorado's cannabis measure, Washington's cannabis legalization initiative was modeled on the state's liquor controls. Its regulatory system was also based on two key guiding principles: public safety and consumer safety. Complementing both of these principles are the details of the state's regulatory system, which emphasizes traceability, transportation, security, and surveillance. While Washington cannabis regulators are limited in resources (there are just 22 staff members working on cannabis in Washington's Liquor Control Board (LCB), compared to over 100 liquor enforcement agents), regulators take comfort in the fact that the rate of youth compliance is high, rising from 84 to 90 percent in the past three months.

However, enforcing consumer restrictions on packaging and other consumer safety requirements is one of the law's biggest challenges. To address this, the state has implemented bans on packaging that is overtly appealing to children, and has prohibited the sale of cannabis-infused candies, lollipops and other food items traditionally marketed to children. A four-member committee within the Washington LCB controls all requirements for packaging and placing of cannabis products in the state.

Washington regulators, like their colleagues in Colorado, are concerned by the potential for abuse of the preexisting medicinal cannabis law. In February 2015, lawmakers in the state passed a bill that will overhaul the industry and reconcile the regulations regarding both recreational and medicinal cannabis. Moving forward, the Washington State Health Department now faces the difficult task of drilling down these regulations and ensuring compliance with the new rules.

Regarding the capacity for cannabis legalization to bring in tax revenue, the Washington presenter was much more optimistic than many of those from Colorado in attendance. Noting that in its first year the law brought in 204 million dollars in new revenue for the state and

surpassed estimates of roughly 1.4 million dollars per day in revenue, the presenter suggested that the measure does in fact represent a significant source of income for state coffers.

### **Uruguay: Law 19.172**

**Home grows:** Households allowed up to 6 flowering plants, with up to 480 grams annual harvest

**Maximum personal possession quantity:** 40 grams

**Drugged Driving Limit:** Zero tolerance

**Traceability:** Seed to sale, combined with a user registry

**Production/Distribution Regulations:** Not fixed, but sales will be kept to pharmacies, and producers will be limited to a select few firms contracted by the state

**Medical Marijuana:** Yes, with prescription

The case of Uruguay is unique for several reasons. For one, it is the only country to legalize and regulate every aspect of the market for psychoactive cannabis (though its use has been decriminalized there since 1974). The law is also set apart from legalization measures in the U.S. for its total ban on advertising cannabis products, and a requirement that cannabis users restrict themselves to one of the three methods of accessing cannabis (Uruguayan adults can either home-grow, join cannabis clubs, or purchase retail cannabis, but cannot combine these activities).

Ultimately, Uruguay's law was passed to amend what many saw as a strange Catch-22. While its use has been decriminalized since 1974, this created a kind of legal contradiction in which users could consume cannabis but could not legally grow it. The law passed in December 2013 seeks to end this contradiction.

The law was also passed in the midst of growing concern over insecurity in the country. While Uruguay remains one of the safest countries in the Americas, its crime rate has increased in recent years, as has the consumption of other illicit substances like cocaine and cocaine-based derivatives.

The Uruguayan cannabis measure was from the very beginning created with a strong emphasis on regulating cannabis, not merely legalizing its use. After all, cannabis accounts for 80 percent of all drugs consumed in the country. By isolating and regulating the market for cannabis, the government hopes to limit access to other, more harmful substances and the criminal groups associated with them.

These public health concerns are reflected in the government's approach to regulation. The law prohibits all forms of advertising cannabis. It also established the Institute for Regulation and Control of Cannabis (IRCCA), which is jointly controlled by the Uruguayan ministries of public health, agriculture, drug control, and social development. While two of three legal methods of accessing cannabis (home cultivation and cannabis clubs) have been implemented, commercial sales and production have not yet begun. Even still, the IRCCA has been very busy. As of the

June 2015, 2,460 home growers have registered with the IRCCA to grow up to six plants in their homes, and 18 different cannabis clubs have applied for official state recognition.

The government's public health approach has also been evident in the way officials are monitoring the law's implementation. The law's success, according to Uruguayan officials, will depend on increasing the currently low public perception of the risks associated with cannabis use, and on minimizing the potential danger faced by those who still decide to use it. Since the law's passage the Uruguayan government launched a campaign aimed to increase the perception of not only cannabis, but all substances, and continues to promote this message as implementation moves forward.

Two key challenges for the law in the coming months and years were identified. The first is public skepticism towards the law. Even though it has not emerged as a hot-button political issue in Uruguay, nearly 60 percent of the public is opposed to regulating cannabis for non-medical uses; at the same time, nearly 75 percent if Uruguayans do approve of legalizing and regulating cannabis for medical purposes. The second challenge, ensuring that commercial cannabis meets demand in terms of variety and potency, is much more economic than political. Still it is vital to the law's long-term success, as capturing the black market is one of its primary stated aims.

## ***Alaska: Ballot Measure 2***

***Home grows:*** plants, gifting up to 28.5 grams

***Maximum personal possession quantity:*** 28.5 grams

***Drugged Driving Limit:*** No driving under the influence permitted

***Traceability:*** Not specified, though all transactions of cannabis must be reported

***Production/Distribution Regulations:*** None specified

***Medical Marijuana:*** Yes, predates current law

Like each of the other cannabis initiatives discussed in the workshop, Alaska's experience with cannabis has certain peculiarities that distinguish its law from others. For one thing, adults in the state have been allowed to grow small amounts of cannabis since a 1975 state Supreme Court ruling decided that this fell under the privacy rights guaranteed in the Alaskan constitution.

This largely libertarian approach continued until November 2014, when Alaska became the third U.S. state to approve a voter initiative legalizing recreational use of cannabis. While the initiative itself was only eight pages long, it contained a timeline for regulators to establish much of the subsequent rules for its implementation and enforcement.

Alaska has a separate approach to medicinal cannabis. Although patients and their caregivers are authorized to possess and grow small quantities (or they are at least afforded "affirmative defense" if arrested on possession charges), the law does not establish a system for them to

purchase or sell cannabis for medicinal purposes. There are no dispensaries like there are in other states, and regulators are generally not prioritizing the establishment of a separate system for medicinal cannabis.

For Alaskan regulators, there are major hurdles to be faced in the coming months. At the forefront of their goals is to get the maximum number of people into the legal system and out of the black market for cannabis as possible. Another goal is to take cannabis out of the state's controlled substance list, instead making it a regulated substance. Doing so is intended to clear up legal questions around the state's criminal statutes, and make it easier to properly track legally-sourced cannabis. If the state successfully takes cannabis off its list of controlled substances, it will be the first in the country to do so.

### ***Oregon: Measure 91***

***Home grows:*** 4 plants, up to 227 grams of usable cannabis

***Maximum personal possession quantity:*** 28.5 grams

***Drugged Driving Limit:*** Use of cannabis while driving prohibited,

***Traceability:*** Requested seed to sale proposals

***Production/Distribution Regulations:*** Authorities grant licenses based determination of public need

***Medical Marijuana:*** Yes, predates current law

When Oregon voters approved the legalization of recreational purposes in November 2014, the state granted the Oregon Liquor Control Commission (OLCC) the authority to license and to regulate four different, non-mutually exclusive types of actors in the cannabis market: producers, processors, wholesalers and retailers. While the home grow/personal possession provisions of the measure went into effect on July 1, 2015, the OLCC will not take applications from those who wish to commercially grow, process, wholesale or operate retail outlets until January 2016, meaning that sales of cannabis in retail stores will not likely start until late 2016.

Like Colorado and Washington, Oregon previously legalized medicinal cannabis, and the new law does not impact the state's medical marijuana program. It allows adults to grow four plants and possess up to eight ounces of cannabis, while public consumption is prohibited. Localities may opt out of the law via a general election, but local governments are not allowed to add extra taxes on cannabis.

On the tax front, Oregon's law establishes a one-time tax on producers who sell cannabis wholesale: \$35 per ounce for flowers, \$10 per ounce for leaves and \$5 each for immature plants. In the first ten months of sales, it is estimated that the law has the potential to bring in \$18.5 million in revenue. At the same time, however, implementing the law is also expected to cost around \$10.5 million.

In terms of challenges ahead, regulators in Oregon are particularly committed to educating the public on the law's details, as well as the timeline for implementation. The internet has proved

vital to this effort. The site [www.marijuana.oregon.gov](http://www.marijuana.oregon.gov) had received more than 350,000 visits since November 2014, and the OLCC has cultivated a mailing list of more than 14,000 subscribers.

Another major hurdle is ensuring that the law is implemented and monitored in such a way as to guarantee the law's success at undercutting the black market for cannabis. To this effect, in May 2015 the state appointed the Oregon Marijuana Rules Advisory Committee (RAC), which interfaces with the OLCC's board of commissioners to ensure that the law is meeting its goals. Its members hold expertise in a range of issues related to Oregon's cannabis initiative, including law enforcement, local government, and industry and business practices.

### ***Discussion Points***

- **Metrics:** One of the clearest discussion themes in the session was on the importance of establishing useful metrics to evaluate the impacts of cannabis legalization. In general, those in attendance agreed that youth use, perceptions of risk, patterns of use (especially amounts consumed per episode by heavy users) crime and seizure statistics, and commercial data, among others, all represent important indicators of the impacts of legal cannabis. However, the gathered researchers also bemoaned a lack of good data sources to draw from. Simply measuring the prevalence of use will not shed enough light on changes in use patterns that may be taking place, and the potential health effects that may be associated with those changes—especially regarding patterns of use among the heaviest users, whose frequency of use and amounts consumed may far exceed the patterns of casual users.
- **Tax rates, tax revenue—flexibility and managing expectations:** In conjunction with the need to gather good data to evaluate the impact of legal cannabis, participants cautioned against setting expectations too high. One of the main case studies for this lesson was tax revenue, an issue that came up repeatedly in the session. Participants from Latin America voiced particular interest in cannabis legalization as a means to capturing greater tax revenue, as the region has historically battled low levels of tax revenue as a percentage of national income. On this front, Colorado was highlighted by many as a clear example where tax revenue on cannabis fell short of widely-circulated estimates, as the law brought in roughly two-thirds of the estimated \$67 million in the first calendar year of its implementation.<sup>4</sup> This issue was not helped by sensationalized coverage of these estimates in the media and by advocates and politicians. Even more important, revenue generation is only one aspect of the role of taxes in a legalized setting; tax rates also affect cannabis prices, and therefore the ability of the nascent legal market to compete with illegal sales. While relatively low tax rates may be

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<sup>4</sup> CBS Denver, "Pot Taxes Fall Short Of Projections, Help Community Programs," January 15, 2015. <http://denver.cbslocal.com/2015/01/15/pot-taxes-fall-short-of-projections-help-community-programs/>

indicated at the outset, to help shrink the illegal market, higher rates would come into play over time, to prevent prices from falling drastically. In other words, from the beginning, each system should build in the flexibility for transition and changing rates in response to market dynamics.

- **Medical cannabis:** Workshop participants repeatedly raised questions regarding the different approaches to medical cannabis in the United States and Uruguay. Considering the high potential for medical marijuana systems in many jurisdictions to supply cannabis for non-medical uses and for black market spillover within existing medical marijuana systems versus recreational cannabis, several participants voiced support for “unifying” the two. A counterargument to this proposition was put forward, however, with a participant affirming that ultimately medical and recreational cannabis are “two different products with two different demands,” and that the risk of abuse in a clearly regulated medical market should be lower. While there is a data deficiency regarding best practices for regulating medical marijuana, this participant noted that user surveys show that medical users are more likely than recreational users to consume cannabis-infused edible products than smoke.
- **The importance of messaging:** Participants roundly agreed on the importance of adopting a communications strategy and conducting a public outreach campaign to educate the public on the details of cannabis legalization. One participant in a state that is currently weighing legalization framed this issue thusly: “Facts are critical for the success of these laws but an overall message is needed for their passage. People in Vermont are saying, ‘let’s wait and see how Colorado turns out.’ What message can I give them?”
- **Cannabis legalization and its international consequences:** Participants also expressed a deep interest in how the international community is reacting to cannabis legalization in U.S. states and Uruguay, beyond the well-publicized criticism from some quarters of the international drug control regime. On the United States laws, there was broad consensus that the Colorado and Washington laws had opened up an important space for other countries to abandon total prohibition of cannabis, and put the U.S. in the awkward position of being unable to vocally defend the prohibitionist model enshrined in international drug treaties. There was also hope that reforms in Uruguay and other countries in the region would lead to eventual changes in the international system as well. In the words of one participant, the uniqueness of Uruguay’s law could prove vital in the upcoming United Nations General Assembly Special Session (UNGASS) in 2016, “which will be a key space for states to make the case that experiments like these are needed.”

## **Session 2—Public Health**

The second session offered participants a chance to look at one of the main battlefronts for researchers interested in evaluating cannabis legalization: public health. While advocates argue that legalization is clearly in the public interest from the perspective of reducing the harms associated with use and encouraging users to make informed choices, critics point to its potential to decrease roadway safety, encourage adult and youth use, and decrease overall perceptions of the drug's documented health risks. Because of the polarized nature of the public health debate around cannabis legalization, presenters in this session stressed that a close look at the facts is needed to properly evaluate its impact. They also emphasized the importance of using reliable data, as well as the need to look to alternative, and occasionally innovative, sources for useful data.

### **Monitoring Potential Changes in Use and Health Effects**

Presenters in this session stressed the importance of reliable data. In Colorado and Washington, the cannabis legalization measures of 2012 were accompanied by calls to closely measure their impact on a variety of themes, public health among them. In Washington, for instance, the State Institute of Public Policy (WSIPP) has been charged with submitting a preliminary report to the legislature in September 2015, which will map out the work to be carried out to inform subsequent reports in 2017, 2022, and 2032. Meanwhile, the health departments in Washington and Colorado are dedicated to tracking legalization's impact by closely monitoring youth and adult use polls, as well as periodic surveys on risk perception.

Interestingly, the existing data to back up the popular argument that legalization encourages cannabis use among youth is so far very slim. Presenters pointed to public health data gathered in Colorado and Washington showing that polls since legalization (Washington's 2014 Healthy Youth Survey and Colorado's 2013 Healthy Kids Survey)<sup>5</sup> show use among high school sophomores in the past 30 days has remained stable compared to the previous polls, and are around the national average of roughly 20 percent.

However, presenters also noted indicators that legalization may have negative impact. In Washington, for instance, the Behavior Risk Factor Surveillance System has identified a slight increase in use in the past 30 days among adults, from 7.6 to 9.2 percent. In Colorado, the first six months of 2014 saw 553 emergency department visits and 515 hospitalizations statewide in

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<sup>5</sup> Forecasting and Research Division, "Monitoring Impacts of Recreational Marijuana Legalization: Baseline Report." Washington State Office of Financial Management, 2015.

[http://www.ofm.wa.gov/reports/marijuana\\_impacts\\_2015.pdf](http://www.ofm.wa.gov/reports/marijuana_impacts_2015.pdf)

which patients were listed as having possible exposure to marijuana. By comparison, these numbers stood at 376 and 373 for the entire period spanning 2010 to 2013.<sup>6</sup>

### **Using New Data to Monitor Legalization's Impact**

Regulators in areas that have legalized cannabis, as well as researchers in the academic and think-tank worlds, are beginning to carry out rigorous research around the potential public health impacts of cannabis legalization. However, user surveys and public polls are only one of many tools in the toolkit for those interested in the subject. Presenters in this session underscored the inadequacies of current data systems, and the limits of focusing simply on measures of the prevalence of use, which provides too little information about amounts consumed, patterns of use, and market evolution. Participants pointed to several other sources of useful data, including health care databases, birth and pregnancy surveys, school attendance and performance data, criminal statistics, workers compensation claims, and emergency response data.

In addition to stressing the importance of using all available metrics, the session also featured a spirited exploration of new and innovative uses of existing data sets to draw new conclusions. One presenter gave particular praise to Colorado's All Payer Claims Database (APCD), the state's most comprehensive source of health care claims information, as a useful metric for testing legalization's impact on mental health by monitoring any significant changes in cases of anxiety or depression.

Another presenter noted the potential for seed-to-sale tracking systems in place in Washington and Colorado to be used to obtain better data on potency and consumption. These require producers and retailers to use software accounting for each plant product throughout its entire growth cycle and along every stage of production. To more accurately follow user behavior, the suggestion was made that the inventory systems used by producers, processors, and retailers could be funneled into valuable research databases on how users are buying and consuming cannabis, and on the potency of cannabis consumed. Such systems, it was argued, provide an important opportunity for more robust research of consumption patterns and market dynamics in a legalized environment than has been possible under prohibitionist regimes, where production and distribution are in the hands of criminal enterprises, not regulated entities required to track their inventories and sales. Sharpening the focus of survey instruments to collect information regarding amounts consumed (not just frequency) in combination with newly available purchase and potency data combining could significantly enhance what we know about potential harms by comparison to simple prevalence indicators.

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<sup>6</sup> Retail Marijuana Public Health Advisory Committee, "Monitoring Health Concerns Related to Marijuana in Colorado: 2014," Colorado Department of Public Health and Environment, 2014.

<https://www.colorado.gov/pacific/cdphe/retailmarijuana-public-health-advisory-committee>

## **Medical Cannabis**

The session also featured an in-depth discussion of medical marijuana, with participants highlighting both the completed research and research gaps around the medical efficacy of medicinal cannabis, as well as the regulatory aspects of current medical marijuana systems. While the research on medicinal applications of cannabis is still in the early stages, participants noted that there have been promising indicators regarding cannabis as a treatment option for childhood epilepsy, post-traumatic stress disorder, Parkinson's disease, neuro-degenerative disorders such as multiple sclerosis, inflammatory bowel disease, pediatric brain tumors, and neuropathic pain. There is also increasing acceptance within the medical community of the legitimacy of cannabis use as a palliative measure to alleviate the symptoms and stress of those with serious or terminal illnesses.

However, at the same time, some participants noted that these rough indicators of potential success do not amount to a rigorous review of cannabis' medical properties using the scientific method. This led to a spirited comparison of the standards regarding the medicinal applications of cannabis compared to other forms of medication. As one participant noted, other forms of plant matter have been observed to exhibit health benefits as well, yet doctors (at least in the Western world) are long past the days of prescribing tinctures and tea over precisely-dosed, isolated forms of their active ingredients.

On top of the research around the medical applications of cannabis, participants outlined the difficulties of regulatory systems in place for medical marijuana. In the United States, these have largely predated the recent wave of cannabis legalization measures, and often pose significantly greater regulatory challenges. This has resulted in the cannabis market dividing into three parts: legal recreational cannabis, legal and semi-legal (or "grey market") medical cannabis, and the illegal market. A primary feature of most states' cannabis laws is the special license given to patients to grow cannabis for personal use, as well as for "caregivers" to cultivate the plant on their behalf. Discrepancies in the screening process of these caregivers, however, have led to abuses and the transfer of medical cannabis onto the black market. All five of the U.S. localities that have so far legalized recreational use (Colorado, Washington, Alaska, Oregon, and the District of Columbia) have existing laws authorizing patients to access medical cannabis, and regulators in each are concerned about their potential for abuse.

In Colorado, the constitutional amendment legalizing cannabis for recreational purposes had no impact on a previous amendment allowing medical marijuana patients and their primary caregivers to grow the plant, passed in 2000. As a result, there are an estimated 300,000 Colorado residents who have physicians' recommendations to access medical cannabis. Yet just 122,000 are officially registered with the state. Of these, 17 percent have permission to access "extended" amounts exceeding the limit of six plants per patient, an imprecise definition that has made tracking medical marijuana difficult and fueled black market transfers.

In Washington state, lawmakers have attempted to address spillover from the medical marijuana market to the illicit market this by passing a measure to reconcile the pre-existing medical regulations with those governing recreational use. In April 2015, Governor Jay Inslee signed a bill that will either close medical marijuana dispensaries, or force them to seek licenses under the newer system. To ensure that medical customers In the future, medical customers will have to look to “medically endorsed” recreational marijuana stores for their supply.<sup>7</sup>

### **Prevention and Education Campaigns**

In the two U.S. states with the most advanced legal cannabis regimes, Washington and Colorado, health authorities are adopting creative approaches to educating the public on the harms associated with cannabis use. These have been research and focus group-driven, with components aimed at both the general public and youth in general. A good example of an existing targeted outreach strategy is Colorado’s \$5.7 million “Good to Know” campaign, which featured ads on radio, print, and television media aimed at educating the public about the risks of cannabis use without alienating users or exposing them to unnecessary stigma.<sup>8</sup>

### **Research Gaps and Challenges in Public Health**

While governments that have legalized cannabis have achieved much in recent years in terms of monitoring their laws from a public health standpoint, this session featured more discussion of the field’s shortcomings than any other. In order for a comprehensive and rigorous research agenda around cannabis legalization and public health to take place, participants identified a number of issues must first be addressed. Among them are:

- **The need to define and measure health outcomes related to cannabis policy:** This is perhaps a shortcoming of the field of public health in general. Instead of working towards a common understanding of the desired outcomes of cannabis policy, there appears to be an endemic lack of initiative to move towards consensus. Moreover, participants identified an urgent need to adapt the monitoring processes in place to properly measure the impact of legalization as it relates to the full societal impacts of use, a difficult task considering data is so limited. Taking advantage of the potential measurement opportunities that legalization should provide (such as much better knowledge of amounts consumed and potency, drawing on data systems tracking production and sales) should also allow a more refined understanding of use patterns and health impacts.

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<sup>7</sup> Associated Press, “Washington state Senate OKs new medical marijuana rules,” April 15, 2015. [http://www.oregonlive.com/pacific-northwest-news/index.ssf/2015/04/washington\\_states\\_medical\\_pot.html](http://www.oregonlive.com/pacific-northwest-news/index.ssf/2015/04/washington_states_medical_pot.html)

<sup>8</sup> Associated Press, “Colorado says it’s ‘Good to Know’ about marijuana,” January 5, 2015. <http://www.usatoday.com/story/news/nation/2015/01/05/colorado-marijuana-campaign/21300293/>

- **The need for more research on the health effects of cannabis use, both positive and negative:** In addition to providing a more solid basis for medical cannabis regulations, this research is vital to adopting an approach to legalization that addresses concerns of quality control and consumer protection, passive exposure, and reducing users' risk of both long- and short-term damage to the body and brain. The past few years have seen a boom in research on the impact of THC and other cannabinoids on the human body, but in the words of one workshop participant, "policy is way ahead of science right now."
- **Legal obstacles and lack of funding for research:** While countries and localities that have legalized cannabis have placed a strong emphasis on monitoring the public health impact of doing so, there is a widespread scarcity of funding for such research, as well as significant obstacles to conducting clinical research. The state of Colorado has proved a notable exception, having created a grants program to support studies to examine the efficacy of using cannabis to treat various medical conditions. The U.S. federal government, however, and particular the National Institute on Drug Abuse (NIDA), was widely criticized by analysts and researchers in the room as exhibiting a lack of streamlined and nimble procedures to promote and fund useful research on the intersection of drug policy and public health.
- **The lack of clarity in the field's research agenda:** In addition to a lack of funding, participants mentioned a lack of clear consensus on the next steps for researching the public health effects of legalizing cannabis. As it stands, the research being conducted tends to vary in accordance with local needs and difference with local laws, meaning that some countries and localities are better suited for certain research than others. This dynamic does not lend itself to broad conclusions about the impact of legalization. Additionally, the session saw repeated mention of the existence of "dogs that aren't barking," alluding to the tendency for research to focus on hot-button popular issues over others that might also merit more study. Among the potential hidden research needs suggested by participants were study of poly-substance abuse, cannabis dependence, and the children of those who are dependent.

### **Session 3—Public Safety**

The third session of the workshop focused on evaluating the public safety implications of cannabis legalization. In general, the session featured a rich policy discussion that went beyond traditional conceptions of security as a law enforcement undertaking, encompassing a broader emphasis on ensuring the welfare and protection of the general public. This alternative conception of security began with the suggestion that cannabis legalization is, in the words of one participant, "a more ambitious enforcement goal than the status quo," as it requires new training, new procedures, and a more complicated approach than mere repression. It also

introduces new variables with potential impact on major safety issues like roadway safety, consumer protection, and organized criminal groups.

### **Uruguay: A Case Study for Cannabis Regulation as a Security Measure**

In this regard, Uruguay's cannabis law is an important case study for assessing legalization as a means of reducing insecurity. One presenter on the issue highlighted the Uruguayan cannabis measure as a response to the public debate over insecurity and crime. Referring to the need to evaluate policy on both its "political" and "ethical" grounds, the speaker asserted that certain ethical truths were needed to recognize the importance of cannabis legalization as a public safety initiative. These include establishing definitions of violence that maintain that imprisoning a person for a nonviolent act "for even a day" is wrong, just as the violence seen on the illegal market is as well. From there, the presenter argued that it follows that a human rights-based perspective that incorporates harm reduction is necessary to foment authentic security.

To complement this ethical framing of the law, the presenter noted that the law was conceived as a way to crack down on the black market for cannabis, generating a legal market to replace it, and to end the exposure of cannabis users to other more harmful substances. It was also a proposal meant to address growing concerns over insecurity and violent crime, fueled by a modest rise in the country's homicide rate.

As a transit country for cocaine from the Andean countries to the European market, and as a consumer country of cannabis grown in neighboring Paraguay, there are various organized criminal groups operating in Uruguay. These include Colombian, Ecuadorean, Argentine, and Brazilian networks, though international criminal rings have not been significantly linked to violent crime. While completely dismantling these groups may be out of reach, Uruguayan officials are convinced that regulating an element of the black market they currently control will take a toll on their profit margins.

In the coming months and years, the researchers and regulators working on Uruguay's cannabis law have outlined five broad dimensions on which to evaluate and improve its implementation, including: 1.) citizen security and well-being, 2.) public health, 3.) equitable enforcement of the law, 4.) governance and policy at the local and national levels, and 5.) economic factors of the drug market.<sup>9</sup>

Specifically on the subject of citizen security, the National Drug Observatory in Uruguay is following the evolution of homicide trends and other violent crimes, as well as the number of those detained, processed, and imprisoned for drug trafficking or any other violation of the

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<sup>9</sup> Friedrich Ebert Foundation in Uruguay, "Proposed Strategy for Evaluating Implementation of Uruguayan Cannabis Law," 2014. <https://aclu-wa.org/sites/default/files/attachments/Estrategia%20EYM%20-%20FESUR%20-%2011-2014.pdf>

country's drug laws. A conclusion on the overall impact of the law will not be reached overnight, but regulators are hopeful that one will emerge over the next five to eight years.

### **Discussion: Towards a 'Professional Cadre' of Researchers**

Following a stimulating look at what Uruguayan officials hope to achieve on public safety, the discussion turned to the concrete challenges faced by policy analysts, regulators, and researchers throughout the hemisphere regarding the establishment of a consistent and comprehensive evaluation agenda. Participants were encouraged to take a step back and assess the academic landscape around the subject, which resulted in a frank and rich appraisal of the achievements, challenges, and opportunities in some of the recent work being done on cannabis policy.

Particularly salient in this discussion was the importance of solid modelling for research meant to evaluate cannabis laws. As one participant put it: "so many of us have the opportunity to be the 'first to study' x," a position that brings with it a big responsibility. This participant also cautioned peers to be wary of "the one big study," referring to the tendency for research to be dominated by ground-breaking studies that have the capacity to shape the policy narrative around cannabis legalization.

One clear recent example is the March 2015 study by Dutch researchers in the city of Maastricht,<sup>10</sup> which has received a great deal of media coverage because of its subject matter: the link between access to cannabis and youth dropout rates and other measures of academic performance. Instead of accepting these narrative-shaping studies, participants were urged by this speaker to take advantage of the easy access to data on cannabis legalization in their areas, to share data sources and think creatively about how to use them.

### **Discussion Points**

Ultimately, one participant argued, the goal of cannabis policy analysts is to create "a professional cadre of researchers in each state" and country where cannabis is legal. This call sparked a discussion of the many footholds for social science research available within the study of cannabis policy, including:

- **The unique aspects of law enforcement and criminal justice data:** Compared to other social indicators such as surveys, hospitalization rates, or education statistics, several participants noted that law enforcement and criminal justice data could provide a more accurate look at the black market, the structures that control it, and the internal dynamics of prisons. Multiple researchers at the workshop highlighted current and potential research conducted with the help of voluntarily participating inmates, stressing the need for researchers to pay special attention to the lessons and experiences of incarcerated populations. Additionally, some suggested that concise

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<sup>10</sup> "'High' Achievers? Cannabis Access and Academic Performance," The Institute for the Study of Labor (IZA) in Bonn), available at: <http://ftp.iza.org/dp8900.pdf>

research on law enforcement aspects of legalization could have a deeper impact on police operations, and could “potentially shape police thinking on the issue.” At the same time, however, others cautioned against relying too heavily on police data to track cannabis market trends, suggesting that current law enforcement operations tend to disproportionately prioritize seizures of illicit substances or guns.

- **The intersection of race and ethnicity with enforcement of cannabis legalization:** Dovetailing with the discussion of incarcerated populations, participants also raised questions over cannabis legalization might have different effects in communities across racial and socioeconomic backgrounds. Does limiting legal use of cannabis to homes, for instance, criminalize the poor or homeless who lack access to a private space to use the drug? Will the benefits of legalizing cannabis spread across socioeconomic strata and lead to lower rates of incarceration for low-income communities of color? Will legalization have a different impact on poorer, urban communities than in middle-class, suburban ones? Participants flagged all of the above questions for further research.
- **Highway safety:** the issue of highway safety came up repeatedly in the discussion, with participants noting the increasing concern among regulators regarding cannabis legalization’s impact on reduced perceptions of the risk of driving while under the influence of cannabis. To combat these fears, police in states and localities that have legalized cannabis have implemented THC-blood tests, a practice that many participants criticized for lacking clear definition for legal impairment. In some areas, like Uruguay, authorities have adopted a “zero-tolerance” approach, meaning that any amount of THC in the body is grounds to conclude that a user is unfit to drive. In the U.S., state laws in Colorado and Washington set a limit of five nanograms of THC per milliliter of blood as the legal limit of impairment, similar to blood-alcohol content (BAC) tests. But unlike BAC, THC-blood content has been shown to lack a direct correlation with impairment, and users can have THC traces in their blood well after the effects of the drug have passed.
- **Youth access to cannabis as a result of legalization:** The mention of any potential for a link between increased access to cannabis and academic performance and attendance sparked a lively discussion on youth access as a consumer and public safety issue. Some participants maintained that while legalization might lead to increased access to cannabis, this would be a better outcome than further restricting access to cannabis, which might in turn force youth into more risky situations in which they are offered more harmful substances.

## **Session 4—Markets in the Public Interest**

The final session of the dialogue focused on the challenge that authorities face in addressing markets (recreational, medical, and illicit) for cannabis, in a way that benefits the general public while addressing the relevant supply- and demand-side dynamics. Participants looked at how authorities in areas that have legalized cannabis have proposed taxes, licensing fees, regulations, restrictions, product standards, lobbying rules, and other measures meant to

maximize the benefits of supplying cannabis to those who want to consume it legally while minimizing the risk of supplying it to the wrong hands.

### ***Colorado: Limits on Production and Distribution***

One method for limiting the potential for diversion of legal cannabis to unintended customers such as minors is the establishment of clear lines to distinguish between the various stages of cannabis in the production, processing, and distribution chain.

In Colorado, this meant requirements that until October 2014, business establishments had to grow at least 70 percent of the marijuana they sold, and sell no more than 30 percent of what they grew to other outlets. This “vertical integration” model is a legacy of the state’s medical marijuana system, which has been one of the most closely-regulated systems for monitoring medical cannabis production and distribution in the United States. When these requirements were lifted, it created new possibilities for state residents to open standalone grow operations and sell their products to licensed retailers or product manufacturer in the state.

Still, applicants were made to pass background checks and pay fees based on their desired licenses, based on plant counts broken into three tiers. In order to increase beyond the initial licensed allotment of 3,600 plants, firms have to demonstrate the ability to sell 85 percent of what they produce. However, due to concerns of profitability and overstocking, regulators have found that retail growers in the state grow an average of around 40 percent of their total allotment.

Currently, Colorado has roughly 2,300 licensed premises to grow, process and sell cannabis, including 1,400 established under the medical licensing system and about 900 under the recreational retail system. These premises are licensed to operate on three different tiers, The majority of these (roughly two-thirds) are along populated areas of Interstate 25, and about half are located in the state capital of Denver.

### **Regulating Cannabis like Alcohol?**

Following an overview of policy and market dynamics in U.S. states that have legalized cannabis, the discussion turned to the wider objectives of cannabis policy from a regulatory standpoint. This discussion began with a look at one of the central advocacy frames of legalization proponents in the United States: the need to “regulate cannabis like alcohol.” One participant used this frame as a springboard into a broader assessment of approaches to regulating harmful substances in general, asking: “But are we satisfied with how we have regulated alcohol?” As this participant noted, restrictions on the sales of alcohol have not stamped out abuse among adults and youth alike in the United States, which has been linked to death, grave illnesses, and violent crimes. From a historical perspective, after all, liquor control boards in the early and mid-20<sup>th</sup> century United States were more concerned with getting users “off the streets” than with regulating liquor in the public interest.

As such, this participant suggested that regulating the market for cannabis should be held to standards above and beyond those applied to alcohol. Doing so will require careful

consideration of multiple variables, including issues of individual liberty, consumer convenience and satisfaction, suppressing the illicit market while protecting the licit one, monitoring the behavior of consumers, encouraging public health, and restricting use by minors and harmful education outcomes. In general, this participant argued that an emphasis should be placed on minimizing overall cannabis use, and on restricting its combination with other substances like alcohol and tobacco in particular.

While regulators may have a wide range of objectives, however, their toolkit to address the above variables is somewhat limited. This participant identified a set of tools that policymakers have at their disposal to achieve the desired outcomes of legalization, and some potential considerations for each. These include:

- **Price:** While there are concerns from some corners about the price sensitivity of cannabis, in general the price of the product does not affect the purchasing behavior of the majority of consumers. However, the bulk of demand for cannabis is determined by heavy, frequent users. Because these individuals use more, they are more price sensitive. As such, keeping prices of cannabis high (while maintaining them at competitive levels with the black market) is in the public interest.
- **Information to users:** Regulators are encouraged to educate the public of the harms of cannabis use, and limit incentives for heavy use. “Loyalty programs” and coupons which encourage substance abuse should be prohibited.
- **Product evaluation:** In addition to adopting rigorous testing standards to ensure quality of cannabis sold, more research is needed in order to limit quantities sold in line with exact dosage standards.
- **Political power:** As the cannabis legalization movement has grown in recent years, there is concern that the frequency of heavy use may as well. Just as the alcohol and tobacco lobbies developed political influence, the cannabis lobby may prove capable of doing so as well. Steps should be taken to curtail the influence of the industry in encouraging use, like mandating training courses for vendors, placing further restrictions on sales, and constraining advertising and promotions.

### ***Discussion Points***

These assertions fueled a deep discussion of the importance of regulatory restrictions on cannabis sales, with participants assessing the implications of taxes and licensing for promoting public welfare. One particularly salient comment described the tension faced by policymakers as a “U curve,” with the harms of legalization on one side and the harms of the illicit market on the other, and the nadir of the curve representing a policy approach guided by public health and safety concerns. Other issues addressed by participants include:

- **Benefits and drawbacks of “vertical integration:”** The session focused attention on Colorado’s model of “vertical integration,” in which producers were made to sell the majority of what they grew themselves. While analysts in attendance largely agreed that it was too soon to draw complete conclusions about the benefits or drawbacks of this

model, it led to a discussion of other approaches. Washington, by comparison, does not allow vertical integration across production and scale. The state authorizes three separate kinds of licenses for producers, processors, and retailers, and while outlets may obtain permission to become both producers and processors, retailers may not engage in the first two activities. Additionally, the state has placed a cap on the number of retail licenses in an attempt to prevent flooding the market and losing control of marijuana transactions.

- **Streamlining regulations vs. a strong enforcement precedent:** A number of analysts in the room expressed a firm belief that governments experimenting with legalized cannabis should streamline their laws and build as much regulatory flexibility into their approaches as possible, in order to be able to adopt their laws to shifting market dynamics. This is particularly important for the cannabis industry in countries where access to investment capital is extremely limited. In the United States, for instance, federal tax code specifically prohibits businesses that profit off of controlled substances from receiving tax credits or exemptions. As a result, some businesses report paying effective tax rates of around 80 to 90 percent. Participants voiced radically divergent opinions on this subject. Some came down on the side of the industry, arguing that profitability is necessary for legalization to cut into the black market, while others suggested even more restrictive approaches like forcing businesses to adopt non-profit business models. A notable outlier in this debate is Uruguay's cannabis law, in which a small handful of commercial growers are competing for direct contracts to grow cannabis for the state. This state-heavy approach represents what one participant called "the ugly duckling" of the debate.
- **The difficulty of having two sets of rules:** As mentioned in previous sessions, the fact that many states have pre-existing laws allowing for medical access to cannabis has posed a number of problems. Not only does having "two different sets of rules" complicate matters from a regulatory perspective, it also weakens the effectiveness of state controls on price and distribution. However, participants also noted that merging medical and recreational systems posed challenges as well. One suggested that combining the two could lead to fluctuations in the market, as medical marijuana systems often leads to heavy users buying in bulk at cheaper prices, and restricting them to the recreational system would limit this incentive. While this could lead to an increase in tax revenue, it was suggested that it could also cause the overall price to drop further, which could in turn be a disadvantage from a public accessibility perspective. However, in Colorado, which is struggling to merge these two markets, analysts indicated that the retail market does not appear to be slowly sapping medical cannabis sales.
- **Testing quality and potency:** Participants voiced deep interest in best practices regarding testing the quality of commercial cannabis. While laboratories in many legalized markets conduct routine tests for THC and cannabidiol (CBD) levels as well as acceptable levels of residual solvents and microbial contaminants, there is no broad

consensus on the matter of quality. Unlike alcohol, there are no industry standards for determining the quality of cannabis from a consumer safety perspective beyond measuring its THC and CBD content. With alcohol, by contrast, potency is variable that is independent from quality (in the sense that a fine wine or aged whiskey can have lower alcohol contents than their cheaper alternatives). Currently, both Washington and Colorado restrict cannabis-infused products at 10 mg of THC per single serving, with a maximum of 100 mg of THC per product. To complicate matters, the fact that cannabis is such a chemically diverse drug with a number of active components ensures that isolating all the ingredients that determine true potency from a user perspective remains an imprecise science.

- **The potential rise of a “cannabis lobby:”** While there was some skepticism towards the idea of cannabis producers, processors and retailers achieving the same degree of lobbying power as “big tobacco” or other industry powerhouses in the United States, multiple participants conceded that the cannabis industry might develop political power in the country, and explored the potential implications of this. Some in the room drew parallels with the alcohol and liquor industries, and the fact that heavy users account for the majority of sales in both, to question whether the cannabis industry would use whatever power it gathers to “torpedo” effective substance abuse prevention measures, or work to undermine or stall implementation of measures enacted to protect the public health. Others, however, took a more benevolent view of the nascent industry. One asked: “Is it unimaginable for [cannabis] companies to partner with public health officials under certain incentives, to not see heavy users as a cash cow?” As for what these incentives might be, others suggested that the current fragility of cannabis experiments in the country might itself be a powerful incentive for the nascent industry to ensure that (at least for the foreseeable future) its actions are in line with public health initiatives. A counter-argument to this, however, was that while the industry as a whole might have an incentive not to prey on or cater to heavy users, profitability would create a collective action problem, by which individual companies compete to do so.

## **Final Session—Lessons Learned**

The workshop concluded with an overview of the ground covered in the previous sessions, and a collaborative effort to synthesize it into a concrete research agenda moving forward. This final session began with recognition of the “dream team” gathered at the workshop, a prestigious group of experts across the discipline of cannabis policy evaluation. The group was invited once again to conceive of the outcomes of the event in four fields: knowledge gained, ideas inspired, relationships fostered, and opportunities opened.

From there, the question of a united research agenda was raised. One participant asked if it would be possible to develop a uniform approach to study demand for cannabis across the United States and other countries leading the charge on alternative cannabis policy. Developing this would require a certain degree of standardization of language, requiring those in the field to come to conclusions over the use of certain terms, such as what exactly constitutes the

difference between a “retailer” and a “dispensary,” or whether “recreational cannabis” is a useful distinction.

Ideally, such an approach would take into account not only demand for unaltered cannabis, but for cannabis oil extracts like “wax” or “shatter” as well. This, in turn, could inform policy regarding limiting these concentrates to wholesale licensees, and restricting their sale to end users. Along these lines, further research is needed into the plant itself. While analysts are beginning to study important issues like the relationship between THC and CBD, there are many other chemical components to cannabis that must be studied (like terpenes) to determine their interactions with other chemicals and their effects on human subjects.

This unified research agenda must also address international trends in global cannabis policy, as well as the regional and international market impacts of state reforms. Participants from elsewhere in the hemisphere outside the United States highlighted a clear demand for research to be adaptable to the diverse political and economic contexts across the Americas. This research is especially important in Latin America and the Caribbean, where universities and research centers are plagued by a relative lack of resource. By the same token, U.S. states could benefit from greater dialogue with each other and with nations that have adopted new cannabis regulatory models, as well as with those that are actively weighing reforms.

While a general consensus was conceded around the need for a united research agenda on policy impacts and outcomes, participants also identified a need to educate lawmakers and policymakers on the current state of the field. Because no one policy will be “right” at the outset, authorities need to be brought up to speed on the relevant policy issues and today’s state of knowledge in order for cannabis laws to evolve in a constructive, public health-oriented direction. One participant described this process as shifting the focus to better public health outcomes in policy rather than exclusively focusing on economic outcomes.

In general, the public policy aspects of cannabis legalization are ahead of the science. In order for the research to catch up, however, participants noted a need for objective spaces and resources to implement solid research methods (observational studies, random experiments, e.g.). With this in mind, jurisdictions considering cannabis legalization should consider evaluation methods before presenting the issue to voters.

From a research perspective, participants noted that the current state of policy knowledge on cannabis was limited by the prevailing funding climate. The conversation shifted towards the urgency of moving beyond an environment in which isolated researchers are currently forced to “shop around” to obtain funding for their research. This sentiment was echoed by participants involved in the funding process, who in turn voiced frustration with a lack of sources of aggregated collection of the wide array of cannabis policy research being done today, which complicates the process of identifying key research gaps in the field.

It was suggested that this conversation could ultimately benefit more from the input of non-profit, non-governmental actors, which are much nimbler (and potentially more effective) than federal governments at supporting a coherent research agenda and assimilation of data

resources. One example given by a participant was the Assuring Better Child Health and Development (ABCD) Initiative, which has been criticized for an undue focus on the intersection of drugs and brain science, “drowning out” other important research needs.

Researchers also expressed concerns regarding the limitations of private funders, and over a climate that fuels research with an advocacy bent, or leaves them susceptible to a right of review to publish. Positive models of funding exist, including the defunct Robert Wood Johnson Substance Abuse Policy Program, which some identified as a model worth reviving.

Beyond a critical evaluation of current policy, further dialogue is needed to address the effective implementation of cannabis policy. As one participant put it, legalization and regulating the market for cannabis “is not a good in and of itself,” and should be held to rigorous standards of methodology. Researchers were encouraged to look not only for potential red flags in cannabis policy, but for “green flags,” or success stories, as well. It was also noted that a well-designed system, if poorly implemented in practice, could end in failure.

This look at implementation could vitally inform the racially disproportionate impacts of both prohibition and new regulatory models. Ultimately, a closer look at implementation could also help identify features needed in a regulatory system to maximize opportunity of those who have experienced disproportionate law enforcement under prohibition to benefit from new legal systems.

### **Next Steps**

After laying out the various lessons learned from the workshop, participants moved from a general discussion of research goals towards a broad set of potential pathways meant to advance the current state of cannabis policy evaluation. These included:

**Establishing standards for “successful legalization:”** As policy experiments move forward, clear benchmarks are needed in order to codify what exactly constitutes successful policy. The development of models and standards for “success” must be culturally sensitive and accommodate diverse social perspectives on cannabis. While further dialogue on the subject is needed, participants identified a number of potential forums to do so. These include the establishment of a kind of regular consortium on the subject, a “Cannabis Policy Evaluation Consortium (CPEC).” This consortium could be independent, or created under the auspices of existing forums such as the International Society for the Study of Drug Policy (ISSDP), which meets once a year. Another alternative may be to incorporate future discussions on the subject within policy conferences that are being planned for the coming months, such as a conference slated for April 2016 at New York University, or as part of an ongoing series of discussions sponsored by the Social Development Research Group (SDRG) of the University of Washington. In order to guarantee the effectiveness of these dialogues, it was agreed that Chatham House Rules may prove a convenient facilitation tool for any future conversations.

**Sharing information:** This current state of policy research on cannabis, fueled by the recent wave of reform initiatives, was described by one participant as “an explosion of data.” Clearly,

those working on the issue would benefit from a kind of institutional clearinghouse, a centralized database to make sense of this surge in newly-available, useful information for evaluating various cannabis regulatory structures. With the advent of new technology, such a database could be digitized and made available to all those working on cannabis policy.

**Engaging funders, industry specialists, and government officials:** While the current trends, at least in the United States, seem to indicate growing momentum towards eventual cannabis legalization, the window of public interest in evaluation is small. Once cannabis legalization has spread to a critical mass of localities that have demonstrated no calamitous consequences (a moment referred to by one participant as “once we establish that the sky is not falling”) the general public is less likely to be concerned with the details of cannabis legalization initiatives. Fostering relationships with key stakeholders now will be key to pursuing research projects meant to document long term outcomes of legalization. Part of this effort will include identifying funders who may not have considered this work before, as well as industry and governmental actors.

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