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## Colorado Marijuana Regulation Five Years Later: Have We Learned Anything at All

Sam Kamin

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## Colorado Marijuana Regulation Five Years Later: Have We Learned Anything at All

# COLORADO MARIJUANA REGULATION FIVE YEARS LATER: HAVE WE LEARNED ANYTHING AT ALL?

SAM KAMIN<sup>†</sup>

## ABSTRACT

This Article is based on the 2018 University Lecture of the same name that I presented at the University of Denver on April 24, 2018. January 1, 2019 marks five years of taxed and regulated adult-use marijuana in Colorado. In this Article, I address much of the misinformation and hyperbole that has been disseminated regarding this first-in-the-world regulatory experiment. I discuss both the successes and the challenges that Colorado has experienced and offer some cautiously optimistic predictions about the years ahead. As we move closer to the end of marijuana prohibition at the federal level, understanding what has worked—and what has not—in Colorado will be crucial to drafting sensible public policy in the years ahead.

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## INTRODUCTION

As the fifth anniversary of legalized marijuana in Colorado approaches, we have seen a number of press reports and editorials decrying the disaster that marijuana regulation has apparently been for our state. Most prominently, Jeff Hunt, the president of Colorado Christian College, wrote in *USA Today* that marijuana regulation had “devastated” Colorado and that other states would be wise to learn from this cautionary tale.<sup>1</sup> Editorial boards<sup>2</sup> and advocacy groups<sup>3</sup> have similarly savaged Colorado’s regulatory regime: crime is up, we are told; revenue is short of expectations; homelessness has skyrocketed; and the state’s highways have become killing fields.

And it must certainly be admitted that Colorado’s regulation of marijuana has not gone perfectly. When regulated marijuana businesses opened their doors in 2014, Colorado became the first state in the nation—and the first jurisdiction anywhere in the world—to regulate the production and distribution of marijuana for adults.<sup>4</sup> There have been fits

1. Jeff Hunt, Opinion, *Marijuana Devastated Colorado, Don’t Legalize It Nationally*, USA TODAY (Aug. 7, 2017, 7:00 AM), <https://www.usatoday.com/story/opinion/2017/08/07/marijuana-devastated-colorado-dont-legalize-nationally-jeff-hunt-column/536010001> (“Last week, Senator Cory Booker introduced the Marijuana Justice Act in an effort to legalize marijuana across the nation and penalize local communities that want nothing to do with this dangerous drug. This is the furthest reaching marijuana legalization effort to date and marks another sad moment in our nation’s embrace of a drug that will have generational consequences. Our country is facing a drug epidemic. Legalizing recreational marijuana will do nothing that Senator Booker expects. We heard many of these same promises in 2012 when Colorado legalized recreational marijuana. In the years since, Colorado has seen an increase in marijuana related traffic deaths, poison control calls, and emergency room visits. The marijuana black market has increased in Colorado, not decreased. And, numerous Colorado marijuana regulators have been indicted for corruption.”). *But see* Sam Kamin, Opinion, *Lies, Damned Lies, and Statistics About Marijuana Legalization*, HILL (Feb. 1, 2018), <https://thehill.com/opinion/criminal-justice/370519-lies-damned-lies-and-statistics-about-marijuana-legalization> (“To many of us who live and work in Colorado, Hunt describes a world we don’t recognize. Our state is booming: the population has grown 10 percent since 2010, Denver’s skyline is perpetually dotted with construction cranes, and the city recently made the shortlist of cities competing to host Amazon’s second headquarters. Gov. John Hickenlooper, who initially opposed legalization in the state, has become a cautious supporter.”).

2. Opinion, *The Sad Anniversary of Big Commercial Pot in Colorado*, GAZETTE (Nov. 9, 2017), reprinted in WASH. EXAMINER (Nov. 11, 2017, 2:53 PM), <https://www.washingtonexaminer.com/the-sad-anniversary-of-big-commercial-pot-in-colorado> (“Commercial pot’s five-year anniversary is an odious occasion for those who want safer streets, healthier kids, and less suffering associated with substance abuse. Experts say the worst effects of widespread pot use will culminate over decades. If so, we can only imagine the somber nature of Big Marijuana’s 25th birthday.”).

3. MARIJUANA ACCOUNTABILITY COAL. & SMART APPROACHES TO MARIJUANA, THE LEGALIZATION OF MARIJUANA IN COLORADO: A 5 YEAR CHECK-UP 1 (2018), <http://marijuanaaccountability.co/wp-content/uploads/2018/02/ExecSummaryMAC-3-5.pdf> (“The legalization of marijuana in Colorado has introduced a host of problems for the state—problems often glossed over by the pot industry and the regulators and decision makers they finance. Today’s highly potent marijuana represents a growing and significant threat to public health and safety—a threat amplified by a new marijuana industry intent on profiting from heavy use. State laws allowing marijuana use have—in direct contradiction of federal law—permitted this industry to flourish. The full extent of the consequences of these policies will not be known for decades.”).

4. See John Ingold, *World’s First Legal Recreational Marijuana Sales Begin in Colorado*, DENV. POST (Jan. 1, 2014, 12:27 AM), <https://www.denverpost.com/2014/01/01/worlds-first-legal-recreational-marijuana-sales-begin-in-colorado>. Prior to that, Colorado was one of an increasing

and starts, areas of regulation that have required repeated amendment, and other areas—such as finding places for social consumption by adults<sup>5</sup>—that continue to exceed the grasp of regulators.<sup>6</sup> While Colorado's first-of-its-kind regulation of legalized marijuana has certainly been a work in progress, it is a significant leap to assert that Colorado—a booming state with a growing, healthy, well-educated population—has been devastated by marijuana legalization.<sup>7</sup>

In this Article, which derives from the University of Denver's University Lecture Series (University Lecture) on the same topic that I gave in April of 2018,<sup>8</sup> I attempt to provide a dispassionate analysis of how marijuana regulation has actually gone in Colorado over the last five years.<sup>9</sup> After briefly summarizing the history of marijuana regulation in Colorado and the relationship between state legalization and the continuing federal prohibition of marijuana, I turn to what we know about the realities of marijuana regulation. I begin with some topics about which we have good information: marijuana sales, revenues, and usage rates. These data point to a few dirty secrets about marijuana legalization that proponents are unlikely to emphasize: marijuana revenues make up only a small percentage of Colorado's annual budget, law enforcement costs remain fairly static, and legalization does little to change the racially disparate ways that marijuana laws are enforced. From these data, I suggest some important areas for further study: interaction effects among marijuana and other drugs, the link between marijuana and broader social harms like homelessness, and the extent of the black market. I conclude

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number of states that permitted the use of marijuana pursuant to a doctor's recommendation. See Sarah Trumble, *Timeline of State Marijuana Legalization Laws*, THIRD WAY (Apr. 19, 2017), <https://www.thirdway.org/infographic/timeline-of-state-marijuana-legalization-laws>.

5. See, e.g., Thomas Mitchell, *Are Changes Ahead for Denver's Cannabis Consumption Program?*, WESTWORD (May 11, 2018, 8:57 AM), <https://www.westword.com/marijuana/denver-may-change-its-social-cannabis-consumption-licensing-program-10301585> (discussing the many impediments to the opening of social consumption clubs despite the passage of Initiative 300 in Denver in November 2016, which created a framework for the licensing of such clubs).

6. See, e.g., Jon Murray, *Denver's First-of-Its-Kind Social Marijuana Use Program for Businesses Is Mostly a Bust. Can It Be Fixed?*, DENV. POST (Aug. 18, 2018, 6:00 AM), <https://www.denverpost.com/2018/08/18/denver-social-marijuana-use-program-struggling> (“After 54 percent of Denver voters approved Initiative 300 in November 2016, the city last year put in place extensive regulations—and now pro-marijuana activists and frustrated business owners are joined by some city officials, and even neighborhood activists who had opposed I-300, in calling for those rules to be loosened.”).

7. One *Denver Post* headline in particular brought to mind Yogi Berra's famous criticism of a restaurant: It's so crowded nobody goes there anymore. See Aldo Svaldi, *More Coloradans Moving out as Population Growth Brings Traffic Headaches, Higher Home Prices*, DENV. POST (Dec. 3, 2017, 12:01 AM), <https://www.denverpost.com/2017/12/03/more-coloradans-leaving-colorado-population-growth>.

8. Sam Kamin, Vicente Sederberg Professor of Marijuana Law & Policy, Univ. of Denver Sturm Coll. of Law, University Lecture: After Five Years of Legalized Marijuana in Colorado, What Have We Learned? (Apr. 24, 2018).

9. My ability to obtain distance on this subject is hampered by the fact that I have been involved in that process since the beginning. I served on Governor Hickenlooper's Task Force to Implement Amendment 64 in 2012–2013 and have served in a similar capacity on City of Denver commissions working to establish rules for the social consumption of marijuana.

that, given the challenges Colorado faced in implementing marijuana regulation, the endeavor has so far been mostly successful. I caution, however, that significant challenges lie ahead and that much work will be needed to ensure that Colorado's early successes continue.

### I. A BRIEF HISTORY OF MARIJUANA REGULATION IN COLORADO

Although federal law continues to prohibit the production, distribution, and sale of marijuana throughout the nation,<sup>10</sup> the last twenty years have seen a movement in the states to relax *state* prohibition of the drug.<sup>11</sup> When Colorado voters passed Amendment 20 in 2000, it became just the seventh state to permit the possession and use of marijuana for medical purposes.<sup>12</sup> Amendment 20 created an exception to the state's criminal laws for those using marijuana pursuant to a doctor's recommendation and instructed the Colorado Department of Public Health and Environment (CDPHE) to create a registry of those who had received such a recommendation.<sup>13</sup> But it was nearly ten years before Colorado created the nation's first statewide regulatory regime for the production and sale of medical marijuana, granting regulatory authority to the Colorado Department of Revenue (DOR).<sup>14</sup>

After two years of experience with the regulation of the production and sale of medical marijuana, Colorado voters decided to extend the right to use marijuana from medical patients to all adults. On November 6, 2012, Colorado passed Amendment 64 and became the first state in the nation to approve adult-use marijuana, beating Washington State by just an hour.<sup>15</sup> The Amendment to the Colorado constitution, which the Governor certified on December 10, 2012,<sup>16</sup> had two parts. The first, which took effect immediately, removed possession of small amounts of marijuana from the state's criminal code.<sup>17</sup> It became lawful for every

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10. See Controlled Substances Act, 21 U.S.C. §§ 801–971 (2018).

11. See Trumble, *supra* note 4.

12. Carol McGraw, *Road to Legalization*, GAZETTE (Apr. 27, 2014), [https://gazette.com/news/road-to-legalization-many-factors-including-tax-revenue/article\\_6b09995c-9761-54a9-8c74-3a05dca54633.html](https://gazette.com/news/road-to-legalization-many-factors-including-tax-revenue/article_6b09995c-9761-54a9-8c74-3a05dca54633.html); see Trumble, *supra* note 4. Today marijuana is authorized for medical use in twenty-nine states and for adult use in nine. *Id.*

13. See COLO. CONST. art. XVIII, § 14(e)(3).

14. See *Colorado Issues First Medical-Marijuana Business Licenses in U.S.*, DENV. POST (Oct. 26, 2011, 4:29 PM), <https://www.denverpost.com/2011/10/26/colorado-issues-first-medical-marijuana-business-licenses-in-u-s/> (“Colorado has begun issuing the first state medical-marijuana business licenses in the nation, the culmination of a more than year-long application process for dispensaries and marijuana-infused-products makers.”).

15. See Matt Ferner, *Amendment 64 Passes: Colorado Legalizes Marijuana for Recreational Use*, HUFFPOST (Nov. 6, 2012, 11:24 PM), [https://www.huffingtonpost.com/2012/11/06/amendment-64-passes-in-co\\_n\\_2079899.html](https://www.huffingtonpost.com/2012/11/06/amendment-64-passes-in-co_n_2079899.html) (“On Tuesday night, Amendment 64—the measure seeking the legalization of marijuana for recreational use by adults—was passed by Colorado voters, making Colorado the first state to end marijuana prohibition in the United States.”).

16. Michael Roberts, *Amendment 64 Is Now Law: Governor John Hickenlooper Quietly Signs Measure*, WESTWORD (Dec. 10, 2012, 12:12 PM), <https://www.westword.com/news/amendment-64-is-now-law-governor-john-hickenlooper-quietly-signs-measure-5909496>.

17. COLO. CONST. art. XVIII, § 16(3)(a).

Coloradan over the age of twenty-one to possess up to an ounce of marijuana or to give it to another without remuneration.<sup>18</sup> Adults were also permitted to cultivate up to six marijuana plants and to keep the marijuana they produced.<sup>19</sup>

The second part of Amendment 64 called for the creation of a regulatory regime to cover the production, distribution, and sale of marijuana for adult use.<sup>20</sup> The Governor appointed a task force<sup>21</sup> to begin this process, which eventually made over fifty recommendations to the legislature for implementation.<sup>22</sup> These recommendations formed the basis for the regulations that the legislature and the DOR—using authority delegated to it by the legislature—would put in place over the next several years.<sup>23</sup>

When discussing Colorado's marijuana regulations, it is crucial to understand that they have been, and continue to be, a work in progress. In each legislative session since Colorado voters approved recreational marijuana use in 2012, the state assembly has grappled with new and complicated regulatory issues. These have ranged from creating packaging and labeling requirements for edible products,<sup>24</sup> to creating THC equivalences between infused products and smokable marijuana,<sup>25</sup> to limiting the shapes of edible products that could be sold to consumers.<sup>26</sup>

18. *Id.* § 16(3)(a), (c).

19. *Id.* § 16(3)(b).

20. *Id.* § 16(5).

21. See Tim Hoover, *Hickenlooper Signs Proclamation Making Marijuana Legalization Official*, DENV. POST (Dec. 10, 2012, 5:07 AM), <https://www.denverpost.com/2012/12/10/hickenlooper-signs-proclamation-making-marijuana-legalization-official>. I served on that task force at the Governor's request.

22. STATE OF COLO., TASK FORCE REPORT ON THE IMPLEMENTATION OF AMENDMENT 64, at 15 (Mar. 13, 2013), <http://hermes.cde.state.co.us/drupal/islandora/object/co%3A11782/datastream/OBJ/view>.

23. JOHN HUDAK, COLORADO'S ROLLOUT OF LEGAL MARIJUANA IS SUCCEEDING: A REPORT ON THE STATE'S IMPLEMENTATION OF LEGALIZATION 6 (2014) ("In March 2013, the task force completed its work and issued a nearly 200-page report on how the state of Colorado should implement Amendment 64. Many of the recommendations were approved by the state legislature and governor that spring. Implementation thereupon began in earnest, and a series of drastic changes and transformations ensued.")

24. See, e.g., STATE OF COLO. MARIJUANA ENFORCEMENT DIV., INDUSTRY-WIDE BULLETIN 14-02 (2014), <https://www.colorado.gov/pacific/sites/default/files/Industry-wide%20Bulletin%2014-02.pdf> ("All Retail Marijuana, Retail Marijuana Concentrate, Retail Marijuana Product, Medical Marijuana and Medical Marijuana Concentrate must be sold in special packaging that is Child-Resistant as defined in Rules R 103 and M 103.")

25. See, e.g., STATE OF COLO. MARIJUANA ENFORCEMENT DIV., INDUSTRY-WIDE BULLETIN 15-12 (2015), [https://www.colorado.gov/pacific/sites/default/files/15-12\\_IB-Equivalencies%26US\\_1.pdf](https://www.colorado.gov/pacific/sites/default/files/15-12_IB-Equivalencies%26US_1.pdf) ("Pursuant to House Bill 14-1361, the Marijuana Enforcement Division (MED) promulgated rules to establish the equivalent of one ounce of Retail Marijuana for Retail Marijuana Product and Retail Marijuana Concentrate.")

26. See, e.g., STATE OF COLO. MARIJUANA ENFORCEMENT DIV., INDUSTRY-WIDE BULLETIN 17-07 (2017), [https://www.colorado.gov/pacific/sites/default/files/17-07\\_IB-October%201%202017%20Rules\\_FINAL.pdf](https://www.colorado.gov/pacific/sites/default/files/17-07_IB-October%201%202017%20Rules_FINAL.pdf) ("[T]he State Licensing Authority promulgated rules expressly prohibiting the production, sale or donation of edible medical marijuana-infused products and edible retail marijuana products (collectively referred to herein as 'Edible Products') in the distinct shape of a human, animal or fruit, or a shape that bears the likeness or contains the character-

Similarly, the DOR has been engaged in rulemaking almost since Amendment 64 passed, and has amended its regulations multiple times since they were first adopted in 2013.<sup>27</sup> The result is a set of statutes and regulations that currently run to more than 800 pages in the bound LexisNexis compendium.<sup>28</sup>

The resulting regulatory regime is a market-based licensing scheme that has served as a model for other states and nations around the world.<sup>29</sup> The system features seed-to-sale monitoring of marijuana plants and products, background checks for all licensed employees, and a dual-licensing system with shared responsibility between the DOR and designated local authorities.<sup>30</sup> While other states have capped either the number of marijuana businesses that will be authorized<sup>31</sup> or the total amount of marijuana they will be permitted to produce,<sup>32</sup> Colorado did neither. Rather, it created a compulsory licensing and tiered-production system that would allow supply and demand to determine how much marijuana

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istics of a realistic or fictional human, animal, or fruit, including artistic, caricature, or cartoon renderings.”).

27. See *Colorado Code of Regulations: 1 CCR 212-2 Retail Marijuana Rules*, COLO. SECRETARY OF STATE, <https://www.sos.state.co.us/CCR/DisplayRule.do?action=ruleinfo&ruleId=3175&deptID=19&agencyID=185&deptName=Department%20of%20Revenue&agencyName=Marijuana%20Enforcement%20Division&seriesNum=1%20CCR%20212-2> (last visited Nov. 19, 2018) (listing the various changes that have been put in place since 2013).

28. See COLO. DEP’T OF REVENUE MARIJUANA ENF’T DIV., *COLORADO MARIJUANA LAWS AND REGULATIONS* (LexisNexis 2018).

29. See, e.g., CITY & CTY. OF DENVER, *THE DENVER COLLABORATIVE APPROACH: LEADING THE WAY IN MUNICIPAL MARIJUANA MANAGEMENT* 3 (2018), [https://www.denvergov.org/content/dam/denvergov/Portals/782/documents/Annual\\_Report\\_2018.pdf](https://www.denvergov.org/content/dam/denvergov/Portals/782/documents/Annual_Report_2018.pdf) (“As legalization spreads across the United States, and as other countries debate and prepare for legalization, Denver remains squarely in their focus. More than ever, the city is looked at to provide guidance on how it effectively implemented and continues to manage the first-of-its-kind sales and commercialization of voter-approved retail marijuana.”).

30. See COLO. CODE REGS. § 212-2, R 101 (2018). (“Except as authorized by the Colorado Constitution, article XVIII, sections 14 or 16, the Retail Marijuana Code, or section 25-1.5-106.5, C.R.S., no person shall possess, cultivate, dispense, Transfer, transport, offer to sell, manufacture, or test Retail Marijuana, Retail Marijuana Concentrate or Retail Marijuana Product unless said person is duly licensed by the State Licensing Authority and approved by the relevant local jurisdiction(s) and/or licensed by the relevant local licensing authority(-ies).”).

31. See, e.g., Press Release, Wash. State Liquor & Cannabis Bd., Board to Increase Number of Retail Marijuana Stores Following Analysis of Marketplace, <https://lcb.wa.gov/pressreleases/lcb-to-increase-number-of-retail-mj-stores> (“Following an analysis of the entire marijuana marketplace in Washington State, the Washington State Liquor and Cannabis Board (WSLCB) today heard a recommendation from staff to increase the number of retail marijuana stores from the current cap of 334 to a new cap of 556. The methodology for the cap will be part of emergency rules which will be announced Jan. 6, 2016. The allocation of retail licenses determined by the board will be published on the WSLCB website at [lcb.wa.gov](https://lcb.wa.gov).”).

32. See, e.g., Penelope Overton, *Maine Lawmakers Consider End to Cultivation Cap on Pot*, PORTLAND PRESS HERALD (May 12, 2017), <https://www.pressherald.com/2017/05/12/lawmakers-consider-end-to-cultivation-cap-on-pot/> (“Last fall, voters narrowly approved the Marijuana Legalization Act, a ballot initiative that limited the amount of marijuana that could be grown for retail sale in Maine to 800,000 square feet of growing space, or canopy, which is equivalent to about 18.4 acres. The initiative set other limits, too, including a 30,000-square-foot cap for the largest growers and a license set-aside for small growers.”).



would be produced by how many entities.<sup>33</sup> Those meeting the eligibility qualifications for licensure are entitled to a license, and so long as producers are able to show there was a market for what they produce,<sup>34</sup> there is essentially no cap on the total amount of marijuana that either individual marijuana businesses or the system as a whole produces.<sup>35</sup> As a result, Colorado has experienced neither the kinds of shortages that plagued the roll out of marijuana in Washington State<sup>36</sup> nor the glut of marijuana currently plaguing Oregon.<sup>37</sup>

## II. WHAT DO WE KNOW ABOUT MARIJUANA REGULATION THUS FAR?

Because marijuana production and sale are carefully regulated,<sup>38</sup> and because the DOR is charged with reporting this information regularly,<sup>39</sup> we know exactly how much marijuana is produced and sold in the state, and how much revenue is generated from taxes on those sales.

### A. Sales

As Figure 1 shows, there was a steady increase in total cannabis sales for at least the first two years of legalized marijuana in Colorado. Seasonal fluctuations aside, marijuana sales climbed fairly steadily from the time retail stores opened in January 2014 until at least mid-2016. At

33. Sam Kamin, *What California Can Learn from Colorado's Marijuana Regulations*, 49 U. PAC. L. REV. 13, 23 (2017) (explaining Colorado's licensing scheme).

34. See, e.g., COLO. CODE REGS. § 212-2, R 212(C)(4). ("Upon demonstrating certain conditions, the Direct Beneficial Interest Owner/s of an existing Retail Marijuana Cultivation Facility license may apply to the Division for a production management tier increase to be authorized to cultivate the number of plants in the next highest production management tier.")

35. See, e.g., Sam Kamin, *Legal Cannabis in the U.S.: Not Whether but How?*, 50 U.C. DAVIS L. REV. 617, 652 (2016) ("Amendment 64 . . . set no caps on the number of licenses that would issue, on the number of licenses any individual or entity could hold, or on the total amount of marijuana that could be produced within the state. The idea was to let the market set supply and price, rather than to impose those limits artificially. Such openness was also motivated by a desire to crush the previously existing black market in marijuana; the freer the legal market for marijuana, the more difficult it would be for black marketers to compete with it. High taxes, high barriers to entry, limits on particular products or supply, all of these would simply drive consumers to the black market and undercut the benefits of legalization.")

36. See, e.g., Trevor Hughes, *Marijuana Legal but Often Scarce in Washington State*, USA TODAY (Sept. 26, 2014, 8:53 PM), <https://www.usatoday.com/story/news/nation/2014/09/26/washington-marijuana-legal-scarce/16266573> ("A little more than two months after Washington launched recreational marijuana sales, you'd be hard pressed to stumble upon any pot shops in the state's biggest city: Until this weekend, only one marijuana store was open in Seattle, and getting there required a trek through industrial developments far from downtown. And when you reach the store, you might not find any pot on the shelves.")

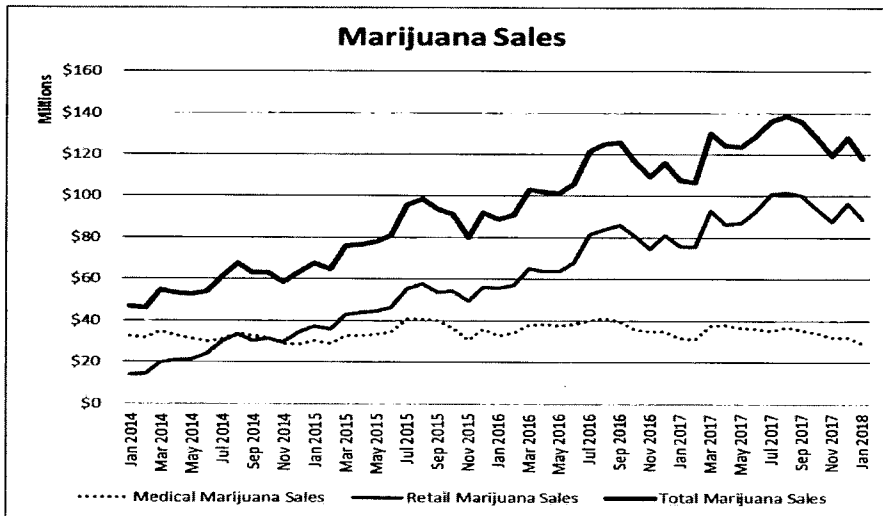
37. Memorandum from Billy J. Williams, U.S. Attorney for the Dist. of Or., Priorities in Enforcement of Federal Laws Involving Marijuana in the District of Oregon (May 18, 2018), [https://media.oregonlive.com/marijuana/other/2018/05/18/USAOR-Marijuana%20Enforcement%20Priorities-Final%20\(1\).pdf](https://media.oregonlive.com/marijuana/other/2018/05/18/USAOR-Marijuana%20Enforcement%20Priorities-Final%20(1).pdf) ("[T]here can be no doubt that there is significant overproduction of marijuana in Oregon. As a result, a thriving black market is exporting marijuana across the country, including to states that have not legalized marijuana under their state laws.")

38. See COLO. DEP'T OF REVENUE MARIJUANA ENF'T DIV., *supra* note 28 (providing the comprehensive body of Colorado marijuana laws and regulations within the 833-page compendium).

39. *Id.* § 201-4, Reg. 26-102.19.

that point, the rate of growth appears to have dropped and year-over-year sales actually fell for the first time. Worthy of note in this regard is the continued viability of medicinal marijuana in Colorado. As sales of recreational marijuana have risen from less than \$20 million per month at the start of legalization to more than \$80 million per month more recently, medical sales have remained remarkably stable, mostly between \$20 million and \$40 million per month.<sup>40</sup> Initially, there were concerns that the continuing availability of medical marijuana would hamper the ability of the state to collect sales revenue on recreational marijuana because recreational marijuana is subject to excise and special sales taxes, while medical marijuana is not.<sup>41</sup> It now seems clear, however, that medical marijuana has become a niche market—a small percentage of a much larger whole.

Figure 1: *Monthly Marijuana Sales in Colorado*<sup>42</sup>



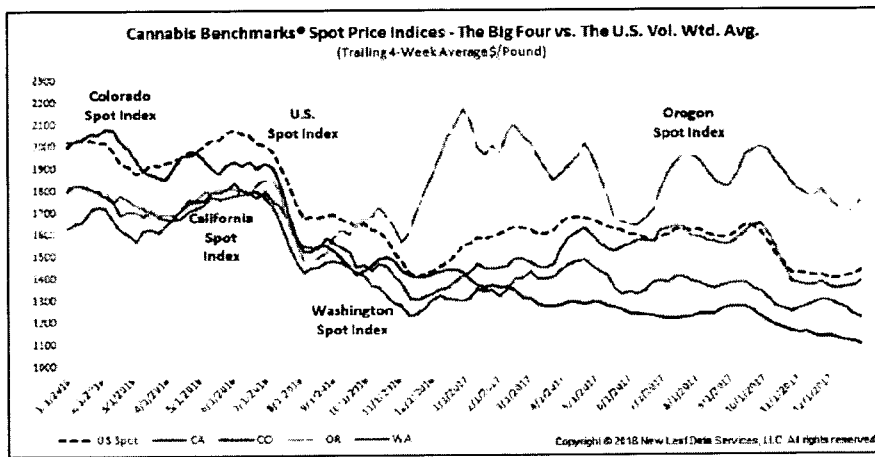
40. COLO. DEP'T OF REVENUE, MARIJUANA SALES REPORTS 1, <https://www.colorado.gov/pacific/revenue/colorado-marijuana-sales-reports>. At first, it appeared that medical marijuana sales would represent a real threat to the adult-use regulatory regime. Because medical marijuana patients do not pay taxes, it is often attractive for those buying marijuana regularly to keep or obtain a marijuana card to avoid tax. See Rae Lland, *What Are the Benefits of Having a Medical Cannabis Card in a Legal State?*, LEAFLY, <https://www.leafly.com/news/health/benefits-of-mmj-card-in-legal-states> (last visited Nov. 19, 2018). Particularly when demand was high (and supply was low) in early 2014, the difference in price between recreational and medical marijuana—genetically identical products—was sufficient to keep many out of the recreational market. Nick Stockton, *5 Charts Explaining Colorado's First Year of Legal Weed*, WIRED (Mar. 9, 2015, 12:00 PM), <https://www.wired.com/2015/03/five-charts-explain-colorados-first-year-recreational-weed>. As recreational production ramped up to meet demand, however, medical marijuana has become a relatively small part of the overall market. Sean Williams, *Ka-Ching! Here's How Much Marijuana Colorado Sold Last Year*, MOTLEY FOOL (Jan. 28, 2018, 11:40 AM), <https://www.fool.com/investing/2018/01/28/ka-ching-heres-how-much-marijuana-colorado-sold-la.aspx>.

41. See Abby Haglage, *Colorado's Pot Revenue Goes up in Smoke*, DAILY BEAST (Feb. 12, 2015, 5:50 AM), <https://www.thedailybeast.com/colorados-pot-revenue-goes-up-in-smoke>.

42. COLO. DEP'T OF REVENUE, *supra* note 40.

Why are total sales flattening out in Colorado? The principal reason seems to be the collapse of the price of marijuana and not flattening consumption rates among consumers. Cannabis Benchmarks, a website that monitors wholesale prices throughout the country, has recorded an almost 50% drop in the price of a pound of marijuana between early 2016 and late 2017.<sup>43</sup> As production has ramped up and more and more capacity has come online,<sup>44</sup> the wholesale price of marijuana has dropped significantly in a number of states legalizing marijuana, though the drop in Colorado seems most pronounced.<sup>45</sup>

Figure 2: Marijuana Prices in Selected States<sup>46</sup>



And there is little reason to expect this trend to reverse any time soon. For the first two years of legalization in Colorado, the state had a near monopoly on the legal cannabis market and was able to charge commensurate prices.<sup>47</sup> With recreational stores opening in Nevada in July of 2017<sup>48</sup> and California in January of 2018,<sup>49</sup> demand (particularly

43. See Bruce Kennedy, *Wholesale Cannabis Prices Tumbled in 2017—And They Have Yet to Hit Rock Bottom*, CANNABIST (March 8, 2018 5:00 AM), <https://www.thecannabist.co/2018/03/08/marijuana-prices-2017-cannabis-benchmarks/100103>.

44. See Jacob Laxen, *Growing Supply of Marijuana in Colorado Leads to Lower Prices*, COLORADOAN (June 21, 2018, 4:18 PM), <https://www.coloradoan.com/story/money/business/2018/06/21/legal-weed-cheaper-colorado-than-its-ever-been-due-increased-supply/722513002> (“Retail marijuana is a relatively new, mature market with a lot of early entrants and resultant overproduction.” (quoting Steve Ackerman, Fort Collins dispensary owner)).

45. See Kennedy, *supra* note 43.

46. *Id.*

47. *Id.*

48. See Jenny Kane & Sarah Litz, *Midnight Marijuana: Nevada Celebrates First Legal Sales*, USA TODAY (July 1, 2017, 6:07 AM), <https://www.usatoday.com/story/news/2017/07/01/nevada-marijuana-recreational-use-legalization/445490001>.

49. See Lisa M. Krieger & Emily Deruy, *First Recreational Marijuana Shops Open in California*, MERCURY NEWS (Jan. 1, 2018, 5:22 PM), <https://www.mercurynews.com/2018/01/01/first-recreational-marijuana-shops-open-in-california>.

from the tourist market) will likely be dropping just as supply continues to ramp up.

This drop in the price of marijuana is a significant cause for concern. A collapse in the consumer price of marijuana could result in a dramatic increase of youth consumption rates and transportation of marijuana from Colorado to other states.<sup>50</sup> And there is no clear stopping point in the downward trajectory of consumer marijuana pricing. As of 2017, the price of marijuana in the state was more than \$1,000 a pound.<sup>51</sup> Growing marijuana for its flowers is not very different from growing hops for its flowers; the two plants share a number of characteristics.<sup>52</sup> But while marijuana flowers cost \$1,000 a pound, hops can be bought online for approximately 1% of that price.<sup>53</sup> Right now, federal illegality, startup costs, and the price of regulatory compliance are all that keep the consumer cost of marijuana from truly collapsing.<sup>54</sup> In the final Part, I return to the implications of this dynamic for the future.

### B. Revenue

While the low price of marijuana may be good news for consumers (in the short run, at least), it is bad news for the state's treasury. Because taxes are assessed based on price rather than the volume or potency of a particular marijuana product, revenue necessarily falls along with price.<sup>55</sup>

50. This risk is so great that some have argued for a price floor, borrowing from the model employed elsewhere for alcohol sales. Rosalie Liccardo Pacula et al., *Developing Public Health Regulations for Marijuana: Lessons from Alcohol and Tobacco*, 104 AM. J. PUB. HEALTH 1021, 1023 ("The problem of using intoxicants as loss leaders is evident in the case of alcohol, generating considerable policy debate in the United Kingdom and elsewhere, with some movement toward imposing minimum per dose pricing in addition to conventional product taxes to maintain higher prices.").

51. See *supra* Figure 2.

52. See Louis Livingston-Garcia, *Hops and Pot: How They're Related*, GROWLER (Apr. 20, 2017), <https://growlermag.com/hops-pot-definitive-guide-theyre-related>.

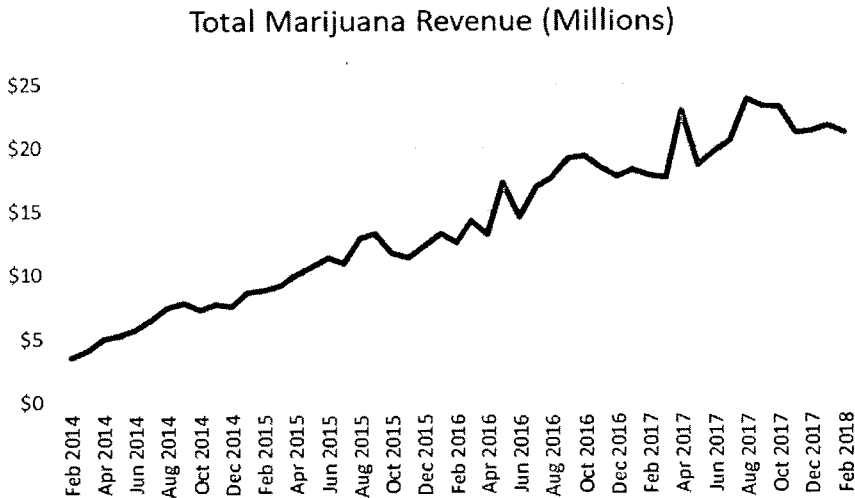
53. See, e.g., *Cascade Hops Leaf 1 lb*, LABEL PEELERS, [https://labelpeelers.com/cascade-hops-leaf-1-lb/?gclid=CjwKCAjw85zdBRB6EiwAov3Rihs82JgA6ot-ksSOTKNNxBi9HE8XqXfuJIRv-Emy7-GpwUJATduN4hoCbjUQAvD\\_BwE](https://labelpeelers.com/cascade-hops-leaf-1-lb/?gclid=CjwKCAjw85zdBRB6EiwAov3Rihs82JgA6ot-ksSOTKNNxBi9HE8XqXfuJIRv-Emy7-GpwUJATduN4hoCbjUQAvD_BwE) (last visited Nov. 19, 2018) (\$12.78/pound); *Admiral UK—Leaf*, HOPS DIRECT, <https://hopsdirect.com/collections/leaf-hops/products/admiral-uk-leaf?variant=31911028673> (last visited Nov. 19, 2018) (\$11.80/pound).

54. See, e.g., Patrick Oglesby, *Marijuana Legalization Grows Closer with Senate Tax Proposal*, HILL (April 9, 2017, 8:00 AM), <https://thehill.com/blogs/pundits-blog/economy-budget/327694-marijuana-legalization-grows-closer-with-senate-tax> ("After legalization, pre-tax prices are bound to wither. Fully legal marijuana won't sell for hundreds or even dozens of dollars per ounce, pre-tax.").

55. COLO. DEP'T OF REVENUE, FOR YOUR INFORMATION: EXCISE 23: EXCISE TAX ON RETAIL MARIJUANA 1–2, <https://www.colorado.gov/pacific/sites/default/files/Excise23.pdf> ("Colorado imposes an excise tax on the first sale or transfer of marijuana from a retail marijuana cultivation facility to another cultivation facility, a retail marijuana store, or a facility that manufactures marijuana products . . . . If the cultivation facility and the retail marijuana store or manufacturing facility engaged in the sale or transfer are **not** affiliated, the excise tax is 15% of the contract price for the unprocessed marijuana sold or transferred . . . . If the cultivation facility and the retail marijuana store or manufacturing facility engaged in the sale or transfer **are** affiliated, the excise tax is 15% of the average market rate . . . for the unprocessed marijuana sold or transferred.").

It is not surprising, therefore, that revenue attributable to marijuana has flattened out in Colorado along with sales.<sup>56</sup>

Figure 3: *Colorado Marijuana Revenue*<sup>57</sup>



This drop in revenue was exactly what was predicted by the RAND Corporation in its report for the state of Vermont on the viability of a commercial market there.

We expect that in the medium to long run, a free-market industry would innovate in ways that drive down production costs, and competitive pressures would force companies to pass along those savings to consumers in the form of lower prices. For most consumer goods, lower prices are a cause for celebration, but, if consumers are vulnerable to overindulging, low prices might be problematic. For example, some view innovation that has led to very low prices for soda pop, junk food, and candy to be a curse, not a blessing, for the American public.

The typical response of economists is that low production costs remain a blessing even if one prefers moderately high prices because one can always use taxes to prop prices up to whatever level is deemed socially optimal. Indeed, public-health advocates frequently suggest higher taxes for tobacco and alcohol; environmentalists do the same for gasoline.<sup>58</sup>

56. See *infra* Figure 3.

57. See COLO. DEP'T OF REVENUE, STATE OF COLORADO MARIJUANA TAXES, LICENSES, AND FEE REVENUE FEBRUARY 2014 TO DATE (Oct. 2018), [https://www.colorado.gov/pacific/sites/default/files/1017\\_CalendarReport%20PUBLISH.pdf](https://www.colorado.gov/pacific/sites/default/files/1017_CalendarReport%20PUBLISH.pdf).

58. JONATHAN P. CAULKINS ET AL., RAND CORP., CONSIDERING MARIJUANA LEGALIZATION: INSIGHTS FOR VERMONT AND OTHER JURISDICTIONS 62 (2015).

There are obvious problems, however, with the application of these tax principles to a substance like marijuana. While there is no black market in gasoline, there certainly is one for marijuana—eighty years of federal prohibition have led to a flourishing national and international trade in black market cannabis.<sup>59</sup> If high taxes are imposed to prop up the price and limit the social harms of marijuana consumption, sophisticated consumers will look to the black market for what they desire. Given this dynamic, Pat Oglesby, one of the authors of the Vermont RAND study summed things up this way:

Overall, cannabis taxes can go up over time—that’s because, after legalization, pre-tax cannabis prices will fall, for two reasons. First, the legal market will gain efficiency and cut costs; second, the black market will wither as law enforcement patiently roots it out. Early on, to beat the black market, some cannabis taxes should start low. As the legal market takes over, taxes can go up.<sup>60</sup>

What does all of this mean for the future of marijuana revenues in Colorado? It is probably best to assume that such revenues will be flat for the foreseeable future if they do not drop significantly in the years ahead. If the production price of cannabis continues to fall, and there’s every reason to expect it will, tax rates will have to go up substantially both to maintain revenues and to avoid public policy disasters.

### C. Marijuana Use

One of the chief concerns of those opposed to cannabis legalization in Colorado was that lowered barriers to consumption would lead to more marijuana use.<sup>61</sup> And this is not an irrational concern. Whatever failures we might today associate with the alcohol prohibition of the early twentieth century, it seems clear that Americans consumed less alco-

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59. See, e.g., *Gonzales v. Raich*, 545 U.S. 1, 18–19 (2005) (describing marijuana as “a fungible commodity for which there is an established, albeit illegal, interstate market” and explaining that the federal Controlled Substances Act was designed “to control the supply and demand of controlled substances in both lawful and unlawful drug markets”)

60. Pat Oglesby, *How Tax Competition Can Threaten Marijuana Revenue*, HILL (Feb. 6, 2018, 4:00 PM), <https://thehill.com/opinion/finance/372396-how-tax-competition-can-threaten-marijuana-revenue>.

61. See, e.g., Brooke Staggs, *Many in Law Enforcement Oppose Prop. 64—That Would Legalize Recreational Marijuana—But Lack Funds to Fight*, ORANGE COUNTY REG. (Aug. 5, 2016, 11:19 AM), <https://www.ocregister.com/2016/08/05/many-in-law-enforcement-oppose-prop-64-that-would-legalize-recreational-marijuana-but-lack-funds-to-fight> (quoting Tom Dominguez, president of the Orange County Deputy Sheriffs as saying that Proposition 64 “does nothing to prevent advertising and marketing to children and teenagers near parks, community centers and child-centric businesses” and represents “a danger to our youth and the communities we have been sworn to serve”); see also *The Spread of Marijuana Legalization, Explained: The Case Against Marijuana Legalization*, VOX (German Lopez ed., Aug. 20, 2018, 12:07 PM), <https://www.vox.com/cards/marijuana-legalization/case-against-marijuana-legalization> (“Opponents of legalization worry that fully allowing recreational marijuana use would make pot far too accessible and, as a result, expand its use and misuse.”).

hol when it was illegal to do so.<sup>62</sup> So there was reason to be concerned that marijuana use might increase, perhaps even significantly, following legalization. However, the early data seem to indicate that this has not been the case.

There are multiple ways in which marijuana use can be measured, and there are reasons to view each with skepticism. So long as marijuana use remains prohibited by federal law (and probably thereafter as well) it is reasonable to expect people (particularly members of vulnerable groups such as children) to underreport their use of it when talking to researchers or when filling out self-reports.<sup>63</sup> To date, the most comprehensive study of marijuana use in Colorado remains the 300-page biennial report on marijuana's health impacts that CDPHE released in early 2017.<sup>64</sup> Among adults, CDPHE found that there has been very little, if any, change in usage patterns in the years immediately following legalization.<sup>65</sup> Using two different measures, state researchers were unable to find a statistically significant change in use between 2014 and 2015.<sup>66</sup> For teenagers, there was also good news. Although marijuana use by teens in Colorado is higher than teenage use elsewhere in the nation, there is no indication that this number has risen since marijuana was legalized, either for adult users or for medical patients.<sup>67</sup>

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62. See, e.g., Jack S. Blocker, Jr., *Did Prohibition Really Work? Alcohol Prohibition as a Public Health Innovation*, 96 AM. J. PUB. HEALTH 233, 237 (2006) (“[O]nce Prohibition became the law of the land, many citizens decided to obey it. Referendum results in the immediate post-Volstead period showed widespread support, and the Supreme Court quickly fended off challenges to the new law. Death rates from cirrhosis and alcoholism, alcoholic psychosis hospital admissions, and drunkenness arrests all declined steeply during the latter years of the 1910s, when both the cultural and the legal climate were increasingly inhospitable to drink, and in the early years after National Prohibition went into effect. They rose after that, but generally did not reach the peaks recorded during the period 1900 to 1915. After Repeal, when tax data permit better-founded consumption estimates than we have for the Prohibition Era, per capita annual consumption stood at 1.2 US gallons (4.5 liters), less than half the level of the pre-Prohibition period.”).

63. See, e.g., Lana Harrison & Arthur Hughes, *Introduction to NAT'L INST. ON DRUG ABUSE, U.S. DEP'T OF HEALTH & HUMAN SERVS., RESEARCH MONOGRAPH 167, THE VALIDITY OF SELF-REPORTED DRUG USE: IMPROVING THE ACCURACY OF SURVEY ESTIMATES 1, 1* (Lana Harrison & Arthur Hughes eds., 1997) (“Measuring levels and patterns of illicit drug use, their correlates, and related behaviors requires the use of self-report methods. However, the validity of self-reported data on sensitive and highly stigmatized behaviors such as drug use has been questioned.”).

64. See RETAIL MARIJUANA PUB. HEALTH ADVISORY COMM., COLO. DEP'T OF PUB. HEALTH & ENV'T, *MONITORING HEALTH CONCERNS RELATED TO MARIJUANA IN COLORADO: 2016*, at iii (2017).

65. *Id.* at 4 (“In 2015, BRFSS data showed an estimated 13% of Colorado adults ages 18 and up had used marijuana in the past-month. The NSDUH estimate for past-month use differs, at 17%. However, neither survey showed a statistical change from 2014 to 2015.”).

66. *Id.*

67. *Id.* (“From 2005–2015, past-month use fluctuated between approximately 20% and 25%, with no clear trend. The most recent NSDUH data for high school age adolescents (14- to 17-year olds) is from 2012–2014 and shows 17% past-month use. This compares with the 2013 HKCS estimate of 19%.”); Christopher Ingraham, *Following Marijuana Legalization, Teen Drug Use Is Down in Colorado*, WASH. POST (Dec. 11, 2017), <https://www.washingtonpost.com/news/wonk/wp/2017/12/11/following-marijuana-legalization-teen-drug-use-is-down-in-colorado>.

More recent data seem to confirm the CDPHE's findings on marijuana use. In late 2017, the National Survey on Drug Use and Health released a study showing that the levels of marijuana consumption in those over twelve, those between twelve and seventeen, those between eighteen and twenty-five, and those twenty-six and over did not increase substantially between the periods 2014–2015 and 2015–2016.<sup>68</sup> In fact, the percentage of those between the ages of twelve and seventeen who used marijuana within the past month dropped sharply after legalization.<sup>69</sup> One possible explanation for this is that the normalizing of marijuana use that comes with legalization actually exerts a downward pressure on youth usage: it is difficult for marijuana to feel rebellious and transgressive when it is widely available and a part of the local culture.<sup>70</sup>

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68. See SUBSTANCE ABUSE & MENTAL HEALTH SERVS. ADMIN., CTR. FOR BEHAVIORAL HEALTH STATISTICS & QUALITY, NATIONAL SURVEY ON DRUG USE AND HEALTH: COMPARISON OF 2014–2015 AND 2015–2016 POPULATION PERCENTAGES, tbl. 1 (2017).

69. *Id.* at tbl 2.

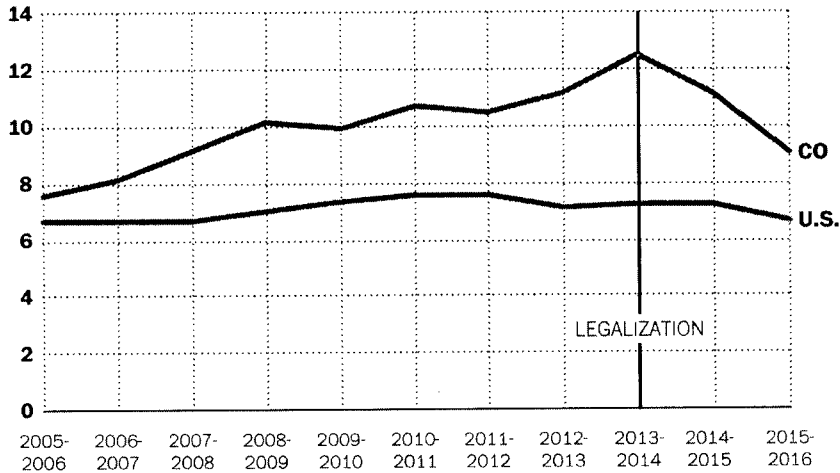
70. See, e.g., Adi Jaffe, *Is Marijuana a Gateway Drug?*, PSYCHOL. TODAY (July 24, 2018), <https://www.psychologytoday.com/us/blog/all-about-addiction/201807/is-marijuana-gateway-drug> (“[B]uying marijuana currently involves (in the states that don’t have recreational or medicinal laws) interacting with black market drug sources otherwise known as drug dealers. This means that, once you buy marijuana you are already breaking the law, and we know that individuals who become willing to commit illegal acts at one point in time are more likely to commit additional illegal acts. In this way, it could be said that [it’s] marijuana’s legal status, not its chemical interactions with the brain at all, that is the gateway. Not only that, but once the law is broken and you’ve bought weed from a drug dealer, you can now interact with people who will have access to other illicit drugs. That makes it more likely that you will break the law again and that you will go on to try other substances, because they are now available.”).



Figure 4<sup>71</sup>

## Teen pot use drops sharply in Colorado

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



WAPA.ST./WONKBLOG

Source: National Survey on Drug Use and Health

### III. SOME DIRTY SECRETS

As I stated at the outset, one of the motivations for both my University Lecture and this subsequent Article was the desire to refute a number of the negative and misleading stories that have been circulating in the press regarding the first five years of taxed and regulated marijuana in Colorado. But in fairness, there are a number of pitfalls that those looking to Colorado should be aware of, particularly if they are considering legalizing marijuana in their own jurisdiction.

#### A. Marijuana Doesn't Produce Much Revenue (And That's a Good Thing, Too)

One of the most consistent criticisms that I hear when I speak about marijuana throughout Colorado is: "Where's all of the money that was promised to Colorado schools?" And the truth is that while Colorado marijuana revenues have largely been at least as high as expected, that revenue makes up a relatively small percentage of Colorado's overall budget. Colorado's operating budget for 2017–2018 fiscal year was \$28.8 billion.<sup>72</sup> By contrast, total marijuana revenue was \$247 million in

71. Ingraham, *supra* note 67.

72. JOINT BUDGET COMM., BUDGET IN BRIEF: FISCAL YEAR 2017–18 at 4, <https://leg.colorado.gov/sites/default/files/fy17-18bib.pdf> (showing a total state operating budget of \$28.84 billion).

calendar year 2017.<sup>73</sup> Thus, taken together, licensing fees, taxes, and fees on the marijuana industry accounted for less than 1% of the total budget.<sup>74</sup> While a quarter of a billion dollars is now flowing into the state that was not there prior to legalization, it is not the kind of money that changes a state's economic fortunes overnight. By contrast, oil and gas revenues have accounted for as much as 85% of Alaska's budget each year.<sup>75</sup> Those revenues are transformative for the state's economy; marijuana revenues in Colorado simply are not.

As for where that money goes, both Amendment 64 itself and its implementing legislation make provisions for how funds are to be allocated. Each year, the first \$40 million in marijuana revenue is slated for the School Construction Fund created by the state legislature.<sup>76</sup> A complicated formula went into effect on July 1, 2017, that returns 10% of state marijuana tax revenues to local governments for distribution there.<sup>77</sup> There are good reasons to have revenue go to fixed costs like school construction rather than to recurring costs like teacher salary. If marijuana revenue were to suddenly dry up, the disruption associated with the drop in funds would be minimized; buildings built or refurbished don't simply disappear if funding does.

Furthermore, the lessons of tobacco revenue indicate that it is probably a good thing for Colorado that cannabis revenue represents only a small part of the state budget. The Master Settlement Agreement between the states and the tobacco industry in the 1990s was supposed to provide the states with revenue to implement anti-smoking programs to benefit state health and wellness.<sup>78</sup> However, budget crises often caused the states to divert that money into the general fund, undercutting public health goals and keeping the states dependent on tobacco revenue (and, by extension, tobacco use) indefinitely.<sup>79</sup> Although state governments

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73. Colo. Dep't of Revenue, *Marijuana Tax Data*, <https://www.colorado.gov/pacific/revenue/colorado-marijuana-tax-data> (last visited Oct. 26, 2018) (showing marijuana licenses, taxes, and fees generating \$247,368,473 in 2017).

74.  $\$247,368,473 / \$28,840,000,000 = 0.86\%$ . See *supra* notes 72–73.

75. Alana Semuels, *The Stingiest State in the Union*, ATLANTIC (Aug. 31, 2015), <https://www.theatlantic.com/business/archive/2015/08/alaska-budget-crisis/402775> (“For years, 90 percent of the state’s general-fund budget was supported by oil revenues (now it’s closer to around 85 percent).”).

76. COLO. CONST. art. XVIII, § 16(5)(d).

77. See COLO DEP’T OF EDUC., FACT SHEET: MARIJUANA TAX REVENUE AND EDUCATION (2018), <https://www.cde.state.co.us/communications/20180427mjfactsheet>.

78. See Ryan D. Dreveskracht, *Forfeiting Federalism: The Faustian Pact with Big Tobacco*, 18 RICH. J.L. & PUB. INT. 291, 296–97 (2015) (“While \$200 billion, over twenty-five years, sounds like a lot of money, for cash-strapped states with budget deficits and capital improvements that remained unfinanced, the thought of turning unsecured annual payments into upfront infusions of cash to states was extremely attractive.”).

79. See, e.g., Walter J. Jones & Gerard A. Silvestri, *The Master Settlement Agreement & Its Impact on Tobacco Use 10 Years Later*, 137 CHEST 692, 695, 697 (“[I]t is clear that the MSA has not resulted in a clear and straightforward intensification of state tobacco control efforts, because of the impact of interest group activity and changing economic situations at the state level; MSA re-

always want extra revenue, problems can arise when that revenue becomes crucial to balancing a state's budget; no one wants to imagine a situation where Colorado policy makers see a drop in marijuana use as a troubling sign for the public fisc.

In this sense, Alaska provides a cautionary tale. Long buoyed by oil and gas revenues, the state has been plunged into crisis as those revenues have dried up in recent years. Having put all of its economic eggs in a single basket, the state must now scramble to develop a new financial plan.<sup>80</sup> This is why I often tell people in other jurisdictions that while there are many good reasons to legalize marijuana—to reallocate criminal justice resources, to avoid the disparate impact of drug laws of communities of color, and so on—raising revenue is not among them. The Colorado experience demonstrates that, perhaps fortunately, legalizing and regulating marijuana is not necessarily a revenue boon for those jurisdictions that have tried it.

### *B. Law Enforcement Costs Don't Disappear*

Coupled with the fact that revenues from marijuana make up only a small percentage of the total state budget,<sup>81</sup> it should be pointed out that the other side of the ledger—cost—is largely unchanged by legalization. Although many thoughtful advocates for legalization were careful to emphasize that passage would allow law enforcement to focus on more pressing matters,<sup>82</sup> it is sometimes argued that legalization will lead to reduced law enforcement costs as states no longer need to spend money on law enforcement.<sup>83</sup> Legalization is thus pitched as a double fiscal win—it promises a future with both more money coming in and less going out.

The reality, however, is far more complicated, for law enforcement costs don't drop to zero after legalization is passed. First, there are prob-

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sources have been significantly diverted from tobacco control and treatment into other state policy activities.”).

80. See Adam Millsap, *Alaska Is Struggling but All Is Not Lost*, FORBES (Apr. 28, 2017, 4:09 PM), <https://www.forbes.com/sites/adammillsap/2017/04/28/alaska-is-struggling-but-all-is-not-lost> (“America’s economy is growing at a slow yet steady pace, but Alaska is not doing so well. Its GDP has been declining for years and it’s currently in a recession. The shale oil boom and low oil prices have been a boon for most of us, who get cheaper gas and energy as a result, but for Alaskans, low profits in the oil industry are a source of economic hardship.”).

81. See *supra* notes 72–74 and accompanying text.

82. See, e.g., COLO. CONST. art. XVIII, § 16(1)(a) (“*In the interest of the efficient use of law enforcement resources, enhancing revenue for public purposes, and individual freedom, the people of the state of Colorado find and declare that the use of marijuana should be legal for persons twenty-one years of age or older and taxed in a manner similar to alcohol.*” (emphasis added)).

83. See, e.g., *Pot Legalization Could Save U.S. \$13.7 Billion Per Year, 300 Economists Say*, HUFFPOST (Apr. 17, 2012, 1:31 PM), [https://www.huffingtonpost.com/2012/04/17/economists-marijuana-legalization\\_n\\_1431840.html](https://www.huffingtonpost.com/2012/04/17/economists-marijuana-legalization_n_1431840.html) (“More than 300 economists, including three [N]obel laureates, have signed a petition calling attention to the findings of a paper by Harvard economist Jeffrey Miron, which suggests that if the government legalized marijuana it would save \$7.7 billion annually by not having to enforce the current prohibition on the drug.”).

ably no law enforcement officers anywhere in the country in 2018 whose sole job is marijuana enforcement. Thus, when marijuana is “legalized,” law enforcement resources are merely shifted to other enforcement priorities, not reduced.<sup>84</sup> While this might be good public policy—almost any law enforcement activity is a better expenditure of funds than is busting low-level marijuana users and dealers—it is not the kind of move that enhances the bottom line.<sup>85</sup>

What is more, it is important to remember that even in those states where marijuana has been “legalized,” it is still mostly illegal. For example, Amendment 24 authorized possession of less than an ounce of cannabis by adults, and licensed production and distribution of cannabis for sale.<sup>86</sup> However, nearly all marijuana conduct—possession of more than an ounce, any possession by minors, any commercial activity by unlicensed entities, any commercial activity that does not comply with regulations—remains illegal under both federal and state law.<sup>87</sup> And, particularly with regard to prohibited commercial activity, it is crucial to the functioning of the regulatory system that those working outside of it are funneled into the regulated industry rather than allowed to operate outside of it. Running a regulated marijuana business is expensive: compliance costs are high, licenses are expensive, and taxes under the current regime are practically confiscatory.<sup>88</sup> If we are going to ask legitimate businesspeople to jump through all of these hoops, it is essential that we also provide them some assurances that they will not have to compete with those not paying such costs. As much as we may dislike the War on Drugs—and the passage of Amendment 64 and similar provisions around the country owe much to America’s growing dislike of punitive approaches to drug policy—it would be fanciful to think that “legalization” means an end to law enforcement.

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84. See Ted Hesson, *Will Police Have More Free Time Once Pot Becomes Legal?*, SPLINTER, <https://splinternews.com/will-police-have-more-free-time-once-pot-becomes-legal-1793842498>

(describing anecdotal evidence that suggests that when marijuana sales were legalized in Colorado, police forces were not reduced but instead freed up to focus on other crimes).

85. For example, voters in the City of Denver voted in 2007 to make marijuana the lowest enforcement priority. See Felisa Cardona, *Denver Puts Pot Busts on Cops’ Back Burner*, DENV. POST (Nov. 6, 2007, 12:56 PM), <https://www.denverpost.com/2007/11/06/denver-puts-pot-busts-on-cops-back-burner/> (“More than half of Denver voters favored an initiative making marijuana the city’s lowest law enforcement priority. With just a handful of ballots left to count, the measure had captured 55 percent of the vote. The result means the mayor must appoint a panel to monitor how marijuana cases are handled by the police and city prosecutors and issue a report.”).

86. See COLO. CONST. art. XVIII, § 16(3)(a), (4).

87. See, e.g., *id.* § 16(1)(b)(II) (“Selling, distributing, or transferring marijuana to minors and other individuals under the age of twenty-one shall remain illegal. . .”).

88. See, e.g., Tom Huddleston, Jr., *The Marijuana Industry’s Battle Against the IRS*, FORTUNE (Apr. 15, 2015), <http://fortune.com/2015/04/15/marijuana-industry-tax-problem/> (“[M]any marijuana business owners end up paying effective tax rates of anywhere from 40% to 70%, according to Derek Peterson, the CEO of Terra Tech, a publicly-traded company that produces marijuana extracts and also has plans to open a handful of dispensaries in Nevada. Others in the industry have said business-owners face effective tax rates as high as 90%. That is compared to the typical corporate tax rate of around 35%, though many large, multinational companies in the U.S. reportedly pay closer to 12.5%.”).

### C. Legalization Doesn't Fix Racial Problems

As difficult as it may be to believe, it is now becoming clear that legalizing marijuana alone does not solve the nation's race problems. Although racial discrimination in the enforcement of drug laws is a significant motivation for the passage of marijuana law reform—it is, to my mind, the strongest argument for moving away from prohibition—the limits of such legalization should be well understood.

First, as mentioned above, even in those states that have legalized marijuana, almost all marijuana conduct remains illegal.<sup>89</sup> Thus, law enforcement is still needed to police marijuana conduct that falls outside the bounds of legality, and that enforcement is likely to be as fraught with explicit and implicit biases as it was prior to legalization. In Colorado, for example, arrests of whites for marijuana offenses fell more than 50% after Amendment 64 passed while arrests of Hispanics and blacks fell only 31% and 25%, respectively.<sup>90</sup> For juveniles, the results were even worse; while arrests of white ten- to seventeen-year-olds on marijuana charges declined 9% between 2012 and 2014, Hispanic and African-American arrests actually rose 22% and 52%, respectively.<sup>91</sup>

Second, unless careful steps are taken to prevent racially disparate impacts going forward, the licensing system that states legalizing marijuana are implementing can replicate many of the problems associated with the enforcement of marijuana prohibition. For example, Colorado's regulation originally precluded those with drug-related convictions from working in the industry.<sup>92</sup> While the motivations for such a rule were sincere—early regulators, borrowing from the gaming industry, wanted to make sure that the illegal enterprises they were replacing would not come to dominate the legal regime they were creating—the effect had a negative impact on diversity in the industry.<sup>93</sup> Relaxing the prohibition on convicted felons<sup>94</sup> becoming licensed has made the development of

89. See *supra* note 87 and accompanying text.

90. OFFICE OF RESEARCH & STATISTICS, DIV. OF CRIMINAL JUSTICE, COLO. DEP'T OF PUB. SAFETY, MARIJUANA LEGALIZATION IN COLORADO: EARLY FINDINGS: A REPORT PURSUANT TO SENATE BILL 13-283, at 5 (2016).

91. *Id.* at 63 tbl. 22.

92. COLO. REV. STAT. § 12-43.3-307(1)(h) (2010) (“A license provided by this article shall not be issued to or held by: . . . a person who at any time has been convicted of a felony pursuant to any state or federal law regarding the possession, distribution, or use of a controlled substance.”) (current version at COLO. REV. STAT. § 44-11-306 (2018)).

93. See, e.g., Tracy Jan & Fenit Nirappil, *Battling the Racial Roadblocks to Joining the Legalized Marijuana Trade*, WASH. POST (June 2, 2017), [http://wapo.st/2qJvTzb?tid=ss\\_mail&utm\\_term=.ddc911e39edb](http://wapo.st/2qJvTzb?tid=ss_mail&utm_term=.ddc911e39edb) (“Colorado, one of the earliest states to legalize marijuana, has nearly 1,000 dispensary licenses and nearly 1,500 cultivation licenses. African Americans make up less than a handful of license holders, according to cannabis entrepreneurs in the state.”).

94. See COLO. CODE REGS. § 212-2.231(D)(8) (“The Applicant is not currently subject to or has not discharged a sentence for a conviction of a felony pursuant to any state or federal law regarding the possession, distribution, manufacturing, cultivation, or use of a controlled substance in the ten years immediately preceding his or her application date or five years from May 28, 2013, which-

minority ownership more likely, but cannot be expected to solve the problem of racial disparity in the marijuana industry. Federal prohibition means that banks remain unwilling to make loans to those in the marijuana industry,<sup>95</sup> limiting licensing opportunities to those with personal wealth. Given the profound racial disparities in personal wealth in this country,<sup>96</sup> the unavailability of banking services further exacerbates the problem of racial disparity in the industry.<sup>97</sup>

Finally, there is the issue of where marijuana businesses are located. A number of commentators have noted that the majority of marijuana businesses tend to be found in disproportionately poor and minority neighborhoods.<sup>98</sup> But it is difficult, intuitively, to know what to make of this fact. As some have noted, poor and minority neighborhoods are more likely to abut industrial neighborhoods where cannabis cultivation can be lawfully zoned.<sup>99</sup> What is more, marijuana businesses, like many others, are likely to be drawn to areas with lower rents, which are likely to coincide with poor and minority neighborhoods as well. Figure 5 makes this point graphically: Nearly every manufacturing, testing, and cultivation facility in Denver is located in one of the areas of the city with lower incomes while retail facilities are distributed (somewhat) more uniformly. While many see this as proof of the exploitativeness of

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ever is longer, except that the State Licensing Authority may grant a license to a Person if the Person has a state felony conviction based on possession or use of marijuana or marijuana concentrate that would not be a felony if the Person were convicted of the offense on the date he or she applied for a license. . . .”).

95. Robb Mandelbaum, *Where Pot Entrepreneurs Go When the Banks Just Say No*, N.Y. TIMES MAG. (Jan. 4, 2018), <https://nyti.ms/2ET8DWT> (“Growing and selling marijuana are, like using it, legal under Colorado law. But banks tend to take their cues from the federal government. Not only does selling marijuana violate federal law; handling the proceeds of any marijuana transaction is considered to be money laundering. Very few banks are willing to take that risk.”).

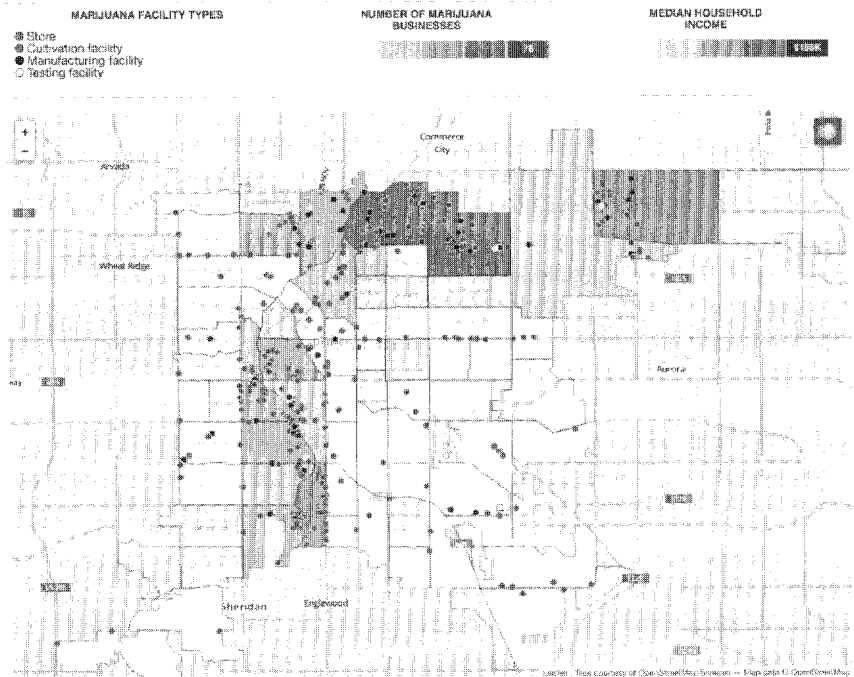
96. Emily Badger, *Whites Have Huge Wealth Edge over Blacks (but Don't Know It)*, N.Y. TIMES: UPSHOT (Sept. 18, 2017), <https://www.nytimes.com/interactive/2017/09/18/upshot/black-white-wealth-gap-perceptions.html> (“Black families in America earn just \$57.30 for every \$100 in income earned by white families, according to the Census Bureau’s Current Population Survey. For every \$100 in white family wealth, black families hold just \$5.04.”).

97. Jan & Nirappil, *supra* note 93 (“Some states also require applicants to have financial holdings upward of \$1 million, a particularly high bar, given the documented wealth disparities between blacks and whites. Those without ready access to capital cannot turn to banks, which are unwilling to provide business loans for an industry that is still illegal at the federal level.”).

98. See, e.g., David Migoya & Ricardo Baca, *Denver’s Pot Businesses Mostly in Low-Income, Minority Neighborhoods*, DENV. POST (Jan. 2, 2016, 1:16 PM), <https://www.denverpost.com/2016/01/02/denvers-pot-businesses-mostly-in-low-income-minority-neighborhoods/> (“Recreational marijuana businesses have proliferated so rapidly in some of Denver’s poorer neighborhoods during the past two years that city officials are exploring ways to disperse future growth more evenly.”); Jon Murray, *The Marijuana Industry’s War on the Poor*, POLITICO MAG. (May 19, 2016), <https://www.politico.com/magazine/story/2016/05/what-works-colorado-denver-marijuana-pot-industry-legalization-neighborhoods-dispensaries-negative-213906> (“In working-class neighborhoods like Elyria-Swansea, Globeville and Northeast Park Hill there’s a growing sense among residents that they have been overrun by a new drug trade, legal but noxious all the same.”).

99. See Migoya & Baca, *supra* note 98 (“‘Many low-income neighborhoods are next to industrial sites. That’s just the lay of the land,’ said Charlie Brown, a former Denver city councilman who led committees that studied and recommended rules on where the businesses could go. ‘To change the rules today is tricky.’”).

the burgeoning marijuana industry, others see it as an opportunity. In fact, some jurisdictions are encouraging the location of marijuana businesses in communities that suffered the worst of the Drug War's ill effects.<sup>100</sup>

Figure 5<sup>101</sup>

#### IV. WHAT WE DON'T KNOW

One point I have tried to make throughout this University Lecture and Article is that evaluation of the successes and failures of marijuana regulation in Colorado should be based on fact rather than anecdote or hyperbole. There are, however, certain areas where the collection of reliable data is more complicated. These areas should be a focus of our attention moving forward.

100. Rachel Swan, *Oakland Hopes to Light the Way for Minority-Owned Pot Businesses*, S.F. CHRON. (May 26, 2016), <https://www.sfchronicle.com/bayarea/article/Oakland-hopes-to-light-the-way-for-minority-owned-7470161.php> (Oakland's "ordinances would reserve half of those permits for applicants who fit a narrow set of criteria: Oakland residents who have lived for at least two years in a designated police beat in East Oakland that had a high number of marijuana arrests in 2013; or individuals who were incarcerated in Oakland for marijuana-related crimes within the last decade. Called equity applicants, these individuals must keep at least a 50 percent ownership stake in the business they seek to permit.").

101. Kevin Hamm, *Marijuana in Denver: Some Areas Saturated*, DENV. POST, <https://extras.denverpost.com/maps/news/marijuana/licensed-facilities> (last visited Nov. 19, 2018).

### A. Black Market

Almost by definition, it is hard to know what has happened with the black market for marijuana in Colorado since legalization; unlike the regulated market, the black market does not make annual reports and its plants are not tracked from seed to sale. Part of the problem is that the phrase “black market” carries a number of different connotations. Prior to legalization, the only market for marijuana was the black market; any production and sale of marijuana was illegal under both state and federal laws, and any commerce that existed was entirely illegal and unregulated. Today, the black market in this sense continues to exist but is necessarily limited by competition with the legal and regulated market alongside which it operates. Although there have been a few high-profile examples of groups coming to Colorado to hide in plain sight while manufacturing unlicensed cannabis,<sup>102</sup> it is not entirely clear that such conduct is rampant in Colorado. Particularly as production has ramped up in the regulated market, it has become increasingly difficult for illegal production or importation of marijuana to compete on either price or quality with what can be obtained legally.<sup>103</sup> Whatever public harms are associated with the price drop that Colorado’s market has experienced in recent years, the low price of marijuana has the benefit of undercutting and throttling the black market.<sup>104</sup>

As I use the term, the phrase “black market” also encompasses the reselling of lawfully purchased cannabis to those not entitled to possess it. This includes categories like adults selling to children as well as more organized schemes such as those who travel to Colorado to purchase marijuana in bulk for resale elsewhere. It is important to realize that this

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102. See, e.g., John Ingold, *32 Indicted in Massive Colorado Marijuana Trafficking Investigation*, DENV. POST (Mar. 25, 2015, 6:39 AM), <https://www.denverpost.com/2015/03/25/32-indicted-in-massive-colorado-marijuana-trafficking-investigation>; Tom McGhee, *Massive Marijuana Bust Dismantles Illegal Trafficking Ring in Denver Metro Area*, DENV. POST (June 28, 2017, 12:30 PM), <https://www.denverpost.com/2017/06/28/massive-marijuana-bust-dismantles-illegal-trafficking-ring-denver>.

103. See Maura Forrest, *With Legal Pot, Colorado and Washington Are Winning Fight Against Black Market, Committee Hears*, NAT’L POST (Sept. 12, 2017, 10:00 PM), <https://nationalpost.com/news/politics/with-legal-pot-colorado-and-washington-are-winning-fight-against-black-market-committee-hears> (“Legal pot in Colorado and Washington is successfully competing with the black market, the House of Commons health committee heard Tuesday, though illicit sales still account for a sizable portion of the market.”).

104. Reilly Capps, *Plunging Pot Prices Force Black Market Growers into Real Jobs*, ROOSTER (Nov. 9, 2018), <https://therooster.com/blog/black-market-weed-growers-forced-into-real-jobs-as-pot-prices-plunge1>. To the extent black market production thrived in Colorado after legalization, it has largely been found in the gaps between Amendments 20 and 64. So-called extended plant counts allowed some patients to grow up to ninety-nine plants on their own property or to combine with others to grow hundreds of plants, all of it completely outside the regulated market. See, e.g., Rachel Estabrook, *Sheriffs, Lawmakers Start to Make a Dent in Colorado’s Marijuana Black Market*, COLO. PUB. RADIO (June 11, 2018), <http://www.cpr.org/news/story/sheriffs-lawmakers-start-to-make-a-dent-in-colorado-s-marijuana-black-market> (“While the black market problem is often assumed to be connected to recreational legalization and the first dispensaries that opened in 2014, El Paso Sheriff Bill Elder traces the problem to Amendment 20, which legalized cannabis for medical use in 2000. That law allowed people to grow 99 plants in their homes—‘a huge loophole’ to Elder.”).



behavior, like the unlicensed production and sale of marijuana, is criminal under state as well as federal law<sup>105</sup> and thus, is a law enforcement concern rather than a regulatory one. And there is certainly evidence that Colorado marijuana finds its way out of state for resale.<sup>106</sup> One important question going forward, however, is to what extent Colorado marijuana is merely replacing imported marijuana elsewhere in the country, and to what extent the availability of Colorado marijuana is creating demand that did not previously exist.

### *B. Interaction Effects*

Earlier, I discussed what we know about marijuana consumption patterns since marijuana stores opened in Colorado almost five years ago.<sup>107</sup> But it is important to view these numbers in context. So far marijuana use has remained largely unchanged (and may in fact have dropped among teenagers).<sup>108</sup> But what if, in several years, it is shown that the percentage of Coloradans (or teens) using marijuana has increased relative to pre-legalization levels? This would, of course, be a concern, but it will be important to see what else has changed in the intervening years. In particular, it will be important to know whether the consumption of other substances has gone up, stayed the same, or dropped.

So, for example, it will be particularly troubling if the legalization of marijuana coincides with an increase in the use of other harmful substances such as tobacco, alcohol, or other recreational drugs. An increase in teenage marijuana use is less troubling if young people are choosing marijuana over more addictive alcohol; it is significantly more problematic if teenagers are adding cannabis to their pre-existing alcohol consumption.

There is much that we don't know about how marijuana use will interact with other substances. Because marijuana is a Schedule I drug, its effects have not been studied the way some other, potentially more dangerous substances have.<sup>109</sup> The effect on the brain of combining cannabis

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105. See, e.g., 21 U.S.C. § 952 (2018); COLO. REV. STAT. § 18-18-406 (2018).

106. See, e.g., Trevor Hughes, *When Smuggling Colo. Pot, Not Even the Sky's the Limit*, USA TODAY (May 13, 2016, 7:00 AM), <https://www.usatoday.com/story/news/2016/05/13/when-smuggling-colo-pot-not-even-skys-limit/83623226> (“If you can dream up a way to smuggle marijuana out of Colorado, chances are someone else has already tried it: Cars and trucks. Potato chip bags and jars of peanut butter. The U.S. mail. Not even the sky is the limit: A pilot last year confessed he used his skydiving planes to deliver nearly a ton of pot to buyers in Texas and Minnesota, court records show. Authorities say growers are using loopholes in Colorado’s legal cannabis system to produce marijuana destined for illegal export, tempted by the high prices that Colorado’s high-grade marijuana commands on the black market, including convenient and discreet marijuana-infused candy.”).

107. See *supra* Section II.C.

108. See *supra* notes 65–69.

109. See, e.g., Arit John, *It's Hard to Study Marijuana's Medical Benefits When It's Illegal*, ATLANTIC (June 27, 2014), <https://www.theatlantic.com/politics/archive/2014/06/its-hard-to-study-marijuanas-medical-benefits-when-its-illegal/373603> (“The problem with recent medicinal marijuana legislation is that it’s not based on actual research. States are deciding certain diseases can be

with other substances, particularly tobacco, is only beginning to be understood.<sup>110</sup> While there is reason to think that cannabis may be useful in helping prevent opiate addiction (because the availability of medical marijuana provides an alternative to the opiate pain killers that are often the gateway into recreational opiate use), the findings are still quite tentative.<sup>111</sup>

### C. Broader Societal Harms

As I mentioned at the outset, marijuana has been blamed for any number of social ills affecting the state. From homelessness to traffic fatalities to violent crime, marijuana legalization has been blamed for many negative outcomes.<sup>112</sup> Many of these are difficult to trace directly to marijuana legalization in anything but a temporal sense. That is, we can look at a particular measure (if we have it) both before legalization and after, and then see whether there is a positive association between the measured harm and the start of legalization. But this can tell us only so much. Before we can find a causal relationship, we need a reasonable hypothesis explaining why marijuana legalization would cause the relevant harm. With regard to some harms—traffic fatalities, for example—the causal theory is clear: legal marijuana causes more marijuana use, which leads to more impairment, which leads to more accidents, which leads to more deaths. With regard to other harms, however, the causal link is more difficult to theorize. Why would we think that an increase in

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treated with pot, but because the federal government has classified marijuana as an illegal and dangerous drug, research on its health benefits are sparse. It's a catch-22 manufactured by the Drug Enforcement Agency: marijuana is illegal because the DEA says it has no proven medical value, but researchers have to get approval from the DEA to research marijuana's medical value."); see also Eric Killelea, *Why Is It So Hard to Study Pot*, ROLLING STONE (Feb. 8, 2018, 9:22 PM), <https://www.rollingstone.com/culture/culture-features/why-is-it-so-hard-to-study-pot-124767>

("[M]arijuana is subject to its own regulations separate from those governing other Schedule I drugs. While LSD researchers can acquire products from private manufacturers licensed to produce and dispense controlled substances, those studying cannabis can only acquire their products from NIDA and the University of Mississippi, the lone legal marijuana grower and distributor in the U.S. since 1968.")

110. See, e.g., Kirsten Weir, *Marijuana and the Developing Brain*, AM. PSYCHOL. ASS'N MONITOR ON PSYCHOL. (Nov. 2015), <https://www.apa.org/monitor/2015/11/marijuana-brain.aspx> ("[I]mportant questions remain to be answered. Much of the research on the long-term cognitive effects of cannabis has focused on heavy users . . . . Finding answers to these questions may be complicated by the fact that marijuana potency has risen dramatically in recent years. Thirty years ago, THC concentrations were typically well below 10 percent, and even below 5 percent. But a recent analysis of marijuana samples sold in Colorado found THC potency approaching 30 percent, according to results presented at the 2015 meeting of the American Chemical Society.")

111. See Ashley C. Bradford et al., *Association Between US State Medical Cannabis Laws and Opioid Prescribing in the Medicare Part D Population*, 178 JAMA INTERNAL MED. 667, 668 (2018) ("[P]rescriptions filled for all opioids decreased by 2.11 million daily doses per year from an average of 23.08 million daily doses per year when a state instituted any medical cannabis law. Prescriptions for all opioids decreased by 3.742 million daily doses per year when medical cannabis dispensaries opened."); Hefei Wen & Jason M. Hockenberry, *Association of Medical and Adult-Use Marijuana Laws with Opioid Prescribing for Medicaid Enrollees*, 178 JAMA INTERNAL MED. 673, 674 (2018) (finding that "medical marijuana laws and adult-use marijuana laws were associated with lower opioid prescribing rates").

112. See *supra* notes 1–3.

violent crime following legalization (if one could be demonstrated) was attributable to legalization rather than some other extraneous factor? If anything, it seems reasonable to expect that moving marijuana production and sale from the control of criminal gangs to a licensed and regulated market would lead to a reduction in violent crime rather than an increase.

The truth is that it will likely be many years before we know which changes are fairly attributable to marijuana legalization and which are not. Only careful, multivariate regression can answer some of these questions, and that will require far more data than the few years currently available. But conducting such analysis will likely prove challenging. Consider, for example, impaired driving, one of the societal harms about which the public is rightly concerned. Since legalization, the state of Colorado has focused on training highway patrol officers to detect the signs of marijuana intoxication.<sup>113</sup> If it turns out that the state is making more arrests for impaired driving after legalization, that may have literally nothing to do with the amount of impaired driving occurring and everything to do with a shift in resources and emphasis. The best data analysis in the world cannot account for data that are a moving target.

#### CONCLUSION—LOOKING AHEAD

At bottom, I argue that marijuana legalization in Colorado has largely been successful. Although far from perfect, Colorado's flexible, market-based approach has led to a functioning market for marijuana while minimizing, at least for now, many of the worst externalities that skeptics feared would befall the state. Ironically, I believe that Colorado benefitted from legalizing marijuana at a time when it was still prohibited by federal law. Federal prohibition placed natural governors on the burgeoning marijuana industry in Colorado. I believe that the specter of a federal crackdown produced a regulatory environment in which both the marijuana industry and its regulators understood that the nation's eyes would be upon the state, and that any overreach could bring the whole enterprise crashing down. This led to a spirit of compromise and public-mindedness that might have been like catching lightning in a bottle; it may be very difficult to replicate in another regulatory environment.

As the industry moves into more and more states, and momentum develops at the federal level toward a fundamental change in the broader legal landscape,<sup>114</sup> concern is raised that the slow, steady growth which

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113. Monte Whaley & John Ingold, *Colorado Troopers Get Training on Spotting Drivers Under Influence of Pot*, DENV. POST (Feb. 24, 2014, 11:07 AM), <https://www.denverpost.com/2014/02/24/colorado-troopers-get-training-on-spotting-drivers-under-influence-of-pot/> ("The state is stepping up training so that law officers will be able to spot drivers who are high on marijuana and to differentiate them from drivers who are impaired by alcohol.")

114. See, e.g., Tom Angell, *U.S. Senate Votes to Legalize Hemp After Decades-Long Ban Under Marijuana Prohibition*, FORBES (June 28, 2018, 5:54 PM),

typified Colorado's development of a marijuana industry will be replaced by rapacious greed. Big Marijuana—a parallel to Big Tobacco, Big Pharma, Big Agra, and Big Alcohol—is the boogeyman du jour.<sup>115</sup> And this is not to minimize the risk to public policy and health that a profit-driven industry unconcerned about federal prohibition could pose. But I find this to be a more compelling argument for careful regulation than for a return to prohibition. Colorado has demonstrated that a sensible approach to marijuana regulation is possible, and states and the federal government would be wise to learn from this example.

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<https://www.forbes.com/sites/tomangell/2018/06/28/u-s-senate-votes-to-legalize-hemp-after-decades-long-ban-under-marijuana-prohibition> (“The non-psychoactive cannabis cousin of marijuana would finally become legal to grow in the United States under a bill overwhelmingly approved by the Senate.”); Janet Burns, *Congress Launches Bipartisan STATES Act to Protect Legal Cannabis Once and for All*, FORBES (June 7, 2018, 2:01 PM), <https://www.forbes.com/sites/janetwburns/2018/06/07/congress-launches-bipartisan-states-act-to-protect-legal-cannabis-once-and-for-all> (“On Thursday, Senators Elizabeth Warren (D-MA) and Cory Gardner (R-CO) announced the introduction of the Strengthening the Tenth Amendment Through Entrusting States (STATES) Act, which seeks to protect states that legalize marijuana from federal interference. Representatives David Joyce (R-OH) and Earl Blumenauer (D-OR) also announced the introduction of a companion bill in the House today.”); Daniel Victor, *John Boehner's Marijuana Reversal: 'My Thinking on Cannabis Has Evolved'*, N.Y. TIMES (April 11, 2018), <https://www.nytimes.com/2018/04/11/us/politics/boehner-cannabis-marijuana.html> (“John A. Boehner, the speaker of the House from 2011 to 2015, reversed a long-held stance against marijuana legalization on Wednesday, saying on Twitter that ‘my thinking on cannabis has evolved.’ Mr. Boehner, a Republican leader who in 2011 told a constituent he was ‘unalterably opposed’ to legalization, joined the board of advisers of Acreage Holdings, a cannabis corporation that operates in 11 states.”).

115. See, e.g., *Big Tobacco 2.0 Big Marijuana*, SMART APPROACHES TO MARIJUANA, <https://learnaboutsam.org/the-issues/big-tobacco-2-0-big-marijuana> (last visited Nov. 19, 2018) (“Like Big Tobacco of yesteryear, Big Marijuana knows that it needs lifelong addicted customers to prosper. Addictive industries generate the lion’s share of their profits from addicts, not casual users. This means that creating addicts is the central goal. And—as every good tobacco executive knows (but won’t tell you)—this, in turn, means targeting the young.”); see also Rachel Ann Barry et al., *Waiting for the Opportune Moment: The Tobacco Industry and Marijuana Legalization*, 92 MILBANK Q. 207, 207 (2014) (“Since at least the 1970s, tobacco companies have been interested in marijuana and marijuana legalization as both a potential and a rival product. As public opinion shifted and governments began relaxing laws pertaining to marijuana criminalization, the tobacco companies modified their corporate planning strategies to prepare for future consumer demand.”).