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U.S. State Approaches to Cannabis Licensing

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Abstract

U.S. states have taken varied approaches to licensing cannabis businesses under federal prohibition, but up to now there is limited research on cross-state licensing approaches. This paper provides a systematic analysis of the current licensing strategies taken by all states that have passed medical cannabis laws (MCLs)/recreational cannabis laws (RCLs). We construct comprehensive data on cannabis business licenses offered in each state, as well as metrics for license categories, cost, and issuance volume. We then analyze patterns between these metrics, also considering how long ago states implemented MCLs/RCLs, qualitative licensing aspects, state ideology and voting preference, and state cannabis taxation data. We observe that states tend to license medical cannabis more restrictively than adult-use cannabis: i.e., by offering licenses in fewer categories, at higher cost, in lower issuance volume, and more often mandating vertical integration. Additionally, states that implemented MCLs/RCLs earlier tend to offer licenses in more categories, at lower cost, and in greater volumes. Further, though states that implemented MCLs recently lean conservative and Republican, we do not observe clear relationships between ideology or voting preference and licensing policy. In our supporting results, we observe that a greater share of states with complex licensing structures impose non-retail price cannabis taxes than states overall, and we discuss how states have changed their licensing policies over time.

Keywords: licensing; rationing; medical cannabis; adult-use cannabis; cannabis legalization

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1. Introduction

As of February 2022, 37 states and the District of Columbia have passed medical cannabis laws (MCLs), and 18 have also passed adult-use (i.e., recreational) cannabis laws (RCLs). Though cannabis remains federally illegal, the size of the “state legal” U.S. cannabis market is estimated at \$18.1bn (Prohibition Partners, 2020). Access to state legal cannabis in the modern era started in 1996 in California, while the first permit-granting activity to cultivate cannabis followed in 2003 with California’s Medical Marijuana Program Act. State-level cannabis business licensing was first introduced in New Mexico in 2007, and extended in 2010 when Colorado instituted the first multi-category system with separate licenses for producers, manufacturers, and dispensaries. In these states and others, medical cannabis sales functioned as an unregulated gray market before the introduction of formal licensing regimes (O’Keefe, 2013). Today, all states that implement MCLs have their own state-specific regulatory bodies and licensing policies. As federal illegality of cannabis precludes federal regulation and inter-state transactions, each state functions as a standalone market. This differentiates the U.S. from the other major legal cannabis markets, Canada and Uruguay, which have both federally legalized, though pursue different regulatory approaches (Hall and Lynskey, 2020).

To understand the status of and cross-state variation in state legal cannabis licensing regimes in the U.S., we construct data on the state-by-state licensing landscape for medical and adult-use cannabis systematically.¹ First, we define license categories based on the range of licenses available across states. We then construct metrics for different axes of variation in licensing regimes (range of license categories, license fees, and license issuance volume) and examine patterns by geography and across states. Next, we discuss different state licensing approaches and explore social and policy factors that may influence our results. We then supplement the licensing analyses by examining linkages to state cannabis tax regimes, and finish by briefly discussing observed changes in licensing policy over time.

This paper primarily contributes to two strands of the literature. First, we extend supply-side policy studies of cannabis rationing. Whether state legalization promotes recreational use is a developing literature: studies of MCLs tend to find zero/small effects on use (Cerdá et al., 2012; Dills et al., 2017; Pacula et al., 2015), while early evidence on RCLs finds larger increases (Cerdá et al., 2020; Hollingsworth et al., 2020; Maclean et al., 2021). From a harm minimization perspective, both state monopoly and “restrictive” licensing models have been advocated for the cannabis market (Barry et al., 2014; Carnevale et al., 2017; Rehm and Fischer, 2015; Pacula et al., 2014). Further, as licensing models

¹ We use “state legal/legalized/legalization” interchangeably with “implemented MCLs/RCLs” for stylistic reasons.

get less restrictive, increased cannabis use can pair with decreased prices, and lower perceived harm of and legal risk of use (Pacula and Smart, 2017). These factors imply multi-dimensional tradeoffs for policymakers. One is seeking economic benefit versus protecting public health, given evidence of a relationship between youth cannabis uptake and both low prices (Van Ours and Williams, 2007; Williams, 2004) and retail outlet density (Pacula et al., 2017; Palali and Van Ours, 2015). There is also tension in seeking to restrict supply or demand for a licit good when doing so propagates an existing illicit market that is untaxed and occupies police resources (Adda et al., 2014; Anderson and Rees, 2021). We provide the first systematic review of revealed policy preferences in state cannabis licensing.

Second, we offer a study of state legal cannabis for all U.S. states, extending the literature on regulation of “sin goods” (e.g., alcohol, drugs and tobacco). Theoretically, legalization and regulation of drugs may yield a lower social cost than enforced prohibition (Becker et al., 2006). Applying this to “sin goods” more broadly, the history of alcohol regulation arguably supports this idea, as liquor consumption fell post-prohibition with the introduction of restrictive licensing (Levine and Reinerman, 1991). However, this is less true for tobacco, as public health outcomes were undermined by commercial interests during much of the last century (Jacobson et al., 1997; Siegel et al., 1997). In practice, state monopoly models for alcohol have been found to improve quality control and suppression of illicit markets (Room and Örnberg, 2019), while licensing policy changes have been integral to tobacco control (Luke et al., 2016). Regarding cannabis, its regulatory treatment by states is closer to that of alcohol than tobacco, in some cases by design (Caulkins, 2017).² Case studies of different federally legal and state legal cannabis markets point to varying public health and commercial outcomes that are directly influenced by regulatory approaches (Armstrong, 2021; Carnevale et al., 2017; Jensen and Roussell, 2016; Pardo, 2014; Obradovic, 2021; Shanahan and Cyrenne, 2019; Subritzky et al., 2016). This paper offers new analyses of regulatory approaches to state legal cannabis, with a licensing focus.

2. Data collection and empirical implementation

We collect data on state medical and adult-use cannabis programs from multiple sources. Data on state licensing rules are current as of May 2021. We primarily obtain data from state legislation regarding medical and adult-use cannabis programs and regulatory guidance on the websites of state cannabis licensing bodies; secondary sources include local media outlets, industry media reports, and policy organizations. In addition, we cross-validate data with cannabis consultancy reports (Prohibition

² We offer a brief comparison of state cannabis licensing to that of alcohol and tobacco in Appendix B.

Partners, 2019, 2020) and with the Marijuana Policy Project (MPP) (<https://www.mpp.org/>). We mainly focus on three aspects of state licensing regimes: license categories, costs, and volume. We construct a metric to facilitate cross-state comparison for each of these axes of variation; these aspects are all relevant to cannabis market development, including entry barriers, diversity and scale of businesses, and entrepreneurship.

First, we consider the range of license categories, and complexity of in-category types and tiers (Table 1). We consider this as follows: by category (main usage purpose, e.g., “cultivation”); by type (sub-category usage purpose, e.g., “indoor cultivation”); and by tier (sub-category/type scale bracket, e.g., “mid-size cultivation”; multi-tier licenses are typically increasing in price with production capacity). To construct a metric for categories per state, we count the number of license categories, and apply a simple complexity weighting (i.e., we count any multi-tier/type category as worth two, versus one for a single-tier, single-type category).

Second, we consider licensing cost. We consider this as total annual application and license fees for a median-sized cultivation and retail cannabis business, as per business sizes reported in industry publications (Cannabis Business Times, 2021; Marijuana Business Daily, 2017). We model this business as having one or more cultivation license(s) that permit(s) 10,000 sq. ft. of indoor plant canopy or 4,000 plants, plus a license that permits 1 dispensary generating \$2m annual revenue, or a vertically-integrated license(s) that permit(s) both. We acknowledge limitations in this approach: businesses may elect for different plant to canopy ratios, and some states prohibit vertical integration. However, this approach permits the simplest possible comparison of licensing costs across states, regardless of how they structure licenses.

Third, we consider the volume of license issuance. We consider this as active licenses issued in total and per million adult residents. For this metric, we focus only on the number of vertically-integrated, cultivation, and dispensary licenses issued, given that these are the most relevant to market participation in the core cannabis business. For population data, we use U.S. Census Bureau data for Resident Population Age 18 Years and Older as of 2019.

In our analyses, we consider how these metrics relate to the year when MCLs and RCLs were implemented in each state, as well as qualitative aspects of licensing policy (e.g., policy on vertical-integration). Our use of cross-sectional data limits our ability to examine causation or make generalizable inferences. Rather, we present and discuss observed patterns in cross-state cannabis licensing using figures and, informed by our data collection and the literature, explore potentially related

social and policy factors. We also report summary statistics and tests of mean equivalents for various subsamples in our data (Table 2). In Section 3.1, we discuss licensing characteristics of all states we collect data for; in Sections 3.2, we present results from states that had operationalized commercial markets by May 2021 (34 MCL states and 11 RCL states). We report detailed state-level licensing and taxation data in Appendix C.

[Table 1 here]

To supplement our licensing analyses, in Sections 3.3 and 4.1 we consider how our metrics relate to i) the ideological leaning and voting preference of states, and ii) different state tax regimes for medical and adult-use cannabis sales. For i), we use the State Ideological Identification Score (SIIS) from Gallup (Jones, 2019) to measure state-level ideological lean, and the Partisan Lean Score (PLS) from FiveThirtyEight (Rakich, 2021) to measure state-level voting preference. For ii), we collect cannabis tax data from state legislation, law firm reports, local media outlets, consultancies, and policy organizations; state sales tax rates are sourced from the Tax Foundation.

3. Cross-state cannabis licensing results

3.1 License categories and geographic picture

All states with MCLs or both MCLs and RCLs operate some form of licensing model, with different application criteria, requirements, permissions, categories, fees, and issuance volume. Most states license medical and adult-use cannabis businesses separately (Alaska and Washington being notable exceptions). In most states, licenses are either awarded competitively following a request for proposals or simply to all qualifying applicants. More exceptionally, some states allocate licenses by lottery (e.g., Arizona and Washington) or permit license resale (e.g., Florida). The structure of license fees differs across states, but usually consists of an application fee (sometimes refundable if the application fails), license fee (paid if successful), and in some cases proof of capital (e.g., funds in escrow or purchase of a surety bond).

Table 1 reports the definition of each available license category for medical and adult-use cannabis, and Figure 1 depicts the geographic distribution of license categories. All states have at least either Vertically-integrated licenses or both Cultivation and Dispensary licenses, or a mix of the two (i.e., permit but do not mandate vertical integration). As for the other categories, Manufacturing and Testing licenses are the most commonly observed across states; Distribution licenses are seen somewhat

less; R&D, Wholesale and Hospitality licenses are seen in fewer cases. In addition, two states operate essentially non-commercial markets: Louisiana functions as a quasi-state duopoly by licensing only two state-affiliated entities to cultivate medical cannabis; D.C. prohibits retail sales of adult-use cannabis despite having implemented RCLs.³

In each state that has implemented both MCLs and RCLs, adult-use licenses are offered in many or more categories, and as many or more sub-category types/tiers, than for medical cannabis.⁴ Across categories, Cultivation licenses are the most frequently “complex” - i.e., multi-type (e.g., indoor vs outdoor) and/or multi-tier (e.g., small vs medium). The proportion of states to have implemented MCLs/RCLs with complex Cultivation or Vertically-integrated licenses is 7 of 35 for medical cannabis and 11 of 17 for adult-use cannabis. Some states also structure Manufacturing licenses as multi-type due to the extraction methods that they permit (e.g., use of water versus solvents). For other categories, complex licenses are less common. Only California takes a tiering approach for most of its license categories, tiering fees by revenue generated by the licensed business.

Most states take one of two divergent approaches to vertical integration: they either mandate it, or only issue Vertically-integrated licenses to “microbusinesses” smaller than a defined size threshold (measured by cultivation canopy size and/or revenue). A larger share of states mandate vertical integration for retail sales of medical cannabis than for adult-use (16 of 36 states do so for medical vs 1 of 17 for adult-use). Focusing on medical cannabis, states that mandate vertical integration offer fewer license categories on average than those that do not; the average cost of licensing is similar in states with and without mandates, but the average issuance volume is lower in mandate states (Table 2).⁵ Hence, states with vertical integration mandates offer a narrower range of licenses and in lower issuance volumes, but not at a large cost differential.

[Figure 1 here]

Figure 2 depicts geographic patterns in our licensing metrics. Across U.S. Census Regions and Divisions, states in the Pacific Division (plus Nevada) all offer a broad range of license categories, while most states in the South have either limited or no MCLs. Relative to the North-East, licensing in the

³ We omit Louisiana (medical cannabis) from our analyses given no license cost information is available; we omit D.C. (adult-use cannabis only) given only transfer/“gifting” (not sales) of adult-use cannabis is permitted by law.

⁴ Tables C1 and C2 report data on categories, tiers, and types for medical and adult-use cannabis, respectively.

⁵ We report results in Table 2 excluding one outlier, Oklahoma. Inclusion of Oklahoma decreases the mean cost for non-mandate states but does not change the significance of the hypothesis test results for comparison of means.

Pacific is of lower cost and higher volume. A possible reason is that none of the Pacific states mandate vertical integration for medical cannabis businesses, unlike most of the North-East. The Midwest and the Mountain Division differ sharply, given that Colorado, Illinois and Michigan have extensive licensing regimes but many of their neighbors (e.g., Indiana, Iowa, Kansas, Nebraska, Wisconsin and Wyoming) have not passed MCLs.

[Figure 2 here]

3.2 Patterns across state licensing metrics

We observe several patterns across licensing metrics and consider these alongside qualitative policy data (Figure 3 and Table 2).⁶ First, for both MCLs and RCLs, states that legalized earlier offer licenses in more categories and within-category types/tiers, at lower cost, and in greater issuance volumes (Figure 3(a)). This pattern also holds when adjusting our sample to include RCL states only, including/excluding potential outliers, and changing the volume measure to adjust for population size (Figure A1). The “early-movers” in state legalization (e.g., Alaska, California, Colorado, and Washington) can all be described in this way, and none mandates vertical integration.⁷ The opposite approach is taken by states that have recently passed either MCLs or RCLs (e.g., Arizona (adult-use), Florida, North Dakota, Ohio and Utah), which tend towards fewer categories, relatively higher cost, and lower issuance volume. Such states with restrictive licensing approaches all specify a cap on issuance volume, half mandate vertical integration, none offer tiered licenses, and until recently, none had passed RCLs. Among recently legalized states, Oklahoma is an outlier with a low-cost, high-volume approach to licensing that exceeds even that of the “early-movers”.⁸

Second, some states that have passed both MCLs and RCLs couple restrictive medical licensing with broader adult-use regimes (e.g., Illinois and Massachusetts) (Figures 3(a) and A1(a)). These states mandate vertical integration for medical businesses while concurrently offering adult-use licenses in multiple categories, at lower cost and in greater issuance volumes. Similar plans are proposed in New Jersey, New York, Vermont, and Virginia. This contributes to much less heterogeneity in cross-state

⁶ Regression results for the axes variables used in Figures 3 and A1 are shown for medical and adult-use cannabis in Tables A1 and A2, respectively; we include these for illustrative purposes only, given limitations in our data.

⁷ We consider that Maine and Oregon take a similar approach overall despite mandating vertical integration for medical cannabis businesses, as both states have MCLs with relaxed home cultivation provisions and RCLs that are comparable in scope to the “early movers” (see Appendix C).

⁸ Oklahoma is an outlier among all states with multiples more medical cannabis licenses issued than any other state; we exclude Oklahoma from our main analyses, but show results including Oklahoma in Figure 3(b) and Figure A1.

adult-use licensing than medical cannabis licensing in general (visible in Figure 3(a)), and to medical cannabis being licensed more restrictively on the whole than adult-use cannabis (Table 2). One possible rationale for this approach is that states try to optimize licensing outcomes across programs through market structure: i.e., electing for fewer medical licensees and more adult-use licensees in order to prioritize ease of quality control for medical sales and economic gain from adult-use sales. Collecting data to test this hypothesis is outside the scope of this paper, but this can be an avenue for further study.

[Figure 3 here]

[Table 2 here]

Third, we observe negative correlation between licensing cost and issuance volume (Figure 3(b)), but high sample variances make statistical relationship hard to discern, and simple regression results should be viewed as correlational (Tables A1 and A2). Though we cannot make strong conclusions from our limited data, there are potential reasons for a negative cost-volume correlation. One is demand-side rationing: setting high license costs act as a barrier to entry, and thus can reduce license applicants. However, we observe that some high-cost states also impose caps on license issuance that bind, creating excess demand for licenses (e.g., Florida, Hawaii, Pennsylvania, and Rhode Island). Rather, issuance caps have been found to enable monopolistic behavior by licensees (Hollenbeck and Uetake, 2021), and the expectation of monopolistic profits may increase willingness to pay for licenses. Thus, volume-cost relationship would likely be driven by supply-side factors rather than demand, which merits further study.

3.3 Discussion and drivers of state licensing patterns

We explore several factors that are potentially related to our results. First, we consider states' ideological and political orientation. We observe that states that implemented MCLs recently lean conservative in ideology and Republican in voting preference; however, we do not observe statistically significant associations between licensing policy and ideology or voting preference (Table 2). Thus, we cannot attribute the time differential in how states approach licensing to these characteristics. While the "early mover" states are some of the least conservative (e.g. California, Colorado, and Washington), in recent years multi-category or low-cost licensing regimes have also been implemented in conservative-

leaning states (e.g., Oklahoma and West Virginia). Further, the restrictive-MCL, broad-RCL approach taken by Illinois and Massachusetts (both less conservative, Democrat-leaning states) may influence these results, which only consider MCLs. Another consideration is that most states without MCLs (e.g., Idaho, Indiana, Iowa, Tennessee, and Wyoming) lean conservative and Republican. Future research can explore these associations in greater detail; other studies point to social factors, such as religiosity, as being associated with cannabis policy choices (Spetz et al., 2019).

We additionally consider country-wide policy changes. Several researchers point to the passing of what is often referred to as the Ogden memorandum in October 2009 as being a turning point in the regulatory approaches of states.⁹ In particular, a proliferation in gray market cannabis dispensaries following Ogden has been cited as an encouragement for states that legalized later to adopt stricter licensing regulations (Powell et al., 2018). Gray market concerns have also been linked to home cultivation: states that passed MCLs pre-2010 permit home cultivation, whereas those that passed MCLs between 2010-13 prohibit it (Anderson and Rees, 2021). We observe that 20 of 36 states allow home cultivation for medical cannabis, and 11 of 14 do so for recreational cannabis. We do not collect data to test whether either of these are motivating factors in tighter licensing policies, but this can be addressed in future studies.

Further, license issuance caps and opt-outs are other axes of variation in licensing policy that merit discussion. We observe that 21 of 36 states legislate some form of cap on license issuance for medical cannabis, and 3 of 11 do so for adult-use. Of these, some are hard caps (i.e., an absolute number) but most are linked to some demand-side metric (e.g., number of patients or pharmacies, or state population). These caps may be state-level, per locality, or both. Local caps may be structured as a simple or demand-based allocation across localities, or to minimize average distance from customers. Any of these approaches may cause market distortions due to inefficient allocation of licenses (Thomas, 2019). A similar inefficient allocation effect could arise from differences in local taxation. Relatedly, local ordinance passed in some states creates intra-state licensing heterogeneity, as municipalities opt-out of hosting licensed businesses (Dilley et al., 2017). This can make licensing more restrictive than the state-level picture suggests: for example, in California local-level opt-outs have been blamed for a persistent illicit market (Nieves, 2021), which carries negative implications for public health (Unger et

⁹ On 2009.10.19, Deputy Attorney General David W. Ogden advised United States Attorneys in states with MCLs that federal priorities were “prosecution of significant traffickers of illegal drugs, including marijuana, and the disruption of illegal drug manufacturing and trafficking” and to pursue these, federal resources should not be focused on prosecuting individuals in “clear and unambiguous compliance with existing state laws” (Ogden, 2009).

al., 2020). We acknowledge that local license caps and opt-outs limit within state uniformity – however, as our focus is on state-level policy, we leave consideration of these to further study.

4. Supporting results

4.1 Linkages between licensing and taxation

Patterns in taxation of cannabis across states are less pronounced than those for licensing, which partly reflects how states differ in opting to impose state- or local-level taxes in general. As well as state-level taxes, some states define a “local option” rate that municipalities can also choose to levy, and some also permit other local taxes to be levied. The imposition of non-retail price excise duties in some states means that calculating state-level total tax burdens requires multiple assumptions (e.g., on mark-up); we abstract away from this and focus on overall trends.

First, we observe that adult-use cannabis is taxed as or more heavily than medical cannabis in each state with both MCLs and RCLs (Table C3). While some states with MCLs exempt medical cannabis from state sales tax, as is a common precedent for medical products, most levy excise duties instead of (sometimes as a “special sales tax”) or on top of state sales tax. In any case, the total tax burden on medical cannabis sales varies greatly, but in most cases does not exceed 15%. In contrast, all states levy excise duties on adult-use sales, and most states also apply sales tax.¹⁰ The total tax burden on adult-use cannabis exceeds 15% in most cases, and notably exceeds 40% in Washington. Linking to licensing, we observe that in relative terms, most states are orientated towards supply-side approaches to rationing medical cannabis (by issuing a limited range and number of licenses at high cost) and demand-side approaches to rationing adult-use cannabis (by imposing high taxes).

Second, we observe that some states levy non-retail price excise duties on top of or instead of retail price-based taxes. Non-price duties are levied in 11 states, either on wholesale value or on non-price metrics such as weight of product sold, THC content or concentration of products (i.e., potency), or dispensary revenues (Figure A2). Linking with licensing, we observe a greater share of states that levy non-price excise duties offer complex (i.e., multi-category/tier licenses) licenses than overall (6 of 11 states that levy non-price duties offer complex licenses vs 13 of 35 overall).¹¹ Of these, the older markets levy duties by weight at wholesale (e.g., Alaska, California, and Maine), while the newer markets do so by potency (e.g., Illinois and New York). Illinois and New York also distinguish by

¹⁰ It should be noted that some states allow registered medical patients to buy cannabis in adult-use stores while exempted from either sales tax (as in California) or excise duties (as in Washington).

¹¹ A pairwise correlation test of these two groups finds a positive relationship significant at the 10% level.

product type, with cannabis edibles taxed more heavily than flower at the same potency. This may reflect a focus on limiting high-potency products in newer markets, versus a focus on limiting aggregate production in older markets. Two states with hard caps on license issuance, Rhode Island and West Virginia, instead tax gross profits of retail outlets; this may hence reflect high market concentration in these states. Thus, we suggest that the choice to impose non-retail price taxes could be influenced by factors such as regulatory capacity, interventionist appetite, or market structure. We leave detailed study of state cannabis taxation policy to future research.

4.2 Licensing policy changes over time

We observe that state licensing policies evolve over time, especially regarding vertical integration. For example, in 2018 Rhode Island increased fees for its three vertically-integrated licensees from \$5,000 to \$250,000 when plans to increase issuance volume were shelved (Marijuana Business Daily, 2018). Meanwhile, in 2014 Colorado stopped encouraging (but did not prohibit) vertical integration by not renewing a rule whereby retailers had to grow at least 70% of cannabis that they sold, which had reportedly led to inefficiencies (Associated Press, 2014). In contrast, in Florida both politicians and businesses have criticized the state's vertical integration mandate, with a Supreme Court challenge to the mandate defeated recently (Gross, 2019). There is also a link with taxation: in 2015, Washington changed from a gross receipts tax to a single excise duty on cannabis sales; the prior system is found to have encouraged vertical integration and led to inefficiencies (Hansen et al., 2021).¹² That policymakers react to vertical integration-related issues in particular is indicative of the relevance of market structure to desired licensing outcomes. These examples provide anecdotal evidence that policymakers respond to the market conditions that they face, as well as any other political and public health concerns.

Relatedly, we observe that state policymakers can react to a common signal or perceive a common issue related to licensing in differing ways. A case in point is the divergence in the responses of states to the issue of indoor smoking of cannabis post-state legalization, which came after states had banned public consumption. Oregon and Washington opted to restrict consumption in venues, while Alaska introduced an onsite consumption endorsement for existing dispensary licensees. Other states

¹² Previously, a 25% duty was levied on transactions from cultivators to manufacturers and again on transactions from manufacturers to dispensaries, compared to the present single 37% duty levied at retail.

have since instead introduced standalone licenses for consumption at events or at venues (i.e., Hospitality licenses).

5. Closing discussion

We explore a cross-sectional picture of U.S. state cannabis licensing by defining a range of categories of cannabis business licenses and constructing novel data and metrics for state licensing regimes. Using these, we analyze patterns in licensing policy across states and discuss how these link to qualitative licensing aspects, state cannabis taxation, and policy drivers. First, we observe that on average, states issue licenses in fewer categories, at higher cost, and in lesser quantities for medical cannabis than adult-use cannabis, and a greater share mandate vertical integration for medical cannabis. Second, we observe that states that implemented MCLs/RCLs longer ago tend to offer more license categories, licenses of lower cost, and greater license issuance volume. Third, we observe that states that implemented MCLs recently lean conservative and Republican, but there is no clear relationship between these characteristics and our licensing metrics. Fourth, we observe that a greater share of states engaged in non-retail price taxation of cannabis have complex licenses than states overall. We finish by briefly discussing how states have changed their licensing policy over time, with a focus on vertical integration.

There are a few limitations to our analyses. Given the complexity of cannabis licensing, we focus on patterns in current policies and abstract away from state-level demographics, such as incomes and social geography, and associated considerations for businesses, such as property prices and zoning laws. Similarly, we describe supply-side state licensing rules without a detailed description of demand-side factors that are outside the scope of this paper. Additionally, given that we deal with cross-sectional data, our analysis of changes over time is limited to anecdotal evidence. Finally, local-level license caps and opt-outs create intra-state heterogeneity which is not captured by state-level data, and we hence cannot account for. All limitations can benefit from future studies.

U.S. state approaches to cannabis licensing have developed quickly since the first adult-use programs were implemented in 2014. One challenge facing policymakers that is indicative of the complexities of state licensing is the persistence of sizable illicit markets in some states, often tied to high prices of licit cannabis (Jensen and Roussell, 2016; Room, 2018). While some industry figures have advocated low-cost, high-volume licensing to mitigate this (Romero, 2019), Oklahoma, a recently legalized state which follows that approach, has reportedly become a major exporter of cannabis, fueling

the illicit trade in other states (Gore and Dulaney, 2021). This case shows the inherent federal-state tension in developing licensing policy for cannabis, distinguishing it from other regulated goods. As long as cannabis remains federally illegal and licensing remains the responsibility of states, each state may continue to act based on their own estimation of the trade-offs involved, which can carry negative externalities for others.

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Figures and Tables

Table 1: License aspects and categories - definitions and permissions

License aspect	Definition
Category	General usage purpose of license, e.g. cultivation
Type	Sub-category usage purpose of license, e.g. indoor cultivation
Tier	Sub-category/type scale bracket of license, e.g. mid-size cultivation
License category	General permissions
Cultivation	Growing of cannabis and non-retail sale of grown cannabis
Distribution	Transport of cannabis and cannabis products between licensed parties
Manufacturing	Processing of raw cannabis and non-retail sale of these processed goods
Dispensary	Retail sale of cannabis and cannabis products
Testing	Analytical testing of cannabis for compliance purposes
R&D	Procurement, storage and use of cannabis for research purposes
Wholesale	Non-retail transactions of cannabis between licensed parties
Vertically-integrated	Confers both Cultivation and Dispensary license permissions
Hospitality	On-site consumption and events (adult-use cannabis only)

Notes: We define Vertically-integrated in this way as conferring permissions for Cultivation and Dispensary (as above) is the common denominator of integrated licenses that we observe.

Table 2 - Subsample means and t-tests

Panel 1: Full sample	Medical	Adult-use	t-stat
License categories (weighted)	3.3 (0.365)	7.3 (0.727)	-4.88***
License cost (\$000s)	105.3 (21.0)	45.9 (17.8)	2.15**
Issuance volume (pop.-adjusted)	89.1 (29.0)	264.6 (74.9)	-2.18**
# of observations	33	11	
Panel 2: RCL states only	Medical	Adult-use	t-stat
License categories (weighted)	4.5 (0.813)	7.3 (0.727)	-3.89***
License cost (\$000s)	54.5 (25.2)	45.9 (17.8)	0.94
Issuance volume (pop.-adjusted)	196.5 (73.4)	264.6 (74.9)	-1.80*
# of observations	11	11	
Panel 3: MCL sample	<10 years since MCL	10+ years since MCL	t-stat
License categories (weighted)	2.6 (0.386)	3.9 (0.578)	-1.89**
License cost (\$000s)	125.6 (17.0)	86.1 (37.6)	0.96
Issuance volume (pop.-adjusted)	15.4 (4.73)	158.7 (51.3)	-2.78***
# of observations	16	17	
Panel 4: MCL sample	No VI mandate	VI mandate	t-stat
License categories (weighted)	4.6 (0.478)	1.9 (0.295)	4.72***
License cost (\$000s)	105.1 (22.2)	105.4 (37.2)	-0.01
Issuance volume (pop.-adjusted)	138.7 (50.7)	36.6 (30.0)	1.86**
# of observations	16	17	
Panel 5: MCL sample	Least conservative	Most conservative	t-stat
Years since legalized	14.2 (1.79)	9.3 (1.74)	1.97*
License categories (weighted)	3.1 (0.651)	3.5 (0.430)	-0.59
License cost (\$000s)	95.9 (34.1)	117.2 (28.1)	-0.48
Issuance volume (pop.-adjusted)	73.7 (36.6)	106.4 (46.8)	-0.55
# of observations	15	17	
Panel 6: MCL sample	Republican lean	Democrat lean	t-stat
Years since legalized	8.8 (1.93)	13.4 (1.57)	-1.81*
License categories (weighted)	3.5 (0.433)	3.2 (0.539)	0.56
License cost (\$000s)	105.7 (24.5)	104.9 (31.3)	0.02
Issuance volume (pop.-adjusted)	117.9 (60.1)	70.6 (28.6)	0.71
# of observations	13	20	

Notes: Data sample current as of May 2021. Columns 2-3 show subsample means (and standard error); Column 4 shows results of t-tests of mean equivalence assuming unequal variance. We use “VI” to denote vertical-integration here. Following our argumentation, Panels 1-4 show 1-sided p-values; Panels 5-6 show 2-sided p-values. We use Gallup SIIS (Jones, 2019) as a measure for Conservative lean and FiveThirtyEight (Rakich, 2021) as a measure for Republican lean. For Gallup, we split the sample at the median for “conservative advantage”; for FiveThirtyEight, we split the sample at a zero score for “Democrat lean”. One outlier (OK) is excluded from all Panels. * p<0.10, ** p<0.05, *** p<0.01.

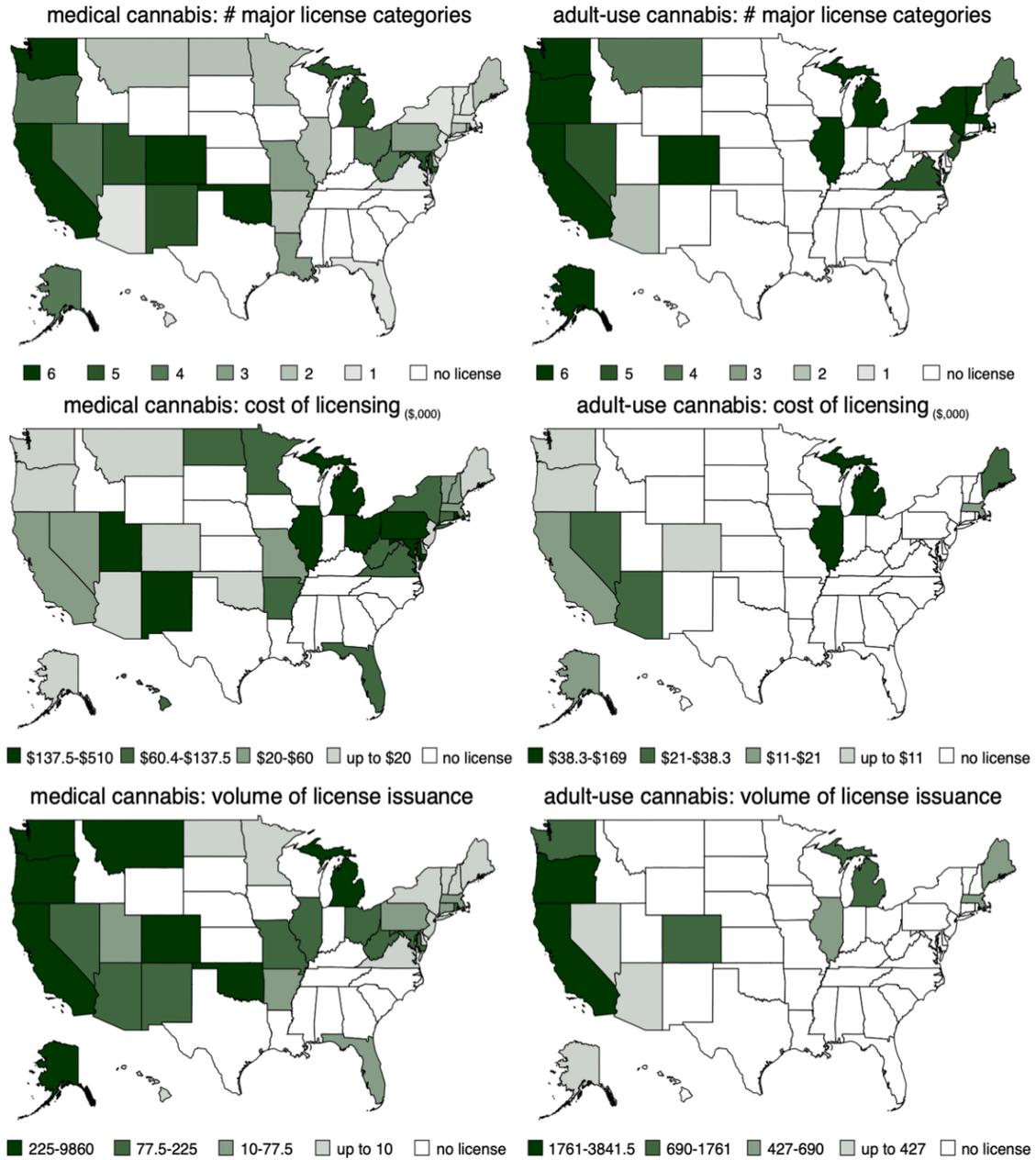
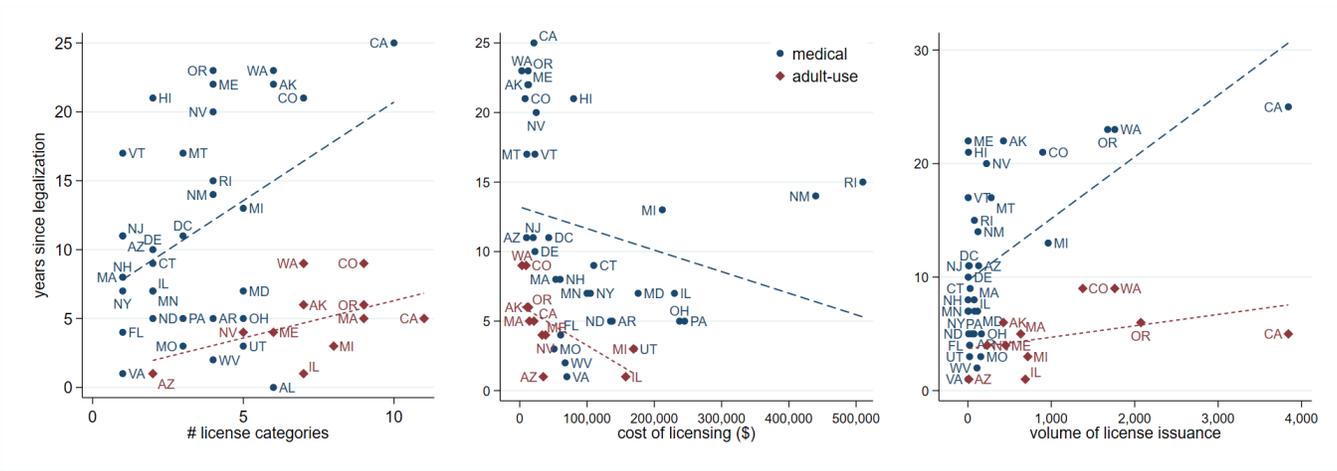
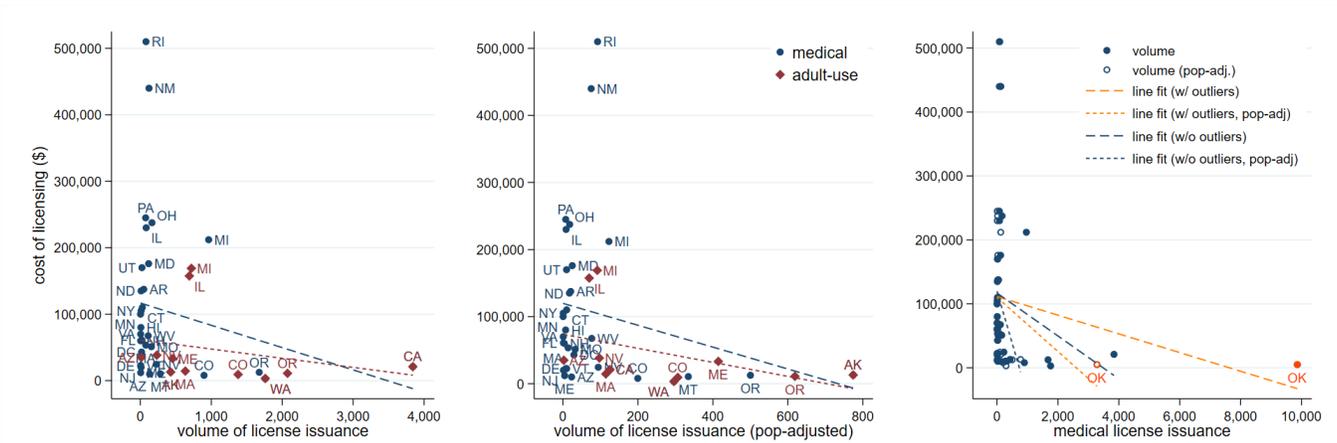


Figure 2: Comparison of licensing metrics across states

Notes: Data sample current as of May 2021. The license category data for MT, NJ, NY, and VA are based on proposed but not yet implemented licensing regimes for medical or adult-use as of sample date. For the cost of licensing and volume of license issuance graphics (middle and bottom), the legend is arranged by quartile values. Cost and volume analysis excludes LA (as state-led; no cost information available).



(a) Cannabis legalization and license categories, costs, and volume

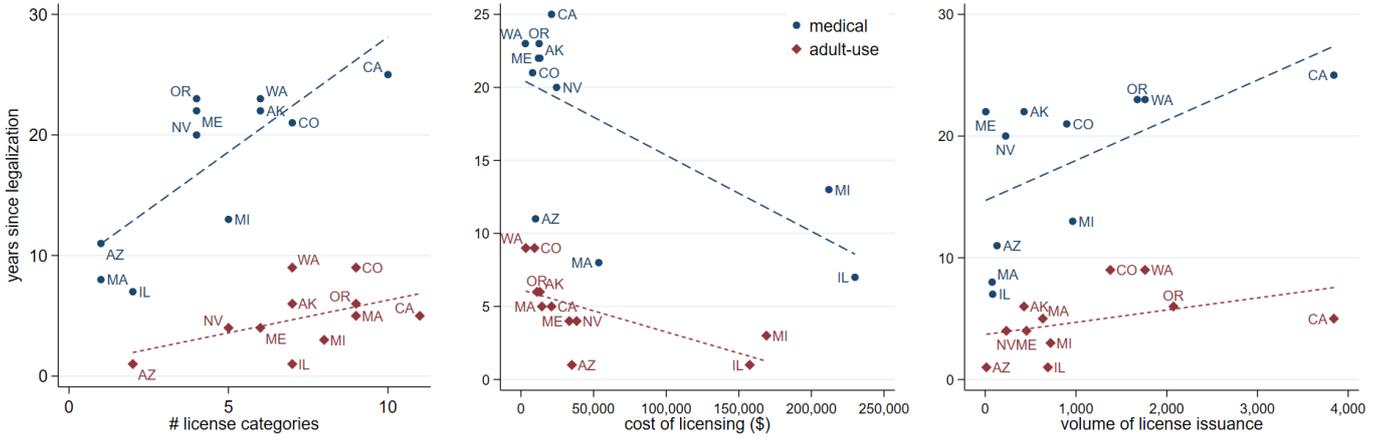


(b) Cannabis licensing costs and issuance volume (total and population-adjusted)

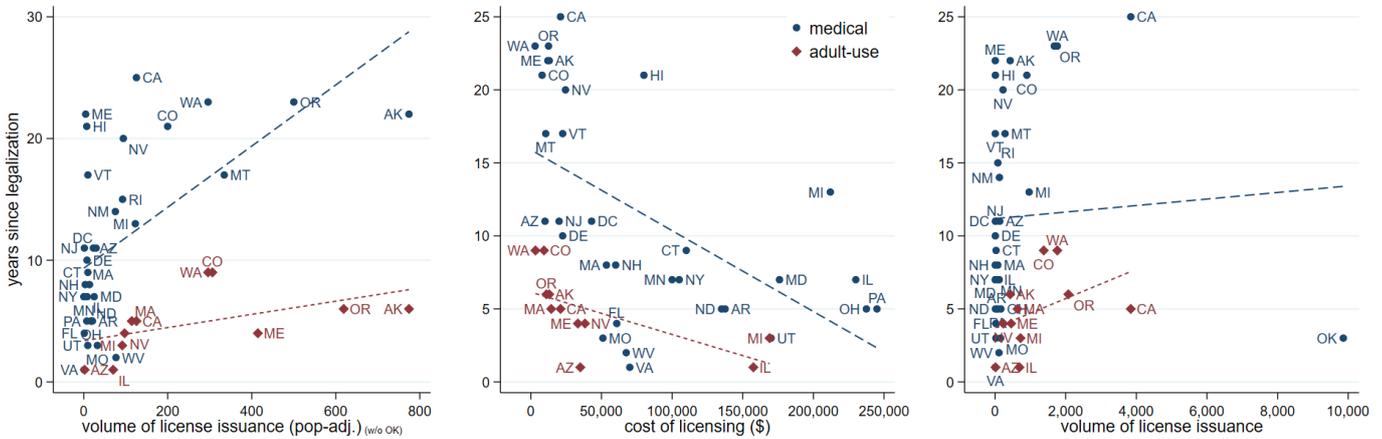
Figure 3: Patterns in cannabis legalization and licensing metrics

Notes: Data sample current as of May 2021. Panel (a) reports the relationship between years since MCLs/RCLs implemented and corresponding state licensing statistics for medical and adult-use cannabis. Panel (b) depicts licensing costs against volume (total and population adjusted). To improve visibility, one outlier (OK) is removed from Panel (a) and from the volume and volume (pop.-adjusted) plots for Panel (b). Univariate regression results for the variables shown above are shown in Tables A1 and A2.

Appendix A: Figures and Tables



(a) Post-legalization categories, costs, and volume in states with both MCLs and RCLs



(b) Post-legalization volume and costs with different measure/sample adjustments

Figure A1: Legalization and licensing styles: different samples and adjustments

Notes: Data sample current as of May 2021. Panel (a) reports the relationship between years since legalization and corresponding state licensing statistics for a subsample of 11 states that have implemented both MCLs and RCLs. Panel (b) shows years since legalization against metrics with measure/sample adjustments: i) issuance volume (adult population-adjusted) with one outlier (OK) removed, ii) cost with two other potential outliers excluded (NM and RI), iii) issuance volume with one outlier (OK) included. Simple univariate regression results for the variables shown above are shown in Tables A1 and A2.

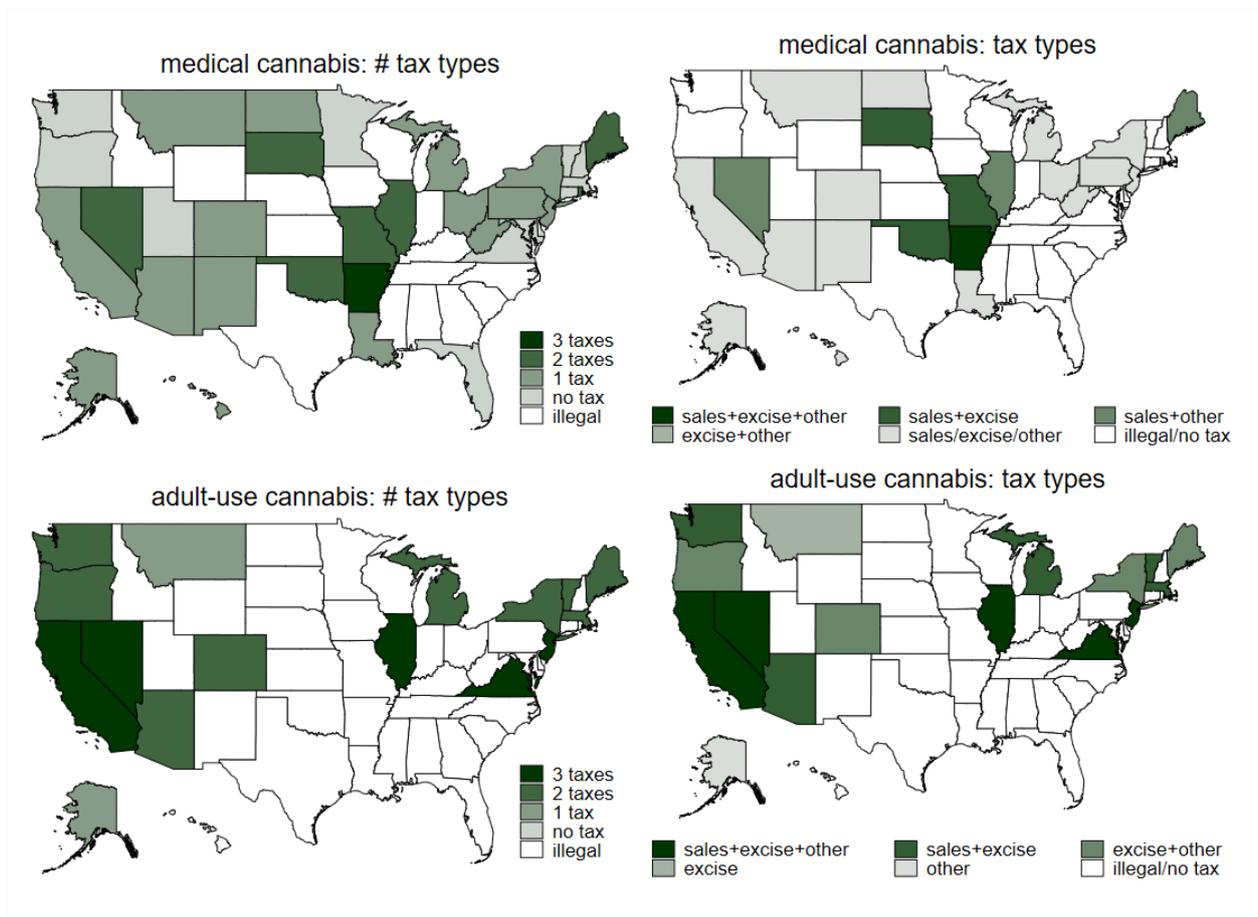


Figure A2: Cannabis-related taxes across states

Notes: Data sample current as of May 2021. The upper and lower graphics in this Figure show the number and types of state-level taxes levied on sales of medical and adult-use cannabis, respectively. We count taxes levied at different points of the supply-chain (i.e., on wholesale sales versus retail sales) separately. In some states, additional local-level taxes and duties are legislated for at a state-level as a “local option” or levied separately by municipalities. We consider “local option” taxes as “other” here.

Table A1: Simple regression output - medical cannabis

Fig 3(a)	License categories (weighted)	Licensing cost (\$000s)	Issuance volume
Years since legalization	0.144** (0.05)	-4.283** (1.78)	61.144** (25.30)
N	33	33	33
R ²	0.25	0.07	0.33
Fig 3(b)	Issuance volume	Issuance volume (pop.-adjusted)	Issuance volume (inc. OK)
Licensing cost (\$000s)	-1.361 (0.85)	-0.313 (0.22)	-3.277 (2.18)
N	33	33	34
R ²	0.05	0.05	0.05
Fig A1(a)	License categories (weighted)	Licensing cost (\$000s)	Issuance volume
Years since legalization	0.316*** (0.08)	-8.294* (3.83)	101.124* (45.66)
N	11	11	11
R ²	0.60	0.43	0.33
Fig A1(b)	Issuance volume (pop.-adjusted)	Licensing cost (\$000s)	Issuance volume
Years since legalization	13.262*** (4.70)	-5.150*** (1.26)	13.596 (52.55)
N	33	32	34
R ²	0.33	0.26	0.00

Notes: Data sample current as of May 2021. Columns show coefficient estimates (and standard errors) of univariate regressions; estimates are equivalent to slope of fitted lines for medical cannabis shown in Figures 3 and A1. Heteroscedasticity-robust standard errors are used. Our cross-sectional sample of 34 states with implemented MCLs makes regression analysis underpowered; as such, we include results here for transparency rather than to make causal inferences. For Fig. 3(b), we report the regression result with outliers without adjusting for population. * p<0.10, ** p<0.05, *** p<0.01.

Table A2: Simple regression output - adult-use cannabis

Fig 3(a)	License categories (weighted)	Licensing cost (\$000s)	Issuance volume
Years since legalization	0.44 (0.27)	-14.148** (6.10)	172.307*** (48.93)
N	11	11	11
R ²	0.24	0.41	0.17
Fig 3(b)	Issuance volume	Issuance volume (pop.-adjusted)	
Licensing cost (\$000s)	-4.850 (2.76)	-1.844** (0.67)	
N	11	11	
R ²	0.07	0.19	
Fig A1(b)	Issuance volume (pop.-adjusted)	Licensing cost (\$000s)	Issuance volume
Years since legalization	46.716** (18.68)	-14.148** (6.10)	172.307*** (48.93)
N	11	11	11
R ²	0.25	0.41	0.17

Notes: Data sample current as of May 2021. Columns show coefficient estimates (and standard errors) of univariate regressions; estimates are equivalent to slope of fitted lines for adult-use cannabis shown in Figures 3 and A1. Heteroscedasticity-robust standard errors are used. Our cross-sectional sample of 11 states with implemented RCLs makes regression analysis underpowered; as such, we include results here for transparency rather than to make causal inferences. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix B: Comparison to Alcohol and Tobacco

Comparing state cannabis licensing policy to that of alcohol and tobacco, we suggest that cannabis is treated closer to alcohol, particularly distilled spirits. States that have legalized mandate licensing of cannabis businesses and tax adult-use sales heavily, as all states do for alcohol businesses and most do for sales of spirits, respectively. These policy choices are often motivated by similar aims, such as preventing overconsumption and youth uptake (Caulkins et al., 2015; Elder et al., 2010). This is often by design rather than coincidence, given cannabis advocacy and/or regulation in some states has been explicitly modeled on that of alcohol (Caulkins, 2017; Obradovic, 2021). Although an overall comparison can be drawn, the state-by-state picture is mixed. Of the 17 alcoholic beverage control states that operate some degree of state monopoly over the sale of alcohol products, 11 have legalized medical cannabis, a lower share than US states as the whole (36 of 50 states). However, some control states (e.g., Maine and Oregon) take a relatively low cost, high issuance approach to cannabis licensing, and Louisiana, the only state-led cannabis market, does so for alcohol. The extent of state involvement in the supply chains for each good is a key difference: there is just one state with some form of monopoly over cannabis (Louisiana), versus 17 for alcohol. However, the state monopoly-commercial market dichotomy is likely less stark for cannabis given the volume of license issuance for cannabis businesses is far lower than that for alcohol in most states.

The comparison to tobacco licensing and taxation is less salient. In contrast to the immediate post-prohibition state institution of comprehensive alcohol licensing and taxation frameworks (Levine and Reinermann, 1991), the tobacco control movement gained momentum only late in the 20th century, and mainly at the federal level (Jacobson et al., 1997). Although states have since tightened tobacco regulation, many still do not have mandatory licensing for retailers; others do not charge a license fee, and most do not limit the volume of license issuance (Luke et al., 2016). Thus, the universally high degree of state involvement in cannabis licensing differs meaningfully from states' treatment of tobacco, despite significant overlap in often cited harm minimization considerations and heavy taxation of both goods. While this may reflect the different degree of federal involvement in regulating each good, other factors such as the relative degree of social acceptance and influence of the respective industries could also play a role.

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Appendix C – Detailed State License and Taxation Data, Category Definitions, and Permissions

Note: policy info as of 2021.05.01

Licensing

- Considered following data points:
 - License categories and in-category types/tiers
 - License fees (decomposed by application, license and renewal fees)
 - License issuance volume (limited to Cultivation, Dispensary and Vertically-integrated licenses (as defined below), as the most relevant for market participation)
 - Partial consideration of capital requirements, residency requirements, other parameters of license issuance
- License information arranged by category:
 - Vertically-integrated
 - Cultivation
 - Distribution
 - Manufacturing
 - Dispensary
 - Testing
 - R&D
 - Wholesale
 - Hospitality (applies to adult-use only)
- If a state does not offer a license for one of the above categories, it is either the case that another license confers the right to perform that activity (e.g. a Cultivation license which permits Distribution), or that there is no provision within the states medical or recreational cannabis access programs specifically for that activity to be undertaken via licensing (e.g. in states without R&D licenses, research using cannabis (if legally possible) would need a different set of legal permissions than a license).

License type definitions

- *Cultivation*: licenses that permit cultivation (growing), sometimes tiered by size of plant canopy permitted and/or split by type of growing area (e.g., indoor/outdoor/mixed), and non-retail sale of cannabis. Other names include Grower/Producer licenses.
- *Distribution*: licenses that permit transportation of cannabis between licensed parties. Other names include Transporter/Courier licenses.
- *Manufacturing*: licenses that permit processing of raw cannabis into products (e.g. wax/resin), sometimes split by type of manufacturing (e.g., solvent or water-based) and non-retail sale of these products. Other names include Processor/Infuser licenses.
- *Dispensary*: licenses that permit retail sales of cannabis and cannabis products at a specific location or number of locations (note: in some states, such as Hawaii, dispensary licenses are vertically-integrated). Other names include Pharmacy/Shop/Store licenses.
- *Testing*: licenses which permit analytical testing of cannabis on behalf of cultivators or dispensaries for compliance purposes. Other names include Laboratory/Safety Compliance Facility licenses.
- *R&D*: licenses which permit access to and usage of cannabis plants and/or material for scientific purposes. Other names include Research licenses.
- *Wholesale*: licenses which permit conducting of non-retail transactions of cannabis between licensed parties.
- *Vertically-integrated*: licenses that confer permissions for Cultivation and Dispensary (as defined above), given this is the common denominator of integrated licenses we observe. Various names exist for this type of license across states (including in some cases Dispensaries; it is clarified in the state information where these are considered Vertically-integrated rather than Dispensary licenses).
- *Hospitality*: licenses which permit consumption of cannabis (in an adult-use/recreational setting) on named premises or at events.

Tax

- Considers cannabis-specific sales taxes and excise duties levied at both the local and state levels.
- Tax rates sourced from the Tax Foundation (<https://taxfoundation.org/2021-sales-taxes/>).
 - Unless otherwise stated, generic local sales taxes/duties may also be levied in addition to the rates detailed here; local excise tax rates referred to in Table C3 are cases where a mandated or optional local tax has been specifically defined in state law
 - Detailed information on different rates of local sales taxes/duties not included here, for brevity
- Excluded details of taxes levied on illegal sales of cannabis (which do not apply to legal sale of cannabis).¹

Further definitions

- In Tables C1 and C2, “Legalization year (eff.)” refers to the year that the relevant legislation previously enacted came into effect or was implemented. In Table C3, “M” refers to medical cannabis; “A” refers to adult-use (recreational) cannabis.
- “Caregiver” refers to a one model by which a state’s medical cannabis program may operate, whereby a named individual or organization is licensed to cultivate and dispense cannabis on behalf of a named patient.
- “Micro” refers to the possibility of licensure for a particular license type being limited to microbusinesses (defined as businesses below a certain revenue threshold or production capacity).
- “Social equity” refers to the possibility in certain states of reduced costs for licensure for certain applicants, typically those from underprivileged social groups, those with a past cannabis-related conviction, or those below a certain income level.
- “Tiers” refers to the different levels of license available within a single license type, typically arranged and priced by scale of production/revenue generated.
- “Types” refers to the number of variations of license that exist within a single category, e.g. indoor vs outdoor cultivation licenses.

¹ See Fox Rothschild – Cannabis Industry State Tax Guide, September 2018 for further information on states which have such taxes, such as Kentucky.

Table C1 – Medical Licensing Lookup

		Legalization year (eff.)	Vertically-integrated	Cultivation	Distribution	Manufacturing	Dispensary	Testing	R&D	Wholesale
Alabama	AL	2021 ²	y	y	y	y	y	y		
Alaska	AK	1999		2 tiers		2 types	y	y		
Arizona	AZ	2010	y							
Arkansas	AR	2016		y	y	y	y			
California	CA	1996	micro	4 types x 5 tiers	2 types (tiered)	5 types (tiered)	2 types (tiered)	y (tiered)		
Colorado	CO	2000		4 tiers	y	y	y	y	y	
Connecticut	CT	2012		y			y			
D.C.	DC	2010		y			y	y		
Delaware	DE	2011	y					y		
Florida	FL	2017	y							
Georgia	GA									
Hawaii	HI	2000	y					y	university	
Idaho	ID									
Illinois	IL	2014		y			y			
Indiana	IN									
Iowa	IA									
Kansas	KS									
Kentucky	KY									
Louisiana	LA	2016		state			y			
Maine	ME	1999	y	caregiver		2 tiers				
Maryland	MD	2014 ³		y		y	y	y	y	
Massachusetts	MA	2013	y							
Michigan	MI	2008		4 tiers	y	y	y	y		
Minnesota	MN	2014	y					y		
Mississippi	MS									
Missouri	MO	2018		y		y	y			
Montana	MT	2004	various tiers					y		
Nebraska	NE									
Nevada	NV	2001		y		y	y	y		
New Hampshire	NH	2013	y							
New Jersey	NJ	2010	y							
New Mexico	NM	2007	y	personal	y	y		y		
New York	NY	2014	y							
North Carolina	NC									
North Dakota	ND	2016		y			y			
Ohio	OH	2016		2 tiers		y	y	y		
Oklahoma	OK	2018		y	y	y	y	y	y	
Oregon	OR	1998		y		y	y	y		
Pennsylvania	PA	2016		y			y	y		
Rhode Island	RI	2006	y	5 tiers				y		
South Carolina	SC									
South Dakota	SD	2021 ⁴								
Tennessee	TN									
Texas	TX									
Utah	UT	2018		y	y	y	y	y		
Vermont	VT	2004	y							
Virginia	VA	2020 ⁵	y							
Washington	WA	1998		y	y	y	y	y	y	
West Virginia	WV	2019		y		y	y	y		
Wisconsin	WI									
Wyoming	WY									

Notes: Data sample current as of May 2021. Legalization year (eff.) refers to effective legalization year – i.e., year when the medical cannabis law (MCL) in question came into effect, rather than year when it was first enacted.

² Legalized in 2021.05 (after our sample date).

³ Law passed in 2004 offering legal protection to patients using medical cannabis did not identify a supply source; thus, 2014 date cited as full legalization.

⁴ As of 2021.05, regulation not yet laid out; expected in coming months.

⁵ Limited initial legalization of low-THC cannabis oil in 2017 that was gradually expanded to a fuller medical cannabis program; limited regulatory/licensing activities started in 2018, but the medical cannabis program is considered effective in general after several important changes went into effect in 2020.07 (<https://www.mpp.org/states/virginia/>).

Table C2 – Adult-use Licensing Lookup

		Legalization year (eff.)	Vertically-integrated	Cultivation	Distribution	Manufacturing	Dispensary	Testing	R&D	Wholesale	Hospitality
Alabama	AL										
Alaska	AK	2015		2 tiers	y	2 types	y	y			endorsement
Arizona	AZ	2020	y					y			
Arkansas	AR										
California	CA	2016	micro	4 types x 5 tiers	2 types (tiered)	5 types (tiered)	2 types (tiered)	y (tiered)			events
Colorado	CO	2012		6 tiers	y	y	y	y	y		2 types
Connecticut	CT	2021 ⁶									
D.C.	DC	2015 ⁷									
Delaware	DE										
Florida	FL										
Georgia	GA										
Hawaii	HI										
Idaho	ID										
Illinois	IL	2020		2 types	y	y	y	y	training		
Indiana	IN										
Iowa	IA										
Kansas	KS										
Kentucky	KY										
Louisiana	LA										
Maine	ME	2017		4 tiers		y	y	2 types			
Maryland	MD										
Massachusetts	MA	2016		11 tiers + co-op	3 types	y	y	y	y		y
Michigan	MI	2018	micro	4 tiers	y	y	y	y			y
Minnesota	MN										
Mississippi	MS										
Missouri	MO										
Montana	MT	2021	y	10 tiers			y	y			
Nebraska	NE										
Nevada	NV	2017		y	y	y	y	y			
New Hampshire	NH										
New Jersey	NJ	2021		y	y	y	y			y	
New Mexico	NM										
New York	NY	2021		y	y	y	y	y	y	y	y
North Carolina	NC										
North Dakota	ND										
Ohio	OH										
Oklahoma	OK										
Oregon	OR	2015 ⁸		4 tiers		y	y	2 types	y	2 types	
Pennsylvania	PA										
Rhode Island	RI										
South Carolina	SC										
South Dakota	SD	2021 ⁹		y		y	y	y			
Tennessee	TN										
Texas	TX										
Utah	UT										
Vermont	VT	2018 ¹⁰	y	y		y	y	y		y	
Virginia	VA	2021 ¹¹		2 types		y	y	y		y	
Washington	WA	2012		3 tiers	y	y	y	y	y		
West Virginia	WV										
Wisconsin	WI										
Wyoming	WY										

Notes: Data sample current as of May 2021. Legalization year (eff.) refers to effective legalization year – i.e., year when the recreational cannabis law (RCL) in question came into effect, rather than year when it was first enacted.

⁶ Legalized in 2021.07 (after our sample date).

⁷ Legal for non-retail provision only; see state profile for further details.

⁸ Legalization enacted in 2014, but law effective as of 2015.

⁹ As of 2021.05; subsequently nullified by the state supreme court.

¹⁰ As of 2021.05, recreational sales were expected to start in 2022.

¹¹ In effect as of 2021.07; as of 2021.05, regulation had not been finalized and recreational sales were expected to start in 2024.

Table C3 – Tax Lookup

		Legal		State Sales Tax		State Excise Tax		Other Taxes	
		M	A	M	A	M	A	M	A
Alabama	AL	y ¹²				9%		on net worth of licensed individuals	
Alaska	AK	y	y					per unit by weight	
Arizona	AZ	y	y	6.6%	6.6%		16%		
Arkansas	AR	y		6.5%		4%		4% at wholesale	
California	CA	y	y		7.25%	15%	15%	per unit by weight	
Colorado	CO	y	y	2.9%			15%		15% at wholesale
Connecticut	CT	y	y ¹³						
D.C.	DC	y	non-retail	6%					
Delaware	DE	y							
Florida	FL	y							
Georgia	GA								
Hawaii	HI	y				4%-4.5%			
Idaho	ID								
Illinois	IL	y	y	1%	6.25%		ad valorem by potency	7% at wholesale	7% at wholesale + 3% local option
Indiana	IN								
Iowa	IA								
Kansas	KS								
Kentucky	KY								
Louisiana	LA	y				7%			
Maine	ME	y	y	5%			10%	per unit by weight	
Maryland	MD	y							
Massachusetts	MA	y	y		6.25%		10.75%		
Michigan	MI	y	y	6%	6%		10%		
Minnesota	MN	y							
Mississippi	MS	y							
Missouri	MO	y		4.225%		4%			
Montana	MT	y	y			2%	20%		
Nebraska	NE								
Nevada	NV	y	y	6.85%	6.85%		10%	15% at wholesale	
New Hampshire	NH	y							
New Jersey	NJ	y	y	4%	6.625%		variable by weight		1-2% local option (levied up to 4x)
New Mexico	NM	y		5.125%					
New York	NY	y	y			7%	9+4%		flat tax by potency at wholesale
North Carolina	NC								
North Dakota	ND	y		5%					
Ohio	OH	y		5.75%					
Oklahoma	OK	y		5.75%		7%			
Oregon	OR	y	y				17%		3% local option
Pennsylvania	PA	y						5% at wholesale	
Rhode Island	RI	y		7%				4% of dispensary revenue	
South Carolina	SC								
South Dakota	SD	y	y	4.5%	4.5%	15%	15%		
Tennessee	TN								
Texas	TX								
Utah	UT	y							
Vermont	VT	y	y		6%		14%		
Virginia	VA	y	y		5.3%		21%		3% local option
Washington	WA	y	y		6.5% (ex-High CBD) ¹⁴		37%		
West Virginia	WV	y						10% of dispensary revenue	
Wisconsin	WI								
Wyoming	WY								

Notes: Data sample current as of May 2021. ‘M’ and ‘A’ refer to medical cannabis and adult-use cannabis, respectively.

¹² Legalized in 2021.05 (after our sample date).

¹³ Legalized in 2021.07 (after our sample date).

¹⁴ WA exempts “High CBD” products from state sales tax; see state profile for how this is defined.

State information

Alabama – AL

- In 2021.05, AL legalized medical cannabis, laying out the guidelines for a limited medical program to commence in 2022.¹⁵ Only topicals, tablets and other non-smokable forms of cannabis may be sold and consumed (edibles and vaporized flower are also banned), and there is a daily dosage cap of 50/75mg THC per patient per day.¹⁶ License fees and permissions are yet to be established, though the law sets bounds for annual fees between \$10,000-50,000. Home cultivation is not permitted.¹⁷ Recreational cannabis remains illegal in AL.
- AL's medical cannabis law states that 9% levy will be applicable to on retail sales of cannabis products; it is not yet clear if this is in place of or on top of state sales tax of 4%. Additionally, licensed individuals will be subject to a 'privilege tax', the burden of which will be calculated based on their net worth in AL in the previous tax year.
- The following types of license (and corresponding issuance quotas) are due to be available from 2022.09:
 - Integrated [5 licenses, each permitting 5 retail locations]
 - Cultivator [at least 4 licenses]
 - Secure Transporter [no quota specified]
 - Processor [4 licenses]
 - Dispensary [4 licenses, each permitting 3 locations]
 - Testing Laboratory [no quota specified]

Alaska – AK

Tax

- AK treats both medical and recreational cannabis as adult-use for tax and licensing purposes. AK does not have a state sales tax, but levies an excise tax on wholesale transactions of cannabis at \$50/oz of mature flower, \$25/oz of immature flower, \$15/oz of trim, and \$1 per clone at the cultivator level.^{18,19}

Licensing

- AK licenses cannabis business through the Alaska Department of Commerce, Community, and Economic Development – Alcohol & Marijuana Control Office. All persons with direct or indirect financial interest regarding licensing must be AK residents.²⁰ There is no state-wide limit on the number of licenses, but local government can prohibit or limit the number of licenses awarded.²¹ As of 2021.05, AK had 266 active cultivation licenses and 161 active dispensary licenses.²² Home cultivation is permitted.²³
- Adult-use licensing fees:²⁴
 - Cultivation: 2 tiers of cultivation license
 - Limited [<500 sq. ft.]: \$1,000 application fee + \$1,000 initial license fee + \$1,400 license renewal fee (paid annually)
 - Standard: \$1,000 application fee + \$5,000 initial license fee + \$7,000 license renewal fee (paid annually)
 - Manufacturing: 2 types of manufacturing license
 - Product manufacturing facility license: \$1,000 application fee + \$5,000 initial license fee + \$7,000 license renewal fee (paid annually)
 - Concentrate manufacturing license: \$1,000 initial license fee + \$2,000 license renewal fee (paid annually)
 - Retail store license: \$1,000 application fee + \$5,000 license fee + \$7,000 license renewal fee (paid annually)
 - Onsite consumption endorsement (for licensed retail stores): \$1,000 application fee + \$2,000 endorsement fee
 - Testing facility license: \$1,000 application fee + \$1,000 initial license fee + \$5,000 license renewal fee (paid annually)

Arizona – AZ

Tax

- Medical cannabis sales are subject to a 6.6% sales tax (5.6% of which goes to the state, 1% to the city/county).²⁵ Adult-use cannabis sales are subject to this rate, plus an additional excise tax of 16%.²⁶

Licensing

- In AZ, vertically-integrated non-profit dispensary licensees are permitted to grow and sell medical cannabis. These businesses are licensed by the Arizona Department of Health Services.
- In 2020.11, voters in AZ passed Proposition 207 (the Smart and Safe Arizona Act) to legalize recreational cannabis (possession and home cultivation). The law allows for the operation of vertically-integrated "marijuana establishments". The first round of adult-use licensing was limited to adult-use endorsements for existing licensed medical cannabis businesses, and was conducted in 2021.01. A further licensing round was conducted by lottery in 2021.04, taking the total number of licensed businesses to 143.²⁷
- Home cultivation is permitted for both medical (if more than 25 miles from an operating dispensary) and adult-use cannabis.²⁸ The total number of medical dispensaries and adult-use establishments permitted is pegged to the number of pharmacies operating in the state.²⁹
- Medical licensing fees:³⁰
 - Vertically-integrated dispensary license: \$5,000 (20% refundable) application fee + \$5,000 initial registration fee + \$1,000 registration renewal fee (paid annually)

¹⁵ <https://mjbizdaily.com/alabama-governor-signs-medical-cannabis-legalization-bill-into-law/>

¹⁶ <https://legiscan.com/AL/text/SB46/2021>

¹⁷ https://www.montgomeryadvertiser.com/story/news/politics/2021/05/17/alabama-medical-marijuana-legalization-weed-what-to-know/5020360001/#selection-581_0-584_0

¹⁸ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

¹⁹ <https://www.adn.com/alaska-marijuana/2019/08/28/as-marijuana-prices-tumble-alaskas-licensed-growers-worry-about-taxes/>

²⁰ <https://www.commerce.alaska.gov/web/amco/MarijuanaFAQs.aspx>

²¹ <https://www.commerce.alaska.gov/web/Portals/9/pub/MCB/StatutesAndRegulations/AS17.38.pdf>

²² Figures for 2021.07.23 using search function on <https://www.commerce.alaska.gov/abc/marijuana/Home/licensesearch>

²³ <https://www.adn.com/alaska-news/2016/07/29/heres-how-many-cannabis-plants-alaskans-can-now-legally-possess-at-home/>

²⁴ <https://www.commerce.alaska.gov/web/amco/MarijuanaLicenseApplication.aspx>

²⁵ <https://www.phoenixnewtimes.com/marijuana/arizona-marijuana-recreational-tax-total-excise-sales-tax-2021-11537927>

²⁶ <https://www.hhcpa.com/newsletter-archive/prop-207-and-prop-208-wheres-the-money-going/>

²⁷ <https://eu.azcentral.com/story/money/business/consumers/2021/04/19/arizona-marijuana-lottery-winners-dispensary-licenses/7287241002/>

²⁸ <https://www.azdhs.gov/licensing/medical-marijuana/index.php#faqs-cultivation>

²⁹ <https://www.azleg.gov/viewdocument?docName=https://www.azleg.gov/ars/36/02854.htm>

³⁰ Prohibition Partners – the North American Cannabis Report, 2019

- Adult-use licensing fees:³¹
 - Marijuana establishment license: \$25,000 initial license fee + \$5,000 license renewal fee [payment term unknown] + \$2,500 per cultivation or manufacturing site registered + \$2,500 for approval to operate (for proprietor) + \$50,000 capital requirement
 - Testing facility license: \$25,000 initial license fee + \$5,000 license renewal fee (time-frame paid not specified)

Arkansas – AR

Tax

- Medical cannabis sales are subject to the regular state sales tax of 6.5%, and an excise duty (called a “privilege tax”) of 4%, the latter of which is paid twice during the supply-chain: first, by dispensaries buying from cultivators (at wholesale price) and also by patients at the point of sale (at retail price).^{32,33} Recreational cannabis is not legal in AR.

Licensing

- The Arkansas Department of Finance and Administration Medical Marijuana Commission licenses AR’s medical cannabis program. AR mandates that majority equity holders (>60%) in licensed medical cannabis cultivators or dispensaries must have been residents of the state for at least 7 years. Applicants must not already hold equity in the type of business that they are applying for a license for (so, an individual with a share in an Arkansas dispensary may apply for a cultivation license, but not a dispensary license). AR has set a maximum of 8 cultivation licenses and 40 dispensary licenses to be issued in total.³⁴ Home cultivation is not permitted.³⁵
- Medical licensing fees:^{36,37}
 - Cultivation license: \$15,000 application fee (50% refundable) + \$100,000 initial permit fee + \$100,000 license fee (paid annually) + \$500,000 performance bond
 - Processor license: \$5,000 application fee + \$100,000 performance bond
 - Transporter license: \$5,000 application fee + \$100,000 performance bond
 - Dispensary license: \$7,500 application fee (50% refundable) + \$15,000 license fee + \$22,500 license renewal fee (paid annually) + \$100,000 performance bond

California – CA

Tax

- While all cannabis sales are nominally subject to a state sales tax of 7.25%, this does not apply to sales of medicinal products to qualified patients.³⁸ For both medical and recreational sales, an excise tax of \$9.25/oz of cannabis flower, \$2.75/oz of cannabis leaves and \$1.29/oz of fresh cannabis plant is levied on cultivators, and an excise tax of 15% is levied at the point of retail.^{39,40}

Licensing

- CA licenses cannabis businesses through 3 different purpose-built entities: the Bureau of Cannabis Control (a standalone entity), Manufactured Cannabis Safety Branch (part of the California Department of Public Health), and CalCannabis Cultivation Licensing (part of California Department of Food and Agriculture).⁴¹ As of 2021.05, plans to integrate these into a single entity, the Department of Cannabis Control, were underway. As of 2021.05, CA had 6,335 active cultivation licenses⁴² and 1,064 active retailer licenses⁴³ across both medical and adult-use cannabis. As data was not available for medical and adult-use licenses separately at the time of data collection, we apply a simple 50/50 split to total issuance volume to calculate medical and adult-use issuance separately. Home cultivation is permitted for both medical and adult-use cannabis.^{44,45}
- Cultivation, distribution, manufacturing and dispensary licenses are split between Type M (medical use) and Type A (adult-use).⁴⁶ Licenses are additionally categorized by a number or letter (such as the different Manufacturer licenses detailed below) but these numbers/letters themselves are not indicative of anything beyond coding purposes (in the manufacturer case, for the type of extraction methods used and the type of goods being produced).⁴⁷
- License fees are priced (tiered) according the gross revenue of the business to be licensed (other than for cultivator licenses).⁴⁸ There is a 1-per-person limit on holding Medium tier cultivation licenses (across medical use and adult-use and across type splits) in effect until 2023; the mixed-light tier split in cultivation license types refers to how much artificial light the cultivator is using.⁴⁹
- Adult-use licensing fees (adult-use licensing regime shown here only, for brevity in exposition):^{50,51}
 - Vertically integrated (permits cultivation [$<10,000$ sq. ft.], distribution, manufacturing and retail)⁵²: Type 12 Microbusiness license: \$1,000 application fee (non-refundable) + \$5,000-\$300,000 license fee (paid annually, tiered by gross revenue)
 - Cultivation⁵³: 5 tiers of cultivation license (4 types: indoor/outdoor/mixed-light tier 1/mixed-light tier 2, plus 2 special licenses), ranging from:⁵⁴

³¹ https://apps.azsos.gov/public_services/Title_09/9-18.pdf

³² <https://arktimes.com/news/cannabiz/2020/09/29/arkansas-medical-marijuana-millions>

³³ <https://www.arkansasonline.com/news/2019/jul/07/state-s-rx-pot-sales-hit-2-2m-20190707/>

³⁴ <https://www.dfa.arkansas.gov/images/uploads/medicalMarijuanaCommission/MMCMedicalMarijuanaRules.pdf>

³⁵ <https://www.healthy.arkansas.gov/programs-services/topics/medical-marijuana-faqs>

³⁶ <https://www.dfa.arkansas.gov/images/uploads/medicalMarijuanaCommission/MMCMedicalMarijuanaRules.pdf>

³⁷ <https://armoneyandpolitics.com/applications-open-for-medical-marijuana-processor-and-transporter-licenses/>

³⁸ https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=RTC§ionNum=34011

³⁹ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

⁴⁰ <https://web.archive.org/web/20210419144704/https://www.cdtfa.ca.gov/industry/cannabis.htm>

⁴¹ <https://cannabis.ca.gov/apply-for-a-license/>

⁴² Active licenses as of 2021.05.31 <https://aca6.accela.com/CALCANNABIS/Cap/CapHome.aspx?module=Licenses>

⁴³ Figures for 2021.03.26 latest provided online <https://web.archive.org/web/20210705054506/https://www.bcc.ca.gov/>

⁴⁴ https://leginfo.ca.gov/faces/codes_displaySection.xhtml?sectionNum=11362.5.&lawCode=HSC

⁴⁵ <https://static.cdffa.ca.gov/MCCP/document/Comprehensive%20Adult%20Use%20of%20Marijuana%20Act.pdf>

⁴⁶ <http://www.calcannabislaw.org/california-cannabis-business-license-compliance-cultivation-outdoor-large-adult-use-recreational-a-type-5>

⁴⁷ https://cannabis.ca.gov/wp-content/uploads/sites/13/2019/01/DPH-17-010_Final.pdf

⁴⁸ https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=BPC&division=10.&title=&part=&chapter=5.&article

⁴⁹ https://static.cdffa.ca.gov/MCCP/document/CDFFA%20Final%20Regulation%20Text_01162019_Clean.pdf

⁵⁰ Medical licensing regime is a subset of adult-use licenses (other than events license). Only adult-use licensing shown here for brevity in exposition.

⁵¹ <https://cannabis.ca.gov/applicants/application-license-fees/>

⁵² <https://bcc.ca.gov/licenses/microbusinesses.html>

⁵³ https://static.cdffa.ca.gov/MCCP/document/CDFFA%20Final%20Regulation%20Text_01162019_Clean.pdf

⁵⁴ Type 5 (Large) licenses set to be available from 2023. Only Indoor shown here for brevity in exposition.

- Specialty Cottage Indoor [<500 sq. ft.] Cultivation: \$205 application fee (non-refundable) + \$1,830 license fee (paid annually)
- Medium Indoor [10,001-22,000 sq. ft.] Cultivation: \$8,655 application fee (non-refundable) + \$77,905 license fee (paid annually)
- Nursery (cloning/seed propagation) and Processor (trimming, drying, curing, grading, or packaging) licenses also available
- Type 11/Type 13 Distributor license (unless engaging in transport only self-distribution): \$1,000 application fee (non-refundable) + \$1,500-\$240,000 license fee (paid annually, tiered by gross revenue).
- Type 6/7/N/P/S Manufacturer license: \$1,000 (\$500 for Type S) application fee (non-refundable) + \$2,000-\$75,000 license fee (paid annually, tiered by gross revenue)⁵⁵
- Type 9/Type 10 Retailer license: \$1,000 application fee (non-refundable) + \$2,500-\$96,000 license fee (paid annually, tiered by gross revenue).
- Type 8 Testing Laboratory license: \$1,000 application fee (non-refundable) + \$3,000-\$112,000 license fee (paid annually, tiered by gross revenue).
- Cannabis Event Organizer license: \$1,000 application fee (non-refundable) + \$3,000-\$20,000 license fee (paid annually, tiered by number of events planned).

Colorado – CO

Tax

- Medical cannabis is subject to a 2.9% state sales tax.⁵⁶ CO exempts recreational cannabis transactions from regular sales tax, but levies a 15% sales tax on retail sales as well as a 15% excise duty (levied by weight using the quarterly “fair market rate”) levied on the first transfer of cannabis from a wholesaler to a processor or retailer.^{57,58}

Licensing

- CO licenses both medical and retail cannabis businesses through the Colorado Department of Revenue Marijuana Enforcement Division. Licensees are additionally required to seek a Business Operator license, and licenses for individual employees/owners are also mandated (fees for latter omitted here). As of 2021.07, CO had 1,225 active cultivation licenses⁵⁹ and 1,051 active dispensary licenses⁶⁰ across both medical and adult-use cannabis. Home cultivation is permitted for both medical and adult-use cannabis.^{61,62}
- Retail licensing fees (retail licensing regime shown here only, for brevity in exposition):⁶³
 - Cultivation: 6 tiers (5 classes and additional extended production) of license available
 - Retail Marijuana Cultivation Facility license: \$1,000 application fee + \$1,500 license fee + \$300 renewal application fee (paid annually) + [one of below] (paid annually)
 - Cultivation license renewal fee: Tier 1 [1-1,800 plants] \$1,500, Tier 2 [1,801-3,600 plants] \$2,300, Tier 3 [3,601-6,000 plants] \$3,000, Tier 4 [6,001-10,200 plants] \$4,500, Tier 5 [10,201-13,800 plants] \$6,500, Expanded production management [13,801+ plants] \$6,500 plus an additional \$800 for each class of 3,600 plants above Tier 5 allowance
 - Retail Marijuana Transporter license: \$1,000 application fee + \$4,400 license fee + \$300 renewal application fee (paid annually) + \$4,400 license renewal fee (paid annually)
 - Retail Marijuana Products Manufacturer license: \$5,000 application fee + \$1,500 license fee + \$300 renewal application fee (paid annually) + \$1,500 license renewal fee (paid annually)
 - Retail Marijuana Store license: \$5,000 application fee + \$2,000 license fee + \$300 renewal application fee (paid annually) + \$1,500 license renewal fee (paid annually)
 - Retail Marijuana Testing Facility license: \$1,000 application fee + \$1,500 license fee + \$300 renewal application fee (paid annually) + \$1,500 license renewal fee (paid annually)
 - Marijuana R&D facility license: \$1,000 application fee + \$1,500 license fee + \$300 renewal application fee (paid annually) + \$1,500 license renewal fee (paid annually) [medical only]
 - Hospitality: 2 types of license available
 - Marijuana Hospitality Business license: \$1,000 application fee + \$1,000 license fee (paid annually)
 - Retail Marijuana Hospitality and Sales Business license: \$5,000 application fee + \$2,000 license fee (paid annually)
 - Retail Marijuana Business Operator license: \$1,000 application fee + \$2,200 license fee + \$300 renewal application fee (paid annually) + \$2,200 license renewal fee (paid annually)

Connecticut – CT

Tax

- CT does not levy local or state sales taxes, nor is there excise duty levied on lawful possession or sale of medical cannabis (applies to licensed producers, dispensaries and patients).⁶⁴ Recreational cannabis was legalized in 2021.07, after our sample date.

Licensing

- CT licenses its medical cannabis program through the Connecticut State Department of Consumer Protection. There is no residency restrictions on holding licenses for out-of-state persons. CT has set a maximum limit of 10 producer licenses to be issued in total,

⁵⁵ https://cannabis.ca.gov/wp-content/uploads/sites/13/2019/01/DPH-17-010_Final.pdf

⁵⁶ <https://leg.colorado.gov/agencies/legislative-council-staff/marijuana-taxes%C2%A0>

⁵⁷ <https://taxfoundation.org/recreational-marijuana-tax/>

⁵⁸ <https://leg.colorado.gov/agencies/legislative-council-staff/marijuana-taxes%C2%A0>

⁵⁹ Figures for 2021.07.24 based on downloaded copy of live spreadsheet <https://docs.google.com/spreadsheets/d/170ZEhmBncg8SSlu-uB50wS5-tylgG7p0fRTB1mZhaTU/edit#gid=0>

⁶⁰ Figures for 2021.07.24 based on downloaded copy of live spreadsheet <https://docs.google.com/spreadsheets/d/1PqYThJwGESrwWvcju9vXosuC0BzAw4YtD03RvISKzE/edit#gid=0>

⁶¹ https://gazette.com/government/colorado-lawmakers-boost-number-of-permissible-home-grow-pot-plants-to-24/article_13d343e7-19ca-5db6-bbeb-c5778a4a0b6e.html

⁶² <https://cannabis.colorado.gov/legal-marijuana-use/home-grow-laws>

⁶³ Figures for 2019-20 latest available as of 2021.05 <https://drive.google.com/file/d/18FiNjSptfOZgHjkYr5lEn1AuTJm6m3C8/view>

⁶⁴ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

while there is no statutory limit on dispensary licenses.⁶⁵ As of 2021.05, CT had 4 active producer licenses and 18 active dispensary facility licenses.⁶⁶ Home cultivation was not permitted at the time of our sample date, but was passed in 2021.10.⁶⁷

- Medical licensing fees:^{68,69}
 - Medical marijuana producer license: \$25,000 application fee (non-refundable) + \$75,000 registration fee (paid annually)
 - Medical marijuana dispensary facility license: \$5,000 application fee (non-refundable) + \$5,000 registration fee (paid annually)

District of Columbia – DC

Tax

- Medical cannabis is subject only to 6% district sales tax (there are no local sales taxes).⁷⁰ Recreational cannabis is legal, but not to be sold commercially; the market for it operates in a grey area given that only transfers are permitted by law.^{71,72}

Licensing

- DC licenses its medical cannabis program through the DC Alcoholic Beverage Regulation Administration. Residents must be majority equity holders (>60%) in licensed medical cannabis cultivators or dispensaries.⁷³ DC limits license issuance through rulemaking, and has current limits of 10 cultivation licenses, 7 dispensary licenses and 2 testing facility licenses.⁷⁴ DC requires owners, directors and employees of medical cannabis businesses to also be licensed individually (fees omitted here). Home cultivation is permitted.⁷⁵
- Medical licensing fees:^{76,77}
 - Cultivation center license: \$8,000 application fee + \$11,000 renewal fee (paid annually)
 - Dispensary license: \$8,000 application fee + \$16,000 renewal fee (paid annually)
 - Testing facility license: \$3,500 application fee + \$7,500 renewal fee (paid annually)

Delaware – DE

Tax

- There are no local or state sales taxes in DE, nor does DE levy a state-level excise duty on medical cannabis.⁷⁸ Recreational cannabis is not legal in DE.

Licensing

- In DE, the Delaware Department of Health and Social Services Office of Medical Marijuana licenses vertically-integrated not-for-profit compassion centers are permitted to grow, manufacture and sell medical cannabis products. As of 2021.05, DE has 6 active compassion center licenses.⁷⁹ Though there is no legislated cap on license issuance, in practice this is pegged to the number of registered patients.⁸⁰ Home cultivation is not permitted.⁸¹
- Medical licensing fees:⁸²
 - Compassion center license: \$5,000 application fee (non-refundable) + \$40,000 certification fee + \$40,000 certification renewal fee (paid every 2 years)
 - Safety Compliance Facility: \$40,000 registration fee + \$40,000 registration renewal fee (paid every 2 years)

Florida – FL

Tax

- Medical cannabis sales are exempt from state sales tax and not subject to a state-level excise duty.⁸³ Recreational cannabis is not legal in FL.

Licensing

- In FL, the Florida Department of Health Office of Medical Marijuana Use (OMMU) licenses vertically-integrated Medical Marijuana Treatment Centers (MMTCs) to grow, transport and sell cannabis products. FL's medical cannabis law ties the number of total MMTC licenses to be issued and the number of dispensaries each licensee may open to the number of registered medical cannabis patients in the state.⁸⁴ As of 2021.05, FL has 22 active MMTCs licenses, and patient numbers suggest 15 further will be issued.⁸⁵ Home cultivation is not permitted.
- Medical licensing fees:

⁶⁵ <https://static.votesmart.org/static/billtext/40132.pdf>

⁶⁶ <https://web.archive.org/web/20210525185838/https://portal.ct.gov/DCP/Medical-Marijuana-Program/Medical-Marijuana-Statistics>

⁶⁷ <https://www.ctpost.com/news/article/Legal-marijuana-in-Connecticut-A-timeline-1628552.php>

⁶⁸ https://www.cga.ct.gov/current/pub/chap_420f.htm#sec_21a-408i

⁶⁹ https://eregulations.ct.gov/eRegsPortal/Browse/RCSA/Title_21aSubtitle_21a-408_HTML/#_21a-408-28

⁷⁰ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

⁷¹ Prohibition Partners – the North American Cannabis Report, 2019

⁷² <https://www.cnbc.com/2018/09/15/heres-what-you-need-to-know-about-dc-marijuana.html>

⁷³ <https://code.dccouncil.us/dc/council/code/sections/7-1671.06.html>

⁷⁴ <https://mjbizdaily.com/washington-dc-recreational-cannabis-could-start-after-long-delay/>

⁷⁵ https://www.washingtonpost.com/local/with-marijuana-legalization-green-rush-is-on-in-dc/2015/02/25/23c3f1de-bc78-11e4-b274-e5209a3bc9a9_story.html?hpid=hp_hp-top-table-main-cannabis-legalization-green-rush-is-on-in-dc%3Ahomepage%2Fstory&hpid=hp_hp-top-table-main-cannabis-legalization-green-rush-is-on-in-dc%3Ahomepage%2Fstory

⁷⁶ <https://dchealth.dc.gov/sites/default/files/dc/sites/doh/publication/attachments/MEDICAL%20MARIJUANA.2018.updates.pdf>

⁷⁷ <https://dccouncil.us/wp-content/uploads/2019/11/Draft-Medical-Marijuana-Plant-Count-Elimination-Emergency-Declaration-Resolution-of-2019.pdf>

⁷⁸ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

⁷⁹ <https://web.archive.org/web/20210423173928/https://dhss.delaware.gov/dhss/dph/hsp/medmarcc.html>

⁸⁰ <https://delawarebusinesstimes.com/news/medical-marijuana-rfp/>

⁸¹ <http://delcode.delaware.gov/title16/c049a/index.html>

⁸² <https://dhss.delaware.gov/dhss/dph/hsp/files/mmpdelcode.pdf>

⁸³ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

⁸⁴ http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0381/Sections/0381.986.html

⁸⁵ <https://web.archive.org/web/20210628063601/https://knowthefactsmmj.com/mmmc/>

- MMTC license: \$60,830⁸⁶ application and license fee + \$60,063 license renewal fee (paid annually)⁸⁷ + \$5,000,000 performance bond⁸⁸ + variable food establishment permit fees (if selling edibles, paid annually)⁸⁹

Hawaii – HI

Tax

- Medical cannabis is taxed at the state general excise tax rate of 4% (4.5% on Oahu).⁹⁰ Recreational cannabis is not legal in HI.

Licensing

- In HI, the Hawaii State Department of Health licenses vertically-integrated dispensaries are permitted to grow, manufacture, transport and sell medical cannabis products. Each dispensary is permitted to have up to 2 cultivation locations and 2 dispensing locations.⁹¹ HI residents must be majority equity holders (>51%) in licensed medical cannabis firms.⁹² The University of Hawaii is permitted to possess cannabis for research purposes related to the efficacy of medical cannabis.⁹³ HI limits the number of dispensary licenses to be issued to a total of 8.⁹⁴ Home cultivation is permitted.⁹⁵
- Medical licensing fees:⁹⁶
 - Vertically-integrated dispensary license: \$5,000 application fee + \$75,000 license fee + \$50,000 license renewal fee (paid annually)
 - Testing facility license: \$3,000 certification fee [certification period unknown]⁹⁷

Illinois – IL

Tax

- At the point of sale, medical cannabis is taxed at the pharmaceutical products reduced sales tax rate of 1% (vs 6.25% general rate).⁹⁸ A 7% excise tax is also levied on cultivators at wholesale value.⁹⁹
- Recreational cannabis products are additionally taxed by potency: 10% tax on cannabis flower or products with less than 35% THC; 20% tax on products infused with cannabis, such as edible products; 25% tax on any product with a THC concentration higher than 35%. They are also subject to the 6.25% state sales tax and local excise duties of up to 3%.¹⁰⁰

Licensing

- In IL, the Illinois Department of Financial and Professional Regulation licenses the state’s medical cannabis and adult-use cannabis programs. IL limits the total number of medical cannabis cultivation centres at 22 and dispensaries at 60.¹⁰¹ IL limits the total number of adult-use cultivation center licenses to 30¹⁰², craft grower licenses to 160¹⁰³, and dispensing organization licenses to 500¹⁰⁴. Home cultivation is permitted for medical cannabis, but not adult-use.¹⁰⁵
- Licensed medical cannabis cultivation and dispensary businesses were able to obtain “early” Adult Use licenses rather than going through the conventional Adult Use licensing process; these ran until 2021.03. Social Equity applicants seeking to operate businesses under the Adult Use Cannabis Program are entitled to a 50% reduction on application fees and an exemption for surety bonds.¹⁰⁶ Community college vocational training licenses are zero cost, and permit cultivation for the purpose of training students.¹⁰⁷
- Medical licensing fees:
 - Cultivation center permit: \$25,000 application fee (non-refundable) + \$200,000 permit fee + \$100,000 permit renewal fee (paid annually) + \$2,000,000 surety bond^{108,109}
 - Medical cannabis dispensary: \$30,000 registration fee (non-refundable)¹¹⁰ + \$25,000 registration renewal fee (paid annually)¹¹¹ + \$50,000 surety bond¹¹²
- Recreational licensing fees:¹¹³
 - Cultivation: 2 types of cultivation license:
 - Adult Use Cultivation Center License: \$25,000 application fee (non-refundable) + \$100,000 registration fee (paid annually) + \$100,000 proof of liquid assets
 - Adult Use Cannabis Craft Grower [<5,000 sq. ft. initially, potentially extendable to 14,000 sq. ft.] License: \$5,000 application fee + \$40,000 license fee (non-refundable, paid annually) + \$20,000 proof of liquid assets
 - Transporting organization license: \$5,000 application fee (non-refundable) + \$10,000 license fee (non-refundable, paid annually)

⁸⁶ https://www.flrules.org/Gateway/View_notice.asp?id=19675982

⁸⁷ <https://www.flrules.org/gateway/ruleNo.asp?id=64ER19-8>

⁸⁸ https://knowthefactsmmj.com/wp-content/uploads/_documents/florida-medical-marijuana-performance-bond.pdf

⁸⁹ <https://www.fdacs.gov/content/download/23977/file/food-permit-fees.pdf>

⁹⁰ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

⁹¹ <https://health.hawaii.gov/medicalcannabisregistry/files/2014/11/2016-7-11-Act-230-signed-by-gov.pdf>

⁹² <https://health.hawaii.gov/opppd/files/2015/06/11-850.pdf>

⁹³ https://www.capitol.hawaii.gov/session2016/bills/HB2707_CD1_.htm

⁹⁴ <https://health.hawaii.gov/medicalcannabisregistry/files/2015/07/Act-241-signed-7-14-15.pdf>

⁹⁵ <https://www.hawaiinewsnow.com/2021/04/14/patients-fear-losing-access-medical-cannabis-amid-push-restrict-amateur-grow-operations/>

⁹⁶ <https://health.hawaii.gov/opppd/files/2015/06/11-850.pdf>

⁹⁷ https://health.hawaii.gov/statelab/files/2020/05/EHASB_BR_ADM_Medical_Cannabis_Testing_Facility_Application1v2.pdf

⁹⁸ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

⁹⁹ <https://taxfoundation.org/recreational-marijuana-tax/>

¹⁰⁰ <https://taxfoundation.org/recreational-marijuana-tax/>

¹⁰¹ <https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=3503&ChapterID=35>

¹⁰² <https://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=041007050HARt%2E+20&ActID=3992&ChapterID=35&SeqStart=6900000&SeqEnd=8300000>

¹⁰³ <https://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=041007050HARt%2E+30&ActID=3992&ChapterID=35&SeqStart=9400000&SeqEnd=10650000>

¹⁰⁴ <https://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=041007050HARt%2E+15&ActID=3992&ChapterID=35&SeqStart=3200000&SeqEnd=6900000>

¹⁰⁵ <https://www.ilga.gov/legislation/ilcs/documents/041007050K10-5.htm>

¹⁰⁶ <https://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=3992&ChapterID=35>

¹⁰⁷ <https://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=3992&ChapterID=35>

¹⁰⁸ <https://www.ilga.gov/commission/jcar/admincode/008/008010000B01400R.html>

¹⁰⁹ <https://www2.illinois.gov/sites/mcnp/Documents/Cultivation%20Center%20Surety%20Bond%20Construction%20Form.pdf>

¹¹⁰ <https://www.idfpr.com/MC/332015MedicalCannabisDispensaryRegistrationForm.pdf>

¹¹¹ <https://www.idfpr.com/Forms/MC/Medical%20Cannabis%20Dispensary%20Registration%20Renewal%20Application.pdf>

¹¹² <https://www.idfpr.com/MC/DFPR%20Surety%20Bond%20Form.pdf>

¹¹³ <https://www.ilga.gov/legislation/ilcs/ilcs5.asp?ActID=3992&ChapterID=35>

- Adult Use Cannabis Infuser License: \$5,000 application fee (non-refundable) + \$20,000 license fee (non-refundable, paid annually)
- Adult Use Dispensing Organization License: \$5,000 application fee (non-refundable) + \$60,000 license fee (paid every 2 years) + \$50,000 surety bond
- Community College Cannabis Vocational Pilot Program license [<50 plants for training purposes]: no cost
- Laboratory approval (both medical and Adult Use): no cost¹¹⁴

Louisiana – LA

Tax

- Medical cannabis is exempt from state sales tax but is subject to a 7% excise duty.^{115,116} Recreational cannabis is not legal in LA.

Licensing

- In LA, the Louisiana Department of Agriculture and Forestry licenses medical cannabis producers and the Louisiana Board of Pharmacy licenses pharmacies to dispense cannabis. By law, only the Louisiana State University Agricultural Center and the Southern University Agricultural Center have the right to be (and have been) licensed to cultivate medical cannabis.¹¹⁷ The universities partner with private businesses to manufacture cannabis products in house.¹¹⁸ As of 2021.05, LA has licensed 9 pharmacies (one per region) of a statutory limit of 10 permits in total.¹¹⁹ Home cultivation is not permitted.
- Medical licensing fees:¹²⁰
 - Marijuana Pharmacy Permit: \$450 application fee + \$100,000 escrow/surety bond

Maine – ME

Tax

- Medical cannabis sales are subject to the normal state sales tax of 5.5%.¹²¹ An excise duty is also levied on cultivators at \$335/lb flower; \$94/lb trim; \$1.50 per immature plant or seedling; \$0.30 per seed.¹²²
- Recreational sales are also subject to the above excise duty, plus an excise duty levied at retail of 10% (but not state sales tax).

Licensing

- In ME, the Maine Department of Administrative and Financial Services Office of Marijuana Policy licenses the state's medical and adult-use cannabis programs. ME's medical cannabis program operates through both caregiver and vertically-integrated dispensary models; qualifying patients may nominate a primary caregiver or a vertically-integrated dispensary to cultivate, manufacture and dispense cannabis on their behalf. As of 2021.05, ME has 5 active medical cannabis vertically-integrated dispensary licenses.¹²³ As of 2021.07, ME has 222 active or conditional adult-use cultivation licenses and 232 active or conditional marijuana store licenses.¹²⁴ Home cultivation is permitted for both medical and adult-use.¹²⁵
- Medical licensing fees:¹²⁶
 - Primary caregiver
 - Plant-count-based license application fee: \$240 per 6 mature/12 immature plants (up to 5 times this amount)
 - Plant-canopy-based license application fee: \$240 per 6 mature/12 immature plants (for amounts above plant-count-based limit, max 500 sq. ft.)
 - Vertically-integrated dispensary registration certificate: \$12,000 registration fee (\$11,000 refundable, paid annually)¹²⁷
 - Manufacturing facility registration:¹²⁸
 - Tier 1 (<40 lbs cannabis allowance): \$150 registration fee (non-refundable, paid annually)
 - Tier 2 (<200lbs cannabis allowance): \$250 registration fee (non-refundable, paid annually)
- Recreational licensing fees:¹²⁹
 - Cultivation: 4 tiers of cultivation facility license, split by indoor/outdoor (indoor costs 2x as much as outdoor), ranging from:^{130,131}
 - Tier 1 [<500 sq. ft.] indoor cultivation facility license: \$100 application fee + \$500 license fee (paid annually) [also paid on a per plant basis at Tier 1 level only]
 - to Tier 4 [<20,000 sq. ft.] indoor cultivation facility license: \$500 application fee + \$30,000 license fee (paid annually) [canopy under Tier 4 can be extended for 33% increase in fees]
 - Nursery cultivation license (may only sell immature plants) also available
 - Products manufacturing facility license: \$250 application fee + \$2,500 license fee (paid annually)
 - Marijuana store license: \$250 application fee + \$2,500 license fee (paid annually)
 - Testing: 2 types of testing license:
 - Testing facility license: \$250 application fee + \$1,000 license fee (paid annually)
 - Sample collector license: \$100 application fee + \$250 license fee (paid annually)

¹¹⁴ Laboratory approval requires laboratory to be accredited and to pass staffing requirements; <https://www2.illinois.gov/sites/mcphp/Documents/Lab-Application-Approval-Form.pdf>

¹¹⁵ <https://legiscan.com/LA/bill/HB507/2019>

¹¹⁶ https://www.theadvocate.com/baton_rouge/news/politics/legislature/article_c9a28e12-887a-11e9-b1cd-6b0be4facd9f.html

¹¹⁷ <https://www.ldaf.state.la.us/medical-marijuana/>

¹¹⁸ <https://gbsciences.com/2019/08/07/louisiana-medical-cannabis/>

¹¹⁹ <https://web.archive.org/web/20210426111933/http://www.pharmacy.la.gov/index.cfm?md=pagebuilder&tmp=home&pid=401>

¹²⁰ https://web.archive.org/web/20201016163921/http://www.pharmacy.la.gov/assets/docs/Forms/PHY-TM_PermitPkg_2017-0831.pdf

¹²¹ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

¹²² <https://taxfoundation.org/recreational-marijuana-tax/>

¹²³ <https://www.maine.gov/dafs/omp/medical-use/dispensaries>

¹²⁴ Figures for 2021.07.24 <https://www.maine.gov/dafs/omp/open-data/adult-use>

¹²⁵ <https://legislature.maine.gov/statutes/28-B/title28-Bsec1502.html>

¹²⁶ https://www.maine.gov/dafs/omp/sites/maine.gov.dafs.omp/files/inline-files/OMP_MMMP_Form-001_Application-Caregiver.pdf

¹²⁷ <https://www.maine.gov/dafs/omp/medical-use/rules-statutes/18-691-C.M.R.-ch.-2>

¹²⁸ <https://www.maine.gov/dafs/omp/medical-use/rules-statutes/18-691-C.M.R.-ch.-4>

¹²⁹ <http://legislature.maine.gov/statutes/28-B/title28-Bsec207.html>

¹³⁰ <http://legislature.maine.gov/statutes/28-B/title28-Bsec301.html>

¹³¹ <http://legislature.maine.gov/statutes/28-B/title28-Bsec501.html>

Maryland – MD

Tax

- Medical cannabis is not subject to the state sales tax, nor are additional excise duties levied (there are no local sales taxes).¹³² Recreational cannabis is not legal in MD.

Licensing

- In MD, the Maryland Medical Cannabis Commission licenses the state’s medical cannabis program. MD limits vertical integration, mandating that a person or entity may have an interest in no more than 1 grower, 1 processor and 4 dispensary licensees.¹³³ MD requires individuals associated with licensed cannabis businesses to register as agents and pay one-time agent fees of \$100-200.¹³⁴ MD issues licenses for an initial 6 year period, renewable thereafter in 4 year terms, though license fees are charged annually, and charges an additional fee for manufacturers and dispensaries selling edible cannabis products. As of 2021.05, MD has 15 pre-approved or active licensed cultivators¹³⁵ and 102 pre-approved or active licensed dispensaries¹³⁶. Home cultivation is not permitted.¹³⁷
- Medical licensing fees:¹³⁸
 - License as Grower and Dispensary: \$11,000 application fee + \$165,000 license fee (paid annually)
 - License as Grower-only: \$6,000 application fee + \$125,000 license fee (paid annually)
 - Licensed Processor: \$6,000 application fee + \$40,000 license fee (paid annually)
 - Licensed Dispensary: \$5,000 application fee + \$40,000 license fee (paid annually)
 - Independent Testing Laboratory: \$100 registration fee + \$100 renewal fee (paid annually)
 - Academic research institution license: \$1,000 registration fee + \$500 renewal fee (paid per subsequent/modified project)

Massachusetts – MA

Tax

- Medical cannabis is exempt from the state sales tax (there are no local sales taxes).¹³⁹
- Retail sales of cannabis are subject to a state sales tax of 6.25% and an excise duty of 10.75%.¹⁴⁰

Licensing

- In MA, the Commonwealth of Massachusetts Cannabis Control Commission licenses medical and adult-use cannabis businesses. There is no residency requirement for medical or adult-use licenses (except the craft cooperative license).¹⁴¹ As of 2021.07, MA had 269 active adult-use cultivation licensees and 363 active adult-use retailer licensees.¹⁴² MTC license figures are unknown, but were reportedly 76 as of 2021.02.¹⁴³ Home cultivation is permitted for both medical and adult-use.¹⁴⁴
- In MA, vertically-integrated Marijuana Treatment Centers (MTCs) are responsible for dispensing, cultivating, and processing cannabis for medical use. MA residents may cultivate up to 6 plants per person for personal use (max 12 per household).
- Vertical integration is not mandated for adult-use businesses. For Social Equity applicants, MA charges no application fees and gives a 50% reduction in license fees. Microbusiness certification is available for small-scale cultivators/manufacturers with only 1 license which also permits a 50% reduction in license fees. The Craft Marijuana Cooperative license permits both cultivation and manufacturing: cultivation is limited to a total of 100,000 sq. ft. across many locations, manufacturing in up to 3 locations.
- Medical licensing fees:
 - MTC license: \$3,500 application fee¹⁴⁵ + \$50,000 license fee (paid annually)¹⁴⁶ + \$500,000 capital requirement
- Adult-use licensing fees:¹⁴⁷
 - Cultivation: 11 tiers of Marijuana Cultivator license, split by indoor/outdoor (indoor shown here, application and license fees cost 2x as much as outdoor), ranging from:¹⁴⁸
 - Tier 1 [<5,000 sq. ft.] indoor: \$200 application fee + \$1,250 license fee (paid annually), to Tier 11 [<100,000 sq. ft.] indoor: \$2,000 application fee + \$50,000 license fee (paid annually)
 - Craft marijuana cooperative license: same applicable fees as Marijuana Cultivator license plus additional \$200+1,250 application and license fee for each cultivation site above 6 locations.
 - Distribution: 3 types of distribution license:
 - Third-party Transporter license: \$1,500 application fee + \$5,000 license fee (paid annually)
 - Existing Licensee Transporter license: \$1,000 application fee + \$5,000 license fee (paid annually)
 - Marijuana Delivery-only license: \$1,500 application fee + \$10,000 license fee (paid annually)
 - Marijuana Product Manufacturing license: \$1,500 application fee + \$10,000 license fee (paid annually)
 - Marijuana Retailer (brick-and-mortar) license: \$1,500 application fee + \$10,000 license fee (paid annually)
 - Independent Testing Laboratory license: \$1,500 application fee + \$10,000 license fee (paid annually)
 - Marijuana Research Facility license: \$300 application fee + \$1,000 license fee (paid annually)
 - Social Consumption Establishment license: \$1,500 application fee + \$10,000 license fee (paid annually)

¹³² <https://taxfoundation.org/recreational-marijuana-tax/>

¹³³ https://mmcc.maryland.gov/Documents/2020_Policy_Regulations/Ownership_and_Control_Requirements_Updated_10.15.2020docx.pdf

¹³⁴ <http://mdrules.elaws.us/comar/10.62.35.01>

¹³⁵ <https://web.archive.org/web/20210503204402/https://mmcc.maryland.gov/Pages/growers.aspx>

¹³⁶ <https://web.archive.org/web/20210503205009/https://mmcc.maryland.gov/Pages/dispensaries.aspx>

¹³⁷ <https://baltimore.cbslocal.com/2022/02/15/marijuana-legalization-could-be-on-the-november-ballot-in-maryland/>

¹³⁸ <http://www.dsd.state.md.us/comar/comarhtml/10/10.62.35.01.htm>

¹³⁹ [Directive 15-1: Sales Tax Exemption for Medical Marijuana | Mass.gov](https://www.mass.gov/directive-15-1-sales-tax-exemption-for-medical-marijuana)

¹⁴⁰ <https://taxfoundation.org/recreational-marijuana-tax/>

¹⁴¹ <https://www.mass.gov/guides/registered-medical-dispensary-rmd-application-process-faq>

¹⁴² Figures for 2021.07.24 [downloaded data] <https://opendata.mass-cannabis-control.com/Licensing-and-Applications/Licenses-Awarded-by-Type/mye9-t9zc>

¹⁴³ <https://www.bizjournals.com/boston/news/2021/02/13/ma-medical-marijuana-patients-reach-highest-level.html>

¹⁴⁴ <https://masscannabiscontrol.com/home-cultivation/>

¹⁴⁵ <https://mass-cannabis-control.com/medical-marijuana-treatment-center-license-applications-move-online-to-the-massachusetts-cannabis-industry-portal/>

¹⁴⁶ <https://masscannabiscontrol.com/license-fees/>

¹⁴⁷ <https://casetext.com/regulation/code-of-massachusetts-regulations/department-935-cmr-cannabis-control-commission/title-935-cmr-500000-adult-use-marijuana/section-500005-fees>

¹⁴⁸ There is also a special class of cultivation license for MA residents: craft marijuana cooperatives are subject to the above fees, but may split canopy across multiple locations and may also manufacture cannabis products.

Michigan – MI

Tax

- Medical cannabis is subject only to 6% state sales tax (there are no local sales taxes).¹⁴⁹ Recreational cannabis is subject to 6% sales tax and a 10% retail excise duty.¹⁵⁰

Licensing

- In MI, the Michigan Marijuana Regulatory Agency licenses medical and adult-use cannabis businesses. As of 2021.05, MI had 948 active cultivation licenses and 732 active retailer licenses across both medical and adult-use cannabis.¹⁵¹ Home cultivation is permitted for both medical and adult-use.¹⁵²
- Uniquely, MI sets cultivation license renewal fees depending on weight of processed cannabis.¹⁵³ Fees for Social Equity program participants can be waived up to 75% for adult-use (not medical) licenses.¹⁵⁴ MI issues vertically-integrated licenses to microbusinesses only, who are permitted to cultivate, process and dispense cannabis.
- Recreational licensing fees (recreational licensing regime shown here only, for brevity in exposition).^{155,156}
 - Marijuana Microbusiness [<150 plants] license: \$6,000 application fee (non-refundable) + \$8,000 initial license fee + \$6,000-10,000 license renewal fee (contingent on weight processed, paid annually)
 - Cultivation: 4 tiers (3 classes plus additional Excess Marijuana Grower license¹⁵⁷), ranging from:
 - Class A [<500 plants] Marijuana Grower license: \$6,000 application fee (non-refundable) + \$4,000 initial license fee + \$3,000-5,000 license renewal fee (contingent on weight processed, paid annually)
 - to Class C [<1,500 plants] Marijuana Grower license: \$6,000 application fee (non-refundable) + \$40,000 initial license fee (paid annually) + \$30,000-50,000 license renewal fee (contingent on weight processed, paid annually)
 - plus Excess Marijuana Grower license: \$40,000 license fee + \$30,000-50,000 license renewal fee (paid annually)
 - Marijuana Secure Transporter license: \$6,000 application fee (non-refundable) + \$25,000 initial license fee + \$20,000-30,000 license renewal fee (contingent on weight processed, paid annually)
 - Marijuana Processor license: \$6,000 application fee (non-refundable) + \$40,000 initial license fee + \$30,000-50,000 license renewal fee (contingent on weight processed, paid annually)
 - Marijuana Retailer license: \$6,000 application fee (non-refundable) + \$25,000 initial license fee + \$20,000-30,000 license renewal fee (contingent on weight processed, paid annually)
 - Marijuana Safety Compliance Facility license: \$6,000 application fee (non-refundable) + \$25,000 initial license fee + \$20,000-30,000 license renewal fee (contingent on weight processed, paid annually)
 - Marijuana Event Organizer license: \$6,000 application fee (non-refundable) + \$1,000 license fee (paid annually)
 - Designated Consumption Establishment license: \$6,000 application fee (non-refundable) + \$1,000 license fee (paid annually)

Minnesota – MN

Tax

- Medical cannabis is exempt from the state sales tax (though local taxes may apply).¹⁵⁸ Recreational cannabis is not legal in MN.

Licensing

- In MN, the Minnesota Department of Health Office of Medical Cannabis licenses medical cannabis businesses. MN law stipulates registration of exactly two vertically-integrated producers, which are responsible for cultivation, manufacturing, transportation, and dispensing medical cannabis; both companies initially licensed in 2014 are still licensees, and operate multiple dispensaries.¹⁵⁹ Home cultivation is not permitted.¹⁶⁰
- Medical licensing fees:
 - Manufacturer license: \$20,000 application fee (non-refundable)¹⁶¹ + \$75,000-100,000 oversight fee (paid annually)¹⁶²
 - Laboratory Approval: licensing possible by state to permit direct contracting with manufacturers¹⁶³

Mississippi – MS

- In 2020.11, voters in MS passed Initiative 65 to legalize medical cannabis.¹⁶⁴ The Initiative detailed that cannabis would be available for named patients on doctor's recommendation with one of a set of predefined debilitating conditions. In 2021.05, the state supreme court struck down Initiative 65, the first time a voter-passed legal cannabis ballot had been voided.¹⁶⁵ As of 2021.10, legislative solutions to medical cannabis legalization are reportedly being discussed.¹⁶⁶ Recreational cannabis is not legal in MS.

Missouri – MO

Tax

¹⁴⁹ https://www.michigan.gov/documents/treasury/RAB_2018-2_Marihuana_611377_7.pdf

¹⁵⁰ <https://taxfoundation.org/recreational-marijuana-tax/>

¹⁵¹ Figures for 2021.07.24 – Cultivation Class A not shown [downloaded data] <https://michigan.maps.arcgis.com/apps/webappviewer/index.html?id=cd5a1a76daaf470b823a382691c0ff60>

¹⁵² <https://www.michigan.gov/lara/0,4601,7-154-11472-562586--,00.html>

¹⁵³ <https://www.mlive.com/news/2019/08/michigan-officials-shake-up-medical-marijuana-business-license-fees.html>

¹⁵⁴ <https://www.michigan.gov/som/0,4669,7-192-47796-529549--,00.html>

¹⁵⁵ Recreational regime only included here for brevity of exposition <https://web.archive.org/web/20210622141940/https://www.michigan.gov/mra/0,9306,7-386-83746-516320--,00.html>

¹⁵⁶ The medical license regime is a subset of the recreational license regime in terms of scope, though license and renewal fees are significantly higher for medical businesses:

https://www.michigan.gov/documents/lara/ADVISORY_BULLETIN_-_MMFLA_Regulatory_Assessment_FY_2020_662682_7.pdf

¹⁵⁷ Issued only to persons holding at least both 5 Class C recreational licenses and 2 Class C medical licenses; permits dual medical and adult-use producers to extend their adult-use cultivation capacity by their existing medical cannabis cultivation capacity in increments of 2,000 plants.

¹⁵⁸ [Directive 15-1: Sales Tax Exemption for Medical Marijuana | Mass.gov](https://www.mass.gov/info-details/directive-15-1-sales-tax-exemption-for-medical-marijuana)

¹⁵⁹ <https://www.revisor.mn.gov/laws/2014/0/311/>

¹⁶⁰ <https://www.minnpost.com/state-government/2021/10/new-rules-for-minnesotas-medical-marijuana-program-could-end-up-quadrupling-number-of-patients-in-program/>

¹⁶¹ <https://www.health.state.mn.us/people/cannabis/manufacture/selection/mfrqa.html#appfee2>

¹⁶² <https://www.health.state.mn.us/people/cannabis/manufacture/selection/rfaclarifications.html>

¹⁶³ <https://www.health.state.mn.us/people/cannabis/manufacture/lab/index.html>

¹⁶⁴ <https://mjbizdaily.com/marijuana-election-results-2020/>

¹⁶⁵ <https://mjbizdaily.com/mississippi-supreme-court-voids-voter-ratified-medical-cannabis-legalization-measure/>

¹⁶⁶ <https://mississippitoday.org/2021/10/28/reeves-medical-marijuana-session/>

- Medical cannabis is subject to the state sales tax of 4.225% and an excise duty of 4% (local taxes may also apply).¹⁶⁷ Recreational cannabis is not legal in MO.

Licensing

- In MO, the Missouri Department of Health and Senior Services licenses medical cannabis businesses. As of 2021.07, MO had 23 active cultivation licenses and 132 active dispensary licenses.¹⁶⁸ Home cultivation is permitted.¹⁶⁹
- Medical licensing fees:¹⁷⁰
 - Medical marijuana cultivating facility license: \$10,000 application fee (non-refundable) + \$25,000 license fee (paid annually) + \$5,000 license renewal fee (non-refundable, paid every 3 years)
 - Medical marijuana-infused manufacturing facility license: \$6,000 application fee (non-refundable) + \$10,000 license fee (paid annually) + \$3,000 license renewal fee (non-refundable, paid every 3 years)
 - Medical marijuana dispensary facility license: \$6,000 application fee (non-refundable) + \$10,000 license fee (paid annually) + \$3,000 license renewal fee (non-refundable, paid every 3 years)

Montana – MT

Tax

- Medical cannabis is subject only to a 2% excise tax levied at retail (MT has no state or local sales taxes outside of resort taxes).¹⁷¹
- In 2020.11, voters in MT passed Initiative 190 to legalize recreational cannabis.¹⁷² The measure would create a wholesale market and outlines licensing and regulation for cultivation, testing, transportation and sale.¹⁷³ A 20% excise tax on recreational cannabis levied at retail is also included.

Licensing

- In MT, the Montana Department of Public Health and Human Services licensed medical cannabis businesses until legislation was passed moving control to the Montana Department of Revenue, effective 2021.07. MT licenses vertically-integrated providers and does not permit wholesaling/processing transactions between providers; hence, each provider is required to have at least one cultivation site and one dispensary location. Fees are charged based on the different components of the overall vertically-integrated licensure, but these license components are not available as separate licenses. As of 2021.05, MT had 281 approved vertically-integrated provider licensees.¹⁷⁴ Home cultivation is permitted.¹⁷⁵
- Medical licensing fees:¹⁷⁶
 - Vertically-integrated provider license components:
 - Cultivation (Provider): 10 tiers of Canopy License, with fees ranging from: \$500 for micro [total <250 sq. ft. at one location] to \$20,000 for tier 9 [total <20,000 sq. ft. across 6 locations] (paid annually)¹⁷⁷ + a Location license for each grow site
 - Manufacturing Location (MIPP) License: \$500 per manufacturing location (paid annually) + \$100 Chemical Manufacturing Endorsement (paid annually)
 - Dispensary: 4 tiers of ranging from: \$500 for 1 location, to \$100,000 for 6+ locations (paid annually)
 - Laboratory license: \$2,000 application and license fee (non-refundable, paid annually)¹⁷⁸
- MT's recreational marijuana program Initiative 190 is forthcoming, and limited to existing licensed medical establishments for the first year of the program; licenses are set to be available from 2021.10.¹⁷⁹ Licensing is limited to residents, and is set to include:
 - Vertically-integrated retail licenses: adult-use provider license and adult-use cannabis-infused products provider (permitting cultivation, processing, transportation and sale)
 - Cultivation: 10 tiers of canopy license [ranging from 1,000 sq. ft. to 30,000 sq. ft.]
 - Retail license: adult-use dispensary license
 - Testing laboratory license

Nevada – NV

Tax

- Medical cannabis sales are subject to state sales tax of 6.85% (local taxes may also apply).¹⁸⁰ An excise tax of 15% is levied on cultivators at semi-annually calculated Fair Market Value at wholesale prices.^{181,182} Recreational cannabis sales are subject to the above, plus an excise duty of 10% (local taxes may also apply).¹⁸³

Licensing

- In NV, the Nevada Cannabis Compliance Board licenses medical and recreational cannabis businesses. NV allows for dual licensees – i.e. holders of both medical and recreational licenses – to be co-located at the same address. As of 2021.05, NV had 310 active cultivation licenses and 147 active dispensary licenses across both medical and recreational cannabis; of these, 150 cultivation

¹⁶⁷ <https://dor.mo.gov/business/medical-marijuana.php>

¹⁶⁸ Figures for 2021.07.24 [downloaded data] <https://health.mo.gov/safety/medical-marijuana/licensed-facilities.php>

¹⁶⁹ <https://health.mo.gov/safety/medical-marijuana/faqs-patient.php#cultivation>

¹⁷⁰ <https://health.mo.gov/safety/medical-marijuana/pdf/mu-market-study.pdf>

¹⁷¹ jan2018-summary-of-activities-to-date.pdf (mt.gov)

¹⁷² <https://mjbizdaily.com/marijuana-election-results-2020/>

¹⁷³ <https://sosmt.gov/wp-content/uploads/1-190.pdf>

¹⁷⁴ Figures for 2021.05 [downloaded data] <https://mtrevenue.gov/cannabis/mmp-reports-dashboard/>

¹⁷⁵ <https://mtrevenue.gov/cannabis/faqs/>

¹⁷⁶ <https://web.archive.org/web/20210421213705/https://dphhs.mt.gov/marijuana/provider/>

¹⁷⁷ https://leg.mt.gov/bills/mca/title_0500/chapter_0460/part_0030/section_0050/0500-0460-0030-0050.html

¹⁷⁸ <https://web.archive.org/web/20210410121015/https://dphhs.mt.gov/marijuana/laboratories>

¹⁷⁹ <https://agr.mt.gov/News/montana-department-of-revenue-has-begun-process-to-make-licenses-available-for-recreational-marijuana-cultivation-and-sale>

¹⁸⁰ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

¹⁸¹ <https://taxfoundation.org/recreational-marijuana-tax/>

¹⁸² [Retail Marijuana \(nv.gov\)](https://retail.marijuana.nv.gov/)

¹⁸³ <https://taxfoundation.org/recreational-marijuana-tax/>

licensees and 66 dispensaries were dual licensees.¹⁸⁴ Home cultivation is permitted for medical, and adult-use (if more than 25 miles from a dispensary).¹⁸⁵

- Recreational licensing fees (recreational licensing regime shown here only, for brevity in exposition):¹⁸⁶
 - Cultivation license: \$5,000 application fee (non-refundable) + \$30,000 license fee + \$10,000 renewal fee (paid annually)
 - Distributor license: \$5,000 application fee (non-refundable) + \$15,000 license fee + \$5,000 renewal fee (paid annually)
 - Production license: \$5,000 application fee (non-refundable) + \$10,000 license fee + \$3,300 renewal fee (paid annually)
 - Dispensary license: \$5,000 application fee (non-refundable) + \$20,000 license fee + \$6,600 renewal fee (paid annually)
 - Laboratory license: \$5,000 application fee (non-refundable) + \$15,000 license fee + \$5,000 renewal fee (paid annually)

New Hampshire – NH

Tax

- NH has no state or local sales taxes, nor is a state-level excise duty levied on medical cannabis.¹⁸⁷ Recreational cannabis is not legal in NH.

Licensing

- In NH, the New Hampshire Department of Health and Human Services Division of Public Health Services licenses vertically-integrated alternative treatment centers (ATCs) to grow, process and dispense medical cannabis. NH has set a statutory limit of 4 ATC licenses to be issued, with each ATC able to open up to 2 dispensaries each, contingent on regional demand.¹⁸⁸ Home cultivation is not permitted.¹⁸⁹
- Medical licensing fees:¹⁹⁰
 - ATC license: \$3,000 application fee (non-refundable), \$20,000 selection fee + [variable program expenses fee, based on program expenses and amount of cannabis dispensed] (paid annually)

New Jersey – NJ

Tax

- Medical cannabis sales are subject to a special state sales tax rate of 4%, less than the 6.625% state-wide rate; this is planned to taper to 0% by 2022.07.¹⁹¹
- In 2020.11, voters in NJ voted for Public Question 1 to legalize adult-use (recreational) cannabis.¹⁹² The measure says adult-use cannabis sales will be regulated by the state's Cannabis Regulatory Commission (which already administers the medical cannabis program) and will be subject to the state sales tax of 6.625%.¹⁹³ Adult-use sales will also be subject to a Social Equity Excise Fee levied at wholesale at 0.33% of the average retail price per ounce for the first 9 months, then on a sliding scale from \$10-\$60 per ounce, depending on the average state-wide retail price for cannabis. Local excise taxes of 1-2% may be also be levied and can be levied multiple times at different points in the supply chain (on cultivators, manufactures, retailers [2%] and wholesalers [1%]).¹⁹⁴

Licensing

- In NJ, the New Jersey Department of Health Division of Medicinal Marijuana licensed medical cannabis businesses until new recreational cannabis laws passed in 2021.02 created a New Jersey Cannabis Regulatory Commission to license both medical and recreational cannabis businesses. NJ licenses vertically-integrated adult treatment centers (ATCs) to grow, process and dispense medical cannabis at multiple locations per licensee (locations are competitively bid for). As at 2021.05, NJ had 10 active ATC licenses with one location each and was soliciting applications from existing licensees for up to 24 further locations.¹⁹⁵ Home cultivation is not permitted.¹⁹⁶
- Medical licensing fees:¹⁹⁷
 - ATC license: \$20,000 application fee (90% refundable)
- Recreational cannabis laws were passed in 2021.02, and as of 2021.05, the full set of regulations for the industry were expected to be finalized in the coming month(s).¹⁹⁸ The following license types are expected for the recreational cannabis industry:¹⁹⁹
 - Cultivator
 - Manufacturer
 - Wholesaler
 - Distributor
 - Retailer
 - Delivery

New Mexico – NM

Tax

- Medical cannabis sales are subject to 5.125% state sales tax.²⁰⁰ Recreational cannabis was legalized in 2021.06, after our sample date.²⁰¹

Licensing

¹⁸⁴ <https://ccb.nv.gov/wp-content/uploads/2021/06/Cannabis-Establishment-Statistic-May-2021.pdf>

¹⁸⁵ <https://www.rgj.com/story/news/marijuana/2018/02/21/watch-growing-marijuana-home-federally-illegal-but-pretty-easy/359719002/>

¹⁸⁶ Medical use licensing omitted here for brevity in exposition; medical has same range of licenses available as for recreational use (minus Distribution). Medical license fees are significantly less (other than for Dispensary), application fees are the same: https://web.archive.org/web/20201016205730/https://tax.nv.gov/MME/Marijuana_Establishments_-_Home/

¹⁸⁷ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

¹⁸⁸ <https://mjbizdaily.com/new-hampshires-new-satellite-dispensary-law-aims-to-boost-medical-marijuana-program-chart/>

¹⁸⁹ <https://www.seacoastonline.com/story/news/local/2021/08/20/new-hampshire-marijuana-laws-weed-is-legal-in-surrounding-states-will-nh-follow/8101297002/>

¹⁹⁰ http://gencourt.state.nh.us/rules/state_agencies/he-c400.html

¹⁹¹ <https://web.archive.org/web/20210323085207/https://www.state.nj.us/treasury/taxation/marijuanasalestaxchangenotice.shtml>

¹⁹² <https://mjbizdaily.com/marijuana-election-results-2020/>

¹⁹³ <https://www.state.nj.us/state/elections/assets/pdf/election-results/2020/2020-public-question-01-english.pdf>

¹⁹⁴ https://www.njleg.state.nj.us/2020/Bills/A0500/21_R2.PDF

¹⁹⁵ <https://web.archive.org/web/20210504232202/https://www.nj.gov/health/medicalmarijuana/alt-treatment-centers/>

¹⁹⁶ <https://www.app.com/story/news/local/new-jersey/marijuana/2022/01/18/nj-legal-weed-home-grow-no-go-but-advocates-push-change/6528890001/>

¹⁹⁷ Prohibition Partners – the North American Cannabis Report, 2019

¹⁹⁸ <https://mjbizdaily.com/new-jersey-governor-signs-recreational-marijuana-law/>

¹⁹⁹ <https://mjbizdaily.com/new-jersey-lawmakers-pass-bill-to-regulate-recreational-marijuana-market/>

²⁰⁰ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

²⁰¹ <https://apnews.com/article/nm-state-wire-new-mexico-business-a952ce277d7edd8990a812f2ab7c6329>

- In NM, the New Mexico Department of Health Medical Cannabis Program licenses vertically-integrated non-profit producers (LNPP) to cultivate distribute, manufacture and dispense cannabis. In addition to commercial production, NM issues personal (<4 mature female + <12 other plants) cultivation licenses for \$30 (paid annually). As of 2021.05, NM had 122 active LNPP licenses.²⁰² Home cultivation is permitted.²⁰³
- Medical licensing fees:²⁰⁴
 - LNPP [max <1,750 plants, with 500 plant extension possible from mid-2021] license: \$10,000 application fee (\$9,000 refundable) + \$40,000 base license fee for first 500 plants (paid annually) + \$5,000 additional license fee for each increment of 50 plants from 500-1,000 plants (paid annually) + \$6,000 additional license fee for every 50 plants above 1,000 (paid annually)
 - Cannabis courier license: \$1,500 application fee (non-refundable, payable annually)
 - Cannabis manufacturer license: \$5,000 application fee (non-refundable, payable annually)
 - Cannabis testing facility license: \$2,200 application fee (non-refundable, payable annually)

New York – NY

Tax

- Medical cannabis is not subject to state sales tax, but a 7% excise tax is levied at retail.²⁰⁵
- In 2021.03, NY passed a law expanding access to medical cannabis and legalizing adult-use cannabis, the Marijuana Regulation and Taxation Act.²⁰⁶ Adult-use cannabis is not subject to state sales tax, but a 9% state excise tax and a 4% local excise tax (mandated, not optional; this is effectively a 13% tax but the revenue streams are split between the state and locality) will be levied on adult-use cannabis sales at the point of retail, in addition to a novel tiered tax structure on the THC potency of products per milligram levied on distributors at wholesale: flower will be taxed at \$0.005 per mg, concentrate at \$0.008 per mg, and edible as \$0.03 per mg.

Licensing

- In NY, the New York State Department of Health Medical Marijuana Program currently licenses medical cannabis businesses, but the law passed in 2021.03 will lead to the creation of an Office of Cannabis Management governed by a Cannabis Control Board to license both medical and adult-use cannabis. NY currently licenses vertically-integrated Registered Organizations to cultivate, manufacture and dispense medical cannabis. In the first and only registration period so far, 10 businesses have so far been licensed and are permitted to open up to 8 dispensaries each; this was increased from 4 previously.²⁰⁷ The number of registered organizations permitted is limited to how well the board considers geographic areas are served. Home cultivation is permitted for both medical and adult-use cannabis.
- Medical licensing fees:²⁰⁸
 - Registered Organization license: \$10,000 application fee (non-refundable) + \$200,000 registration fee (registration lasts 2 years).
- Under the adult-use cannabis legislation, vertical integration is forbidden, as persons with an ownership interest in cultivator or processor licensees may not maintain an ownership interest in dispensary licensees. The Act mandates the creation of an Office of Cannabis Management to oversee regulation of the adult-use industry, and outlined the following license types:²⁰⁹

○ Cultivators	○ Retailers
○ Processors	○ Delivery
○ Cooperatives and Microbusiness	○ On-site consumption
○ Distributors (wholesale)	○ Nursery
○ Laboratories	○ Research

North Dakota – ND

Tax

- Medical cannabis is subject to the state sales tax of 5%.²¹⁰ Recreational cannabis is not legal in ND.

Licensing

- In ND, the North Dakota Department of Health Division of Medical Marijuana licenses compassion centers to either cultivate and manufacture or dispense cannabis. By law, there are no more than 2 compassion centers with the sole purpose of cultivation/manufacturing and no more than 8 with the sole purpose of operating as a dispensary.²¹¹ Separate manufacturing licenses are not issued. Cultivation/manufacturing licensees may also conduct research on 50 plants not counted towards their capacity limit. Home cultivation is not permitted.²¹²
- Medical licensing fees:²¹³
 - Compassion center manufacturing facility license: \$5,000 application fee + \$110,000 certification fee (payable every 2 years) + \$10,000 additional certification fee for every 500 plants above 1,000 (payable every 2 years)
 - Compassion center dispensary license: \$5,000 application fee + \$90,000 certification fee (payable every 2 years)

Ohio – OH

Tax

- Medical cannabis is subject to state sales tax of 5.75%.²¹⁴ Recreational cannabis is not legal in OH.

²⁰² Latest figures from 2020.11 <https://web.archive.org/web/20210421030449/https://www.nmhealth.org/publication/view/general/2101/>

²⁰³ <https://www.krwg.org/regional/2021-05-12/growing-cannabis-at-home-what-does-this-mean-for-new-mexico-households>

²⁰⁴ <http://164.64.110.134/parts/title07/07.034.0004.html>

²⁰⁵ [TSB-M-16\(1\)M:\(1/16\):Tax Requirements for New York Medical Marijuana Registered Organizations:tsbm161m \(ny.gov\)](https://www.health.ny.gov/regulations/medical_marijuana/application/selected_applicants.htm)

²⁰⁶ <https://legislation.nysenate.gov/pdf/bills/2021/S854A>

²⁰⁷ https://www.health.ny.gov/regulations/medical_marijuana/application/selected_applicants.htm

²⁰⁸ https://www.health.ny.gov/regulations/medical_marijuana/application/applications.htm

²⁰⁹ <https://www.governor.ny.gov/news/governor-cuomo-signs-legislation-legalizing-adult-use-cannabis>

²¹⁰ <https://weedmaps.com/learn/laws-and-regulations/north-dakota/>

²¹¹ https://www.ndhealth.gov/mm/PDF/Program_Informational_Guides/FAQ%20for%20Compassion%20Centers%20-%20Updated%206-21-18.pdf

²¹² <https://www.keloland.com/news/capitol-news-bureau/home-grown-medical-marijuana-is-illegal-in-north-dakota-director-tells-s-d-legislators/>

²¹³ <https://www.legis.nd.gov/cencode/t19c24-1.pdf>

²¹⁴ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

Licensing

- In OH, the Ohio Department of Commerce licenses medical cannabis cultivators, processors and testing laboratories, and the State of Ohio Board of Pharmacy licenses medical cannabis dispensaries. As of 2021.05, OH had 34 active and provisional cultivation licenses²¹⁵, and 57 active dispensary licenses plus a further 73 to be awarded²¹⁶. Home cultivation is not permitted.
- Medical licensing fees:^{217,218}
 - Cultivation: 2 tiers of cultivation license:
 - Level I [<25,000 sq. ft.]: \$20,000 application fee (non-refundable) + \$180,000 initial license fee + \$200,000 license renewal fee (payable annually)
 - Level II [<3,000 sq. ft.]: \$2,000 application fee (non-refundable) + \$18,000 initial license fee + \$20,000 license renewal fee (payable annually)
 - Processor license: \$10,000 application fee (non-refundable) + \$90,000 initial license fee + \$100,000 license renewal fee (payable annually)
 - Dispensary license: \$5,000 application fee (non-refundable) + \$70,000 certification fee + \$70,000 license renewal fee (payable every 2 years)²¹⁹
 - Laboratory license: \$2,000 application fee (non-refundable) + \$18,000 certification fee + \$20,000 license renewal fee (payable annually)

Oklahoma – OK

Tax

- Medical cannabis is subject to state sales tax of 5.75% and excise duty of 7%.²²⁰ Recreational cannabis is not legal in OK.

Licensing

- In OK, the Oklahoma Medical Marijuana Authority licenses medical cannabis businesses. Applicants are required to prove residency in OK for either the 2 years prior to application or 5 years continuously at any time in the past 25 years, and ownership of registered businesses by non-residents is capped at 25%.²²¹ As of 2021.05, OK had 7,624 active cultivation licenses²²² and 2,236 active dispensary licenses²²³. Home cultivation is permitted.²²⁴
- Medical licensing fees^{225,226,227}
 - Grower license: \$2,500 application fee (non-refundable, paid annually)
 - Transporter license: \$2,500 application fee (non-refundable, paid annually)
 - Processor: \$2,500 application fee (non-refundable, paid annually)
 - Dispensary: \$2,500 application fee (non-refundable, paid annually)
 - Testing Laboratory license: \$2,500 application fee (non-refundable, paid annually)
 - R&D: 2 types of R&D license:²²⁸
 - Research Facility license: \$500 application fee (non-refundable, paid annually)
 - Education Facility license: \$500 application fee (non-refundable, paid annually)

Oregon – OR

Tax

- There is no state sales tax in OR, nor is there an excise duty levied on medical cannabis.²²⁹
- Recreational cannabis sales are subject to a retail excise duty of 17% and a local excise duty of up to 3%.^{230,231}
 - Oregon used to levy an excise tax on cultivators by weight, but switched to taxing retail price in 2014 in an effort to lighten the burden on industry and rationalize taxation of other cannabis products.^{232,233}

Licensing

- In OR, the Oregon Health Authority licenses medical cannabis businesses and the Oregon Liquor Control Commission licenses recreational cannabis businesses. As of 2021.05, OR had 1 active medical cannabis dispensary license²³⁴, down from 20 at the beginning of 2017²³⁵, and 6,727 registered grow sites²³⁶. OR has 1320 active recreational cultivation licenses and 754 active recreational dispensary licenses.²³⁷

²¹⁵ <https://web.archive.org/web/20210421064323/https://www.medicalmarijuana.ohio.gov/documents/ProgramUpdate/COO%20Cultivator%20Licensees.pdf>

²¹⁶ <https://medicalmarijuana.ohio.gov/Documents/Dispensaries/Dispensary%20Applications%20-%20RFA%20II/Dispensary%20Applications%20-%20RFA%20II/Ohio%20Medical%20Marijuana%20Control%20Program%20-%20Dispensary%20RFA%20II.pdf>

²¹⁷ <https://www.medicalmarijuana.ohio.gov/rules>

²¹⁸ <https://www.medicalmarijuana.ohio.gov/FAQs?Category=CULTIVATING%2C%20PROCESSING%20AND%20TESTING>

²¹⁹ <http://codes.ohio.gov/oac/3796%3A6-5>

²²⁰ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

²²¹ <https://oklahoma.gov/omma/businesses/business-application-information3.html>

²²² https://web.archive.org/web/20210525123837/https://oklahoma.gov/content/dam/ok/en/omma/docs/business-lists/omma_growers_list.pdf

²²³ https://web.archive.org/web/20210525124607/https://oklahoma.gov/content/dam/ok/en/omma/docs/business-lists/omma_dispensaries_list.pdf

²²⁴ <https://travischarlessmith.com/can-you-grow-marijuana-at-home-in-oklahoma/#:~:text=The%20final%20rule%20on%20growing,one%20that%20is%20producing%20flower.>

²²⁵ https://oklahoma.gov/content/dam/ok/en/omma/docs/osdh_681_2020_emergency_rules_for_website.pdf

²²⁶ https://oklahoma.gov/content/dam/ok/en/omma/docs/omma_-_commercial_license_checklist_0.pdf

²²⁷ <https://oklahoma.gov/omma/newsroom/2019/july/oklahoma-medical-marijuana-authority-outlines-upcoming-program-changes.html>

²²⁸ <https://oklahoma.gov/omma/businesses/researcher-application-information.html>

²²⁹ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

²³⁰ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

²³¹ [Oregon Department of Revenue Letterhead, Salem](https://www.oregon.gov/oregonia/PH/DISEASES/CONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Pages/dispensary-directory.aspx)

²³² <https://taxfoundation.org/recreational-marijuana-tax/>

²³³ <https://newrevenue.org/2016/02/09/4518/>

²³⁴ <https://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Pages/dispensary-directory.aspx>

²³⁵

²³⁶ <https://web.archive.org/web/20170923013806/http://www.oregon.gov/OHA/PH/DISEASES/CONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Pages/dispensary-directory.aspx>

²³⁷ https://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Documents/OMMP_Statistical_Snapshot_04-2021.pdf

²³⁷ https://web.archive.org/web/20210528233713/https://www.oregon.gov/olcc/marijuana/documents/marijuanalicense_approved.pdf

- Medical cannabis patients in OR are permitted to grow up to 12 plants for personal use only, and register these as grow sites – of the 6,727 grow sites registered, 5,052 were listed as only serving one patient.²³⁸ Home cultivation is also permitted for adult-use.
- Medical licensing fees:
 - Grow site [variable permissions on plant allowance]: \$200 registration fee (paid annually)²³⁹
 - Processing Site registration: \$4,000 application fee (\$3,500 refundable, paid annually) + \$480 tracking system fee (paid annually)²⁴⁰
 - Dispensary registration: \$4,000 application fee (\$3,500 refundable, paid annually) + \$480 tracking system fee (paid annually)²⁴¹
 - Testing: Oregon Environmental Laboratory Accreditation Program (ORELAP) accreditation: complex 3 tiered fee schedule based on laboratory scoring and purpose (higher for out-of-state laboratories)²⁴²
- Recreational licensing fees:²⁴³
 - Cultivation: 4 tiers of cultivation license available split by 3 types (indoor/outdoor/mixed):²⁴⁴
 - Micro Tier I Indoor [<625 sq. ft.] Producer license: \$250 application fee (non-refundable, paid annually) + \$1,000 license fee (paid annually)²⁴⁵
 - Micro Tier II Indoor [<1,250 sq. ft.] Producer license: \$250 application fee (non-refundable, paid annually) + \$2,000 license fee (paid annually)
 - Tier I Indoor [<5,000 sq. ft.] Producer license: \$250 application fee (non-refundable, paid annually) + \$3,750 license fee (paid annually)
 - Tier II Indoor [<10,000 sq. ft.] Producer license: \$250 application fee (non-refundable, paid annually) + \$5,750 license fee (paid annually)
 - Processor license: \$250 application fee (non-refundable, paid annually) + \$4,750 license fee (paid annually)
 - Retail license: \$250 application fee (non-refundable, paid annually) + \$4,750 license fee (paid annually)
 - Testing: 2 types of testing license available:
 - Laboratory license: \$250 application fee (non-refundable, paid annually) + \$4,750 license fee (paid annually)
 - Sampling Laboratory license: \$250 application fee (non-refundable, paid annually) + \$2,250 license fee (paid annually)
 - Research certificate: \$250 application fee (non-refundable, paid every 3 years) + \$4,750 license fee (paid every 3 years)
 - Wholesale: 2 types of wholesale license available:
 - Micro Wholesaler license: \$250 application fee (non-refundable, paid annually) + \$1,000 license fee (paid annually)
 - Wholesaler license: \$250 application fee (non-refundable, paid annually) + \$4,750 license fee (paid annually)

Pennsylvania – PA

Tax

- Medical cannabis sales are exempt from state sales tax; a 5% excise duty is levied on wholesale transactions.^{246,247} Recreational cannabis is not legal in PA.

Licensing

- In PA, the Philadelphia Department of Health licenses medical cannabis businesses. State law permits no more than 25 grower/processor permits (permits both cultivation and manufacturing) and 50 dispensary permits to be issued in total, with up to 5 grower/processor licensees allowed to also hold a dispensary permit. Dispensary permits are tenable up to 3 separate locations.²⁴⁸ Permits are issued by region and the number of permits issued in each is weighted by demand and socioeconomic factors.²⁴⁹ Home cultivation is not permitted.
- Medical licensing fees:²⁵⁰
 - Grower/processor permit: \$10,000 application fee (non-refundable) + \$200,000 initial permit fee + \$10,000 permit renewal fee (payable annually) + proof of \$2m capital assets, \$500,000 liquid assets
 - Dispensary permit: \$5,000 application fee (non-refundable) + \$30,000 initial permit fee + \$5,000 permit renewal fee (payable annually) + proof of \$150,000 liquid assets
 - Laboratory approval: [fees unknown] (2 year approval term)²⁵¹

Rhode Island – RI

Tax

- Compassion centers are subject to a 4% tax on net monthly patient revenue, and medical cannabis is subject to state sales tax of 7% (there are no local sales taxes).^{252,253} Recreational cannabis is not legal in RI.

Licensing

- In RI, the Rhode Island Department of Business Regulation Office of Cannabis Regulation licenses vertically-integrated compassion centers to cultivate, manufacture, distribute and dispense cannabis. RI has 3 licensed compassion centers in the state thus far and 6

²³⁸ <https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Pages/growers.aspx#fee>

²³⁹ <https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Pages/growers.aspx#fee>

²⁴⁰ <https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Pages/processors.aspx>

²⁴¹ <https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Pages/dispensary-apply.aspx>

²⁴² https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Documents/rules/333-064_FINAL_text_Effective-01-01-2021.pdf

²⁴³ <https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=267086>

²⁴⁴ Additionally possible to apply for a Medically Designated Canopy license (for an additional \$100) if at least 75% of the yield is provided to medical patients or caregivers. Only Indoor shown here for brevity in exposition (Indoor space allowance is 25% of Outdoor).

²⁴⁵ Micro Tier Producer licensees can apply for an additional endorsement to be granted processing rights.

²⁴⁶ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

²⁴⁷ <https://www.revenue.pa.gov/GeneralTaxInformation/Tax%20Types%20and%20Information/MedMarijuana/Pages/default.aspx>

²⁴⁸ <http://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/028/chapter1141/s1141.23.html&d=reduce>

²⁴⁹ <http://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/028/chapter1141/chap1141toc.html&d=>

²⁵⁰ <http://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/028/chapter1141/chap1141toc.html&d=>

²⁵¹ <https://www.health.pa.gov/topics/Documents/Programs/Medical%20Marijuana/DOH%20-%20Application%20to%20Become%20an%20Approved%20Laboratory%20for%20Medical%20Marijuana%20Testing.pdf>

²⁵² Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

²⁵³ [Microsoft Word - DrugsMedicinesMarijuanaForMedicalUseDietarySupplementsAnd Groom](#)

further are due to be licensed.²⁵⁴ RI also separately licenses producers and manufacturers (i.e. vertical integrated is required for retailers alone) who are only permitted to sell to compassion centers.²⁵⁵ As of 2021.05, RI had 64 active cultivation licenses plus a further 6 approved but not yet issued.²⁵⁶

- In addition to commercial medical cannabis production, registered medical cannabis patients in RI can purchase plant tags for \$25 each to produce their own cannabis.²⁵⁷ Previously, cooperative cultivation licenses were available, but these were phased out.²⁵⁸
- Medical licensing fees:
 - Compassion center license: \$10,000 application fee (non-refundable) + \$500,000 license fee (paid annually)²⁵⁹
 - Cultivation and manufacturing: 5 tiers of license:²⁶⁰
 - Micro-license [<2,500 sq. ft.]: \$5,000 application fee (non-refundable) + \$5,000 license fee (paid annually)
 - Class A [<5,000 sq. ft.]: \$5,000 application fee (non-refundable) + \$20,000 license fee (paid annually)
 - Class B [5,001-10,000 sq. ft.]: \$5,000 application fee (non-refundable) + \$35,000 license fee (paid annually)
 - Class C [10,001-15,000 sq. ft.]: \$5,000 application fee (non-refundable) + \$50,000 license fee (paid annually)
 - Class D [15,001-20,000 sq. ft.]: \$5,000 application fee (non-refundable) + \$80,000 license fee (paid annually)
 - Laboratory license: \$5,000 initial application fee (non-refundable) + \$5,000 license fee (paid annually)^{261,262}

South Dakota – SD

- In 2020.11, voters in SD voted in plebiscites on two items: Measure 26 to legalize medical cannabis, and Amendment A to legalize recreational cannabis.²⁶³ Measure 26 compels the state to outline regulations for medical cannabis programme within 120 days and allows for up to 3 plants for home cultivation.²⁶⁴ In 2021.02, a circuit court judge ruled that Amendment A was in fact unconstitutional, and as such recreational cannabis legalization was overturned.²⁶⁵ As of 2021.05, a supreme court appeal against the Amendment A ruling was ongoing, and regulation for medical cannabis had not yet been laid out.²⁶⁶ Adult-use legalization was subsequently nullified in 2021.11 by the state supreme court.²⁶⁷
- Measure 26 dictates that an excise tax of 15% will be levied on all cannabis sales at retail in addition to state sales tax of 4.5%.²⁶⁸

Utah – UT

Tax

- Medical cannabis is exempt from state sales tax.²⁶⁹ Recreational cannabis is not legal in UT.

Licensing

- In UT, the Utah Department of Agriculture and Food and the Utah Department of Health jointly license businesses through the state's medical cannabis program. Utah has set statutory limits of 8 cultivator²⁷⁰ licences and 15 pharmacy licenses²⁷¹. Home cultivation is not permitted.
- Medical licensing fees:²⁷²
 - Cultivator license (<100,000 sq. ft.): \$10,000 application fee (non-refundable) + \$100,000 license fee (paid annually) + \$250,000 performance bond^{273,274}
 - Courier license: \$125 application fee (non-refundable) + \$2,500 license fee (paid annually)²⁷⁵
 - Manufacturing: 2 tiers of license available:^{276,277,278}
 - Tier I Processor [processing, formulation, packaging and labelling] license: \$1,250 application fee (non-refundable) + \$100,000 license fee (paid annually) + \$50,000 performance bond
 - Tier II Processor [packaging and labelling] license: \$1,250 application fee (non-refundable) + \$35,000 license fee (paid annually) + \$50,000 performance bond
 - Pharmacy license: \$50,000-\$69,500 license fee (depending upon the type of license received and the physical location of the pharmacy, paid annually)²⁷⁹
 - Testing Laboratory license: \$500 application fee (non-refundable) + \$15,000 license fee (paid annually) + \$50,000 performance bond²⁸⁰

Vermont – VT

²⁵⁴ <https://www.wpri.com/target-12/28-companies-vie-for-six-coveted-ri-marijuana-dispensary-licenses/>

²⁵⁵ https://www.lawserver.com/law/state/rhode-island/ri-laws/rhode_island_general_laws_21-28-6-16

²⁵⁶ <https://web.archive.org/web/20210424232611/https://dbr.ri.gov/divisions/medicalmarijuana/approvals.php>

²⁵⁷ https://www.lawserver.com/law/state/rhode-island/ri-laws/rhode_island_general_laws_21-28-6-15

²⁵⁸ <http://webserver.rilin.state.ri.us/Statutes/TITLE21/21-28.6/21-28.6-14.HTM>

²⁵⁹ https://www.lawserver.com/law/state/rhode-island/ri-laws/rhode_island_general_laws_21-28-6-12

²⁶⁰ https://dbr.ri.gov/documents/divisions/medicalmarijuana/Medical_Marijuana_Cultivator_Application.docx

²⁶¹ <https://health.ri.gov/publications/frequentlyaskedquestions/Medical-Marijuana-Laboratory-Applicants.pdf>

²⁶² <https://rules.sos.ri.gov/regulations/part/216-10-05-2>

²⁶³ <https://mjbizdaily.com/south-dakota-legalizes-adult-use-cannabis-after-passing-medical-measure/>

²⁶⁴ https://sdsos.gov/elections-voting/assets/2020IM_Legalize_Marijuana_Medical_Use_AG_Statement.pdf

²⁶⁵ <https://mjbizdaily.com/judge-shoots-down-south-dakotas-adult-use-marijuana-amendment/>

²⁶⁶ <https://mjbizdaily.com/south-dakota-high-court-to-hear-recreational-cannabis-case-this-month/>

²⁶⁷ <https://www.npr.org/2021/11/24/1058884032/south-dakotas-supreme-court-rules-against-legalization-of-recreational-marijuana>

²⁶⁸ https://sdsos.gov/elections-voting/assets/2020_CA_LegalizeMarijuana_AGStatement.pdf

²⁶⁹ <https://le.utah.gov/~2018S3/bills/hbillenr/HB3001.pdf>

²⁷⁰ <https://medicalcannabis.utah.gov/production/cultivators/>

²⁷¹ https://le.utah.gov/xcode/Title26/Chapter61A/26-61a-S305.html?v=C26-61a-S305_2021031720210317

²⁷² https://webapp.ag.utah.gov/LicenseLookup/?parameters=c02d455972917d6571a65e03e5a4b61_b4bb55d6c8fac1e3164ca902ba7b75343677b9db8b531c9e7602ab4a6041ca61.f07a07514617a53328ae04b6e387af27

²⁷³ <https://mjbizdaily.com/utah-medical-cannabis-cultivation-licenses-may-cost-100000-a-year/>

²⁷⁴ <https://ag.utah.gov/wp-content/uploads/2019/10/UT-Cannabis-Cultivator-bond-form-v2.pdf>

²⁷⁵ <https://medicalcannabis.utah.gov/wp-content/uploads/2020/10/Medical-Cannabis-Courier-Application-Packet.pdf>

²⁷⁶ <https://medicalcannabis.utah.gov/production/processors/>

²⁷⁷ <https://medicalcannabis.utah.gov/wp-content/uploads/2020/07/UT-Cannabis-Processor-bond-form-v2-2-1.pdf>

²⁷⁸ <https://medicalcannabis.utah.gov/wp-content/uploads/2020/07/ProcessorApplication.pdf>

²⁷⁹ <https://medicalcannabis.utah.gov/2020/01/03/udoh-announces-recipients-of-medical-cannabis-pharmacy-licenses/>

²⁸⁰ https://medicalcannabis.utah.gov/wp-content/uploads/2020/07/Lab_Application.pdf

Tax

- Medical cannabis is exempt from state sales tax.^{281,282}
- Recreational cannabis was legalized in 2018 and commercial sales are due to begin in 2022, subject to further regulatory processes; in 2020.10, a bill was passed into law levying a 14% excise duty on retail sales, which are also be subject to 6% state sales tax.^{283,284}

Licensing

- In VT, vertically-integrated dispensaries are permitted to cultivate, manufacture, transport and dispense medical cannabis; so far, 5 licenses have been issued, and a 6th will be solicited once the state has registered 7,000 patients.²⁸⁵ In VT, patients or designated caregivers may cultivate up to 2 mature and 7 immature plants for personal use at any given time.²⁸⁶
- Medical licensing fees:²⁸⁷
 - Vertically-integrated dispensary: \$2,500 application fee (non-refundable) + \$20,000 license fee + \$25,000 license renewal fee (paid annually)
- The 2020.10 bill SB54 outlined the provisional recreational license regime, which is predicated on businesses operating from 2022.10.²⁸⁸ As of 2021.05, the Cannabis Control Board has been constituted but is yet to set license costs and may introduce more types of licenses; those currently scheduled to be available are:²⁸⁹
 - Integrated (combination of other 5 types, targeted at vertically-integrated dispensaries)
 - Cultivator: small [<1000 sq. ft.] and regular [tiered by size]
 - Product manufacturer
 - Wholesaler
 - Retailer
 - Testing laboratory

Virginia – VA

Tax

- Up to 2021.05, VA's medical cannabis program has been limited to prescription of cannabis oil (defined as any formulation of processed plant extract), which is exempt from state sales tax.^{290,291} In 2021.02, medical sales of smokable flower were legalized, to begin from 2021.09; as of 2021.07, it was not clear from the current wording of the law whether sales of smokable flower will be subject to taxation, though some sources have suggested they will not.²⁹²
- Recreational cannabis was legalized in 2021.04, due to come into effect in 2021.07, with sales beginning in 2024; sales are to be subject to state sales tax of 5.3%, a state excise duty of 21% levied at the point of retail, and an additional 3% local option.²⁹³

Licensing

- In VA, the Virginia Department of Health Professions Board of Pharmacy licenses medical cannabis businesses. VA's medical cannabis program began as a low-THC (<10mg per dose) cannabis oil-only program in 2018 (legislation was passed in 2017), was expanded in 2019 to include other product types such as topicals, and in 2020 came into effect meaningfully with legal protection for medical cannabis patients and the opening of dispensaries.²⁹⁴ In 2021 smokable flower was legalized.²⁹⁵ In 2018, 5 licenses (the statutory limit) were issued to vertically-integrated pharmaceutical processors, who are permitted to open up to 5 dispensaries each.²⁹⁶ Home cultivation was not permitted at the date of our sample, but has since been legalized.²⁹⁷
- Medical licensing fees:²⁹⁸
 - Pharmaceutical processor license: \$10,000 application fee (non-refundable) + \$60,000 permit fee (paid annually)
- The law passed in 2021.04 permitting recreational cannabis strictly limits vertical-integration in principle other than for "small businesses". Social equity applicants will be prioritized for licensing and have a portion of the fees waived. Cultivation licenses will be split between Class A (standard) and Class B (<1% THC plants only). The legislation stipulates that a Cannabis Control Authority will be formed to regulate the industry and outline a licensing regime; the following license types and maximum quotas will be:²⁹⁹
 - Marijuana cultivation facility [450]
 - Marijuana manufacturing facility [60]
 - Marijuana wholesaler [25]
 - Marijuana testing facility [no quota specified]
 - Retail marijuana store [400]

Washington – WA

Tax

- Although in WA all cannabis is considered adult-use, only recreational-use sales are subject to the state sales tax of 6.5% and an excise duty of 37%.³⁰⁰ Exemptions to the state sales tax are made for (i) medical patients, and (ii) any purchase of "High CBD" products.^{301,302} Products can be classed as "High CBD" if they are non-flower and adhere to a minimum CBD:THC ratio and/or THC concentration below a defined threshold, differing by product type (e.g. maximum 2% THC and at least a 25:1 CBD:THC ratio for concentrates, or at least a 5:1 CBD:THC ratio for topicals).

²⁸¹ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

²⁸² <https://tax.vermont.gov/sites/tax/files/documents/FS-1072.pdf>

²⁸³ <https://eu.burlingtonfreepress.com/story/news/2020/10/08/vermont-cannabis-marijuana-bill-passes-allows-retail-sales/5921070002/>

²⁸⁴ <https://eu.burlingtonfreepress.com/story/news/2020/10/08/vermont-marijuana-bill-legal-retail-how-impacts-me-cannabis/4809970002/>

²⁸⁵ <https://web.archive.org/web/20210421013138/https://medicalmarijuana.vermont.gov/registered-dispensaries>

²⁸⁶ <https://medicalmarijuana.vermont.gov/patients-and-caregivers>

²⁸⁷ <https://codes.findlaw.com/vt/title-18-health/vt-st-tit-18-sect-4474f.html>

²⁸⁸ <https://eu.burlingtonfreepress.com/story/news/2020/10/08/vermont-marijuana-bill-legal-retail-how-impacts-me-cannabis/4809970002/>

²⁸⁹ <https://www.vpr.org/post/cannabis-control-board-picks-breathe-new-life-vts-quest-set-legal-pot-marketplace#stream/0>

²⁹⁰ <https://lis.virginia.gov/cgi-bin/legp604.exe?212+ful+HB2218S1>

²⁹¹ <https://lis.virginia.gov/000/chapter550.pdf>

²⁹² <https://www.mpp.org/states/virginia/hb-2312/sb-1406-virginia-cannabis-regulation-bill-summary/>

²⁹³ <https://lis.virginia.gov/000/chapter550.pdf>

²⁹⁴ <https://www.mpp.org/states/virginia/>

²⁹⁵ <https://www.virginiamercury.com/2019/03/07/virginia-looks-more-and-more-like-it-has-a-full-blown-medical-marijuana-program/>

²⁹⁶ <https://lis.virginia.gov/cgi-bin/legp604.exe?212+ful+HB2218S1>

²⁹⁷ <https://www.wric.com/news/a-virginians-guide-to-legally-grow-marijuana-at-home-starting-july-1/>

²⁹⁸ https://www.dhp.virginia.gov/pharmacy/PharmaceuticalProcessing/docs/RFA_PharmaceuticalProcessors2020.pdf

²⁹⁹ <https://lis.virginia.gov/000/chapter550.pdf>

³⁰⁰ Fox Rothschild – Cannabis Industry State Tax Guide, September 2018

³⁰¹ [Sales and Use Tax Exemptions for Marijuana Retailers with a Medical Endorsement \(wa.gov\)](https://www.wa.gov/Portals/1/Documents/Pubs/608011-Products.pdf)

³⁰² <https://www.doh.wa.gov/Portals/1/Documents/Pubs/608011-Products.pdf>

- WA changed to the current system in 2015, whereas previously it levied a 25% excise duty on each transaction from producers to processors, processors to dispensaries, and dispensaries to consumers; the change was reportedly made because this encouraged vertical integration and created an avoidable federal tax burden.³⁰³

Licensing

- In WA, the Washington State Liquor and Cannabis Board and Department of Revenue Business Licensing Service license medical and recreational cannabis businesses in the same way; there is a no-cost endorsement available for a retail licensee to also be able dispense to medical patients.³⁰⁴ As of 2021.06, WA had 1,054 active dual producer/processor licensees, 151 producer-only licensees, and had set a statutory limit of 556 retail licensees.³⁰⁵ Of the 556, 486 were active, and the remainder due to be filled via the Social Equity program.³⁰⁶
- Medical patients may self-grow personal use cannabis up to 15 plants as individuals, or more as a group of up to 4 patients as a registered cooperative.^{307,308} Adult-use home cultivation is not permitted. Only medical patients may buy “High-THC” (10-50mg of active THC per serving) products.³⁰⁹
- Adult-use licensing fees (adult-use licensing regime shown here only, for brevity in exposition):³¹⁰
 - Producer license: Tier 1 [<2,000 sq. ft.], Tier 2 [<10,000 sq. ft.], and Tier 3 [<30,000 sq. ft.] (same cost for all tiers): \$250 application fee (non-refundable) + \$1,381 license fee (paid annually).³¹¹
 - Transportation license: \$250 application fee (non-refundable) + \$1,000 license fee (paid annually)
 - Processor license: \$250 application fee (non-refundable) + \$1,381 license fee (paid annually)
 - Retailer license: \$250 application fee (non-refundable) + \$1,381 license fee (paid annually)
 - Testing facility certification: \$2,747 application fee (non-refundable) + \$6,192 audit and certification fees (paid annually for years 1-3 and 5 of operation) + \$1,667 application renewal fee (paid in years 4 and 6 of operation)³¹²
 - Research license: \$250 application fee (non-refundable) + \$1,300 license fee (paid annually)

West Virginia – WV

Tax

- Medical cannabis is subject to a 10% tax levied against gross receipts of dispensaries, but is exempt from state and is from local sales taxes (and local excise duties).³¹³ Recreational cannabis is not legal in WV.

Licensing

- In WV, the West Virginia Department of Health and Human Resources Bureau for Public Health Office of Medical Cannabis licenses medical cannabis businesses. WV issued the state’s first Grower and Processor licenses in 2020 following a request for applications in 2019, and issued the first Dispensary licenses in 2021.³¹⁴ WV has set a statutory limit of 10 Grower, 10 Processor and 100 Dispensary licenses.³¹⁵ State residency was previously required for licensees, but no longer is.³¹⁶ Home cultivation is not permitted.³¹⁷
- Medical licensing fees:³¹⁸
 - Grower license: \$5,000 application fee (non-refundable) + \$50,000 permit fee (paid annually) + \$5,000 permit renewal fee (paid annually) + proof of \$2m capital assets, \$500,000 liquid assets
 - Processor license: \$5,000 application fee (non-refundable) + \$50,000 permit fee + \$5,000 permit renewal fee (paid annually) + proof of \$2m capital assets, \$500,000 liquid assets
 - Dispensary license: \$2,500 application fee (non-refundable) + \$10,000 initial permit fee + \$2,500 permit renewal fee (paid annually) + proof of \$125,000 liquid assets
 - Laboratory approval: [fees unknown] (2-year approval term)³¹⁹

³⁰³ <https://taxfoundation.org/recreational-marijuana-tax>

³⁰⁴ <https://app.leg.wa.gov/RCW/default.aspx?cite=69.50.375>

³⁰⁵ <https://www.cannabisbusinesstimes.com/article/state-of-washington-state-cannabis/>

³⁰⁶ https://lcb.wa.gov/mjlicense/mj_license_faq

³⁰⁷ <https://apps.leg.wa.gov/wac/default.aspx?cite=314-55-410>

³⁰⁸ <https://www.doh.wa.gov/YouandYourFamily/Marijuana/MedicalMarijuana/PatientInformation/PossessionAmounts>

³⁰⁹ <https://www.doh.wa.gov/YouandYourFamily/Marijuana/MedicalMarijuana/PatientInformation/FrequentlyAskedQuestions>

³¹⁰ <http://lcb.wa.gov/sites/default/files/publications/licensing/forms/LIQ-1387-Marijuana-License-Fee-and-Description-Sheet.docx>

³¹¹ <https://apps.leg.wa.gov/wac/default.aspx?cite=314-55-075>

³¹² https://lcb.wa.gov/sites/default/files/publications/Marijuana/Labs/Lab_Certification_Process%20Revised.pdf

³¹³ <http://www.wvlegislature.gov/wvcode/ChapterEntire.cfm?chap=16A&art=9§ion=1>

³¹⁴ <https://mjbizdaily.com/west-virginia-awards-medical-cannabis-dispensary-licenses/>

³¹⁵ <https://dhhr.wv.gov/bph/Documents/MedicalCannabis/FAQ%20-%20Growers%20Processors%20Dispensaries.pdf>

³¹⁶ <https://dhhr.wv.gov/bph/Pages/Medical-Cannabis-Program.aspx>

³¹⁷ <https://wvmetronews.com/2021/08/22/discussions-continue-about-allowing-cannabis-patients-to-grow-plants/>

³¹⁸ <http://apps.sos.wv.gov/adlaw/csr/readfile.aspx?DocId=53206&Format=PDF>

³¹⁹ <http://apps.sos.wv.gov/adlaw/csr/readfile.aspx?DocId=53208&Format=PDF>