

Tax and Employment Considerations

Dispensary, Indoor Cultivation, and Processing Facilities

Overview

Tax revenue and employment opportunities are the most common benefits associated with states and localities legalizing and regulating cannabis. However, these benefits are not automatically achieved and must be fostered through a delicate balance of tax rates, dispensary density and other factors designed to encourage a safe and efficient legal market. These factors, if addressed inappropriately, will significantly increase the size of the illegal cannabis market and funnel additional costs back to states and localities in the form of enforcement activities against illegal market actors, a practice which has been likened to ‘whack-a-mole’. A high tax rate will increase the cost of regulated cannabis, which in turn will be passed on to consumers who typically favor lower prices available on the illegal market. Likewise, insufficient access, whether through low points of sale levels or restrictive operational hours, will also contribute to consumers patronizing the illegal market.

To facilitate a smooth transition to the regulated market, the cannabis industry requires a policy framework that will enable it to compete with the illegal market on access and price, and conversely encourages as many potential illegal operators as possible to enter the regulated system. Absent such a framework, the legal market will struggle to take root, and the illegal market will persist. To aid in achieving this balance, states and localities should consider creating a zoning structure that allows for 1 dispensary per every 7,500 residents. Additionally, tax rates should be set low enough to reduce illegal market activity, but balanced enough to achieve tax revenue. High aggregate tax rates lead to higher product prices that are passed on to consumers and make illegal market products more attractive.

Budget Deficits & Cannabis Revenue

According to the United States Government Accountability Office (GAO), state and local governments continue to face fiscal challenges and could continue to see gaps between revenue and spending during the next 44 years.¹ With budget shortfalls affecting all levels of government, elected officials and constituencies need additional means to produce tax revenue. Absent new revenue, local governments are faced with limiting or eliminating popular or lifesaving programs that provide valuable services to their respective communities. This problem is expected to be compounded with recent proposed federal budget cuts to state and local subsidy and investment programs, as federal funds compose a significant portion of state and local government revenue.²

Increasingly, state and local governments are examining the potential fiscal benefits of taxing and regulating cannabis. This revenue can be utilized to pay for costs associated with regulation and enforcement, as well as funding for specific programs as seen in many states and localities that have implemented policies to tax and regulate medical and/or recreational cannabis. Additionally, states which

¹ U.S. Government Accountability Office, *State and Local Governments’ Fiscal Outlook 2016 Update*, GAO-17-213SP (Washington, DC, 2016), <https://www.gao.gov/assets/690/681506.pdf>

² Lav, Iris J., and Michael Leachman. "At Risk: Federal Grants to State and Local Governments." Center on Budget and Policy Priorities. March 20, 2017. Accessed July 19, 2017. <https://www.cbpp.org/research/state-budget-and-tax/at-risk-federal-grants-to-state-and-local-governments>.

have legalized marijuana have experienced reductions in crime rates and savings in policing, judiciary and incarceration costs due to the reduction in cannabis enforcement actions.^{3,4}

Even though the regulated cannabis sector is still in its infancy, this industry has proven to generate hundreds of millions of dollars for state, county, and local governments. A sampling of legalized states offers insight into the substantial tax revenue that can be achieved through taxing and regulating this industry. Colorado, which taxes both medical and recreational cannabis, generated \$198.5 million in calendar year 2016.^{5,6} The State's Marijuana Tax Cash Fund distributed \$40 million to school capital construction, \$5.7 million to the Public School Fund, \$4.4 million to the Early Literacy Competitive Grant Program, \$2.3 million to the School Health Professional Grant Program, \$900,000 to the School Bullying Prevention & Education Grant Program, and \$900,000 to drop-out prevention programs.⁷ In 2016, Washington and Oregon generated \$185.7 million and \$60.2 million, respectively.⁸

Cities such as Denver, which collected \$29 million in taxes and licensing fees in 2015, use these discretionary funds to pay for regulation, as well as a host of public policy issues, including public health and education.⁹ In 2016, Adams County, CO dedicated \$516,718 in cannabis taxes to college scholarships targeting low-income students.¹⁰ Los Angeles, a City that is currently facing a budget crisis and working towards the broadest legalization effort by a city in the nation, will also see substantial benefit in taxing and regulating cannabis. L.A. Councilman Paul Krekorian estimated that the cannabis industry is expected to generate more than \$100 million in tax revenue.¹¹ The revenue will then be diverted to the City's general fund, where government officials will allocate it to address critically underfunded programs.

Opponents of medical and adult-use cannabis laws claim that legalization leads to burdensome regulatory and enforcement costs that outweigh gains in tax revenue. However, these claims are not supported by state and local ledgers. The cannabis industry eagerly awaits a comprehensive, state-commissioned cost-benefit analysis of adult-use legalization by the Washington State Institute for Public Policy, which will be released in September 2017. In the meantime, tax revenue has far exceeded state regulatory costs, and reductions in marijuana-related arrests have saved adult-use states millions of dollars in enforcement, judicial and incarceration costs.¹²

³ Schlender, Shelley. "Legalizing Pot Brings Down Drug-related Crime in Colorado." VOA. June 18, 2016. Accessed July 14, 2017. <https://www.voanews.com/a/legal-marijuana-and-crime/3379448.html>.

⁴ Birr, Steve. "DC's Legalized Weed Is One-Year Old, And Crime Has Cratered." The Daily Caller. February 27, 2016. Accessed July 14, 2017. <http://dailycaller.com/2016/02/27/dcs-legalized-weed-is-one-year-old-and-crime-has-cratered/>.

⁵ Colorado Department of Revenue. *Marijuana Tax Data*, 2016; Staff. "Colorado Sells More Than \$1 Billion of Marijuana in 2016," in *Associated Press*, February 10, 2017.

⁶ Colorado Legislative Council Staff Issue Brief, *Distribution of Marijuana Tax Revenue*, Number 15-10 (Colorado, 2015), https://leg.colorado.gov/sites/default/files/15-10_distribution_of_marijuana_tax_revenue_issue_brief_1.pdf

⁷ Colorado Department of Education. *Fact Sheet: Marijuana Tax Revenue and Education*, September 2016, p. 1.

⁸ Oregon represents calendar year 2016; Washington represents fiscal year 2016. Oregon Department of Revenue. *Oregon Marijuana Tax Statistics*, 2016; Nigel Jaquiss. "Oregon's Recreational Cannabis Tax Revenue for 2016 Exceeded Original Estimate More Than Six-Fold," in *Willamette Week*, January 21, 2017; Washington State Liquor and Cannabis Board. *Marijuana Dashboard*, 2016; Debra Borhardt. "\$1 Billion in Marijuana Taxes Is Addictive to State Governors," *Forbes*, April 11, 2017.

⁹ Illescas, Carlos. "Marijuana sales tax revenue huge boon for Colorado cities." The Denver Post. May 26, 2016. Accessed May 11, 2017. <http://www.denverpost.com/2016/05/26/marijuana-sales-tax-revenue-huge-boon-for-colorado-cities/>.

¹⁰ John Aguilar. "What Is Adams County Doing with Its Half Million Bucks in Pot Taxes?" in *The Denver Post*, May 1, 2016.

¹¹ City News Service. "LA eyes \$100 million in marijuana tax revenue." LA Daily News. January 18, 2017. Accessed May 11, 2017. <http://www.dailynews.com/general-news/20170118/la-eyes-100-million-in-marijuana-tax-revenue>.

¹² As an example, in FY 2015-16, the State of Colorado generated \$157,511,445 in marijuana fees and taxes while the total expenditures of the Colorado Department of Revenue's Marijuana Enforcement Division stood at \$10,163,003. Colorado Department of Revenue, Enforcement Division. *Report to the Joint Budget Committee and House and Senate Finance Committees of the Colorado General Assembly Pursuant to Subsection 12-43.4-104(6)*, C.R.S, April 2017. Drug Policy Alliance. So

As evidenced above, even with stark forecasts for the economy and changes in federal subsidy programs, the cannabis industry offers states and localities relief in addressing fiscal challenges. However, to achieve tax revenue and cost reduction goals, there is an onus on state and local governments to enact laws and regulations that reduce the illegal cannabis market and allow sufficient leeway in advertising and business organization for legal cannabis establishments to separate themselves from illegal operators.

Employment Challenges & Cannabis Opportunities

In addition to budget shortfalls, the United States has also been affected adversely by decreasing employment opportunities. From 2000-2016, over 5 million manufacturing jobs were lost throughout the nation.¹³ This decline was extremely detrimental to California's economic recovery, with cities such as Los Angeles losing 20% of their manufacturing jobs since 2007.¹⁴ Additionally, jobs in agriculture, manufacturing, utilities, and the federal government are also expected to continue to decline through 2024.¹⁵

Regulated cannabis markets have created substantial job growth within legalized states and localities. If employment levels nationally are comparable to the levels identified in an October 2016 economic impact analysis conducted for the State of Colorado, then the cannabis industry directly employed an estimated 83,434 full-time equivalent (FTE) workers. Including direct, indirect, and induced employment, the regulated industry supported an estimated 119,310 FTE jobs nationwide in 2016.¹⁶ In comparison, the coal mining industry directly employed 50,400 workers as of March 2017.¹⁷ Projections indicate that by 2020, cannabis jobs will outgrow the number of manufacturing jobs in the United States.¹⁸

Every licensing category within the cannabis industry requires teams of employees to successfully operate, with such jobs ranging from low skill jobs to high skill manufacturing jobs and complex executive functions. Dispensaries, for example, will employ positions such as budtenders, who are responsible for interfacing with patients to advise on the effects of specific strains of cannabis, as well as accountants, purchasing managers, compliance officers and operations managers. Procurement officers will be needed to analyze cannabis products to ensure the quality of cannabis products that the dispensary buys. Security guards will deter crime and protect dispensaries from nefarious characters. Other license categories, such as cultivation and processing facilities, will require trimmers, growers, salesman, managers, packagers, and technicians, among other positions. With onerous advertising restrictions, cannabis businesses are increasingly hiring marketing and social media managers as well.

Far, So Good: What We Know about Marijuana Legalization in Colorado, Washington, Alaska, Oregon and Washington, D.C., October 2016, p. 4-5.

¹³ Long, Heather. "U.S. has lost 5 million manufacturing jobs since 2000." CNNMoney. March 29, 2016. Accessed May 11, 2017. <http://money.cnn.com/2016/03/29/news/economy/us-manufacturing-jobs/>.

¹⁴ Kitroeff, Natalie. "Los Angeles manufacturing job loss hampers state recovery, report says." Los Angeles Times. June 29, 2016. Accessed May 11, 2017. <http://www.latimes.com/business/la-fi-manufacturing-losses-california-20160629-snap-story.html>.

¹⁵ "Projections of industry employment, 2014–24: Career Outlook." U.S. Bureau of Labor Statistics. December 2015. Accessed May 11, 2017. <https://www.bls.gov/careeroutlook/2015/article/projections-industry.htm>.

¹⁶ Marijuana Policy Group. *The Economic Impact of Marijuana Legalization in Colorado*, October 2016, p. 5 and 9.

¹⁷ US Bureau of Labor Statistics. Employment, Hours, and Earnings from the Current Employment Statistics Survey, Series ID CES1021210001, All employees, thousands, coal mining, seasonally adjusted, March 2017.

¹⁸ Borhardt, Debra. "Marijuana Industry Projected to Create More Jobs Than Manufacturing By 2020." Forbes. February 22, 2017. Accessed May 11, 2017. <https://www.forbes.com/sites/debraborhardt/2017/02/22/marijuana-industry-projected-to-create-more-jobs-than-manufacturing-by-2020/#a1329d03fa92>.

There are residual benefits that stem from the influx of employees in a state or locality. Their presence boosts the local economy in a variety of ways, which are best summarized below:

“... there is the ripple effect of all these jobs. The [Marijuana Business Daily] report points out that these employees spend their earnings on housing, food, travel and entertainment, which helps other local businesses. The launch of all these cannabis businesses has sparked a real estate boom in spaces that were for the most part previously vacant. Tourism is bringing new travel dollars into these states as well. The [Marijuana Business Daily] report estimates that for every \$1 consumers spend at dispensaries, another \$3 in economic benefits are created in cities, states and nationwide. State and local municipalities are plugging holes in their budgets with the marijuana tax receipts and making infrastructure repairs and boosting schools.”¹⁹

Estimating Potential Tax Revenue & Employees per Cannabis License

While there is general information available regarding tax revenue for states and employment projections for the entire country, local elected officials lack granular information related to tax revenue and employment opportunities that will be created by cannabis businesses across specific licensing categories. Attached are models prepared by cannabis industry experts that detail expected revenues across dispensaries, cultivation and processing facilities, as well as the level of employment needed to successfully run these businesses.

The figures below represent conservative estimates to help understand the impact and size of different cannabis businesses. We can provide detailed information behind these calculations on request.

Dispensary

The following chart displays two scenarios for the projected annual tax revenue and total employees for dispensary licenses at a tax rate of 3%. The first uses our minimum recommendation of 1 retail location per 7,500 inhabitants while the second column uses a model of 1 retail location per 15,000 inhabitants.²⁰

Based on the below example, a retail density of 1 per every 15,000 yields 13 licenses within the retailer category, meaning that there will not be enough retailers to meet demand. The below chart reflects annual tax revenue if half of the demand (consumers) patronizes the illegal market, which does not pay taxes. Also, higher tax rates will increase the illegal market rate further, as retailers will pass the costs on to customers, and customers favor cheaper products.

¹⁹ Borchardt, Debra. "Report: Total Marijuana Demand Tops Ice Cream In U.S." Forbes. May 17, 2017. Accessed July 25, 2017. <https://www.forbes.com/sites/debraborchardt/2017/05/17/new-report-says-total-marijuana-demand-tops-ice-cream/#459caa455b5e>.

²⁰ Please note the justification for maintaining dispensary density of at least 1/7,500 is tied to maximizing tax revenue and reducing the illegal market and is covered in our related paper on reducing illegal markets in legal jurisdictions.

Cannabis Retailer Example (200,000 Population)		
Dispensaries per population	7,500	15,000
Number of Licenses	27	13
Employees per License	17	17
Total Employees	459	221
Patients Per Day	180	200
Average Sale Per Customer	\$60	\$60
Gross Monthly Sales	\$8,748,000	\$4,680,000
Annual Gross Revenue	\$106,434,000	\$56,940,000
Monthly Net Tax (3%)	\$262,440	\$140,400
Annual Tax Revenue (3%)	\$3,193,020	\$1,708,200
Estimated Illegal Market Rate	10%	50%
Total Market Value Per Year	\$117,077,400	\$113,880,000
Illegal Market Share Per Year	\$10,634,400	\$56,940,000

Employees include 2 security guards, 2 receptionists and intake personnel, 7 budtenders, 2 vendor and inventory managers, 1 staff manager, 1 marketing and social media director, 1 accountant/controller, and 1 executive director.

Indoor Cultivation

The following chart displays the projected annual tax revenue and total employees for indoor cultivation licenses using an annual tax rate of 2% of gross revenue, as well as a fixed rate of \$10 per square foot. The columns are separated by possible license type.

Indoor Cultivation				
Canopy Space (sq. ft.)	5,000	10,000	22,000	44,000
Employees (Total)	9	19	37	69
Annual Revenue	\$2,359,031	\$4,718,062	\$10,379,736	\$20,759,471
Annual Tax (2%)	\$47,200	\$94,400	\$207,600	\$415,200
Annual Tax (\$10/sq. ft.)	\$50,000	\$100,000	\$220,000	\$440,000
Total Tax Revenue:	\$97,200	\$194,400	\$427,600	\$855,200

***These calculations are based on a wholesale price of \$1,800 per pound of cannabis.*

Processing

The chart below displays the projected annual Tax Revenue and total Employees for a processing license using a local annual tax rate of 2% and estimating a sufficient legal market at the retail level to provide sufficient legal demand.

Processing License	
Number of Licenses	10
Gross Monthly Sales	\$5,277,750
Gross Annual Revenue	\$63,333,000
Monthly Net Tax	\$131,944
Annual Tax	\$1,583,400