Delivering Revenue, Insight

and Efficiency to Local Government

Fiscal Analysis of the

Commercial Cannabis Industry

Prepared for

the

City of Watsonville

November 5, 2020

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I. Introduction

The City of Watsonville adopted a new cannabis ordinance (WMC Chapter 14-53) on June 9, 2020 which greatly expanded the number of cannabis permits and types of cannabis businesses allowed in the City. The changes included an increase in the number of manufacturing permits, increased maximum cultivation area, allowance for cultivators to operate on up to 2 parcels, and allowing retail sales, distribution, and testing.

The number of licenses allowed is shown in Figure 1, below.

Figure 1:

Cannabis Use Permit Classifications	Permitted Numbers of Cannabis Use Permits	
	Equity Licenses	Total Facilities Allowed
Cultivation (Type 1A, 2A, or 3A)	1	6
Manufacturing (Type 6 or 7)	1	15
Testing (Type 8)	1	No limit
Non-storefront retail (Type 9)		7 (only those cultivation and/or manufacturing permittees holding a valid City Use Permit shall be eligible to obtain a Type 9 Cannabis Use Permit to sell only products cultivated/manufactured at their local Watsonville facility)
Storefront retail (Type 10)	1	3
Distribution (Type 11)	1	2 stand-alone, plus others as an accessory use.
Processing	1	3

Under the previous ordinance, the City could issue up to 6 cultivation licenses and up to 9 manufacturing licenses. Distribution licenses could only be issued to existing cultivators or manufacturers. The changes allow the same 6 cultivation licenses but with a greater cultivation area, up to 15 manufacturing licenses, 2 stand-alone distributors, and 3 storefront retailers (which are also be allowed to deliver). Cannabis testing laboratories are allowed with no limit.

Cannabis cultivators and manufacturers are also allowed to seek non-storefront retailer licenses, but only for the purposes of delivering their own products to retail customers within the City of Watsonville and with a maximum of 7 such permits. A minimum of 1 use permit for each cannabis license type would be reserved for equity applicant as defined in 5-49 of the Watsonville Municipal Code.

The City previously only allowed cultivation up to a maximum of 5,000 square feet of canopy, but this has been increased up to 22,000 square feet. The City has also proposed to allow cultivators to conduct operations on more than one parcel under a single City permit, so that they may expand without having to move their existing operations. It is common for cultivators to hold numerous state-issued cultivation licenses for multiple premises. The City will also allow 2 permits for cannabis processors, either within a permitted cultivation facility or as part of a stand-alone cannabis processing facility.

The City is also considering a number of changes to its cannabis tax rates and how they are structured. The current cannabis tax ordinance assesses $20 per square foot for all cultivation, including nurseries, 2.5% of gross receipts for manufacturing, and 10% of gross receipts for retail sales. Staff has proposed that the City retain the current rate for cultivation but reduce the rate for any area that would only contain immature plants to just $1 per square foot. The rate for manufacturers would remain at 2.5% of gross receipts, but the rate for retailers would be reduced to 5%. As of yet, the City has not proposed a tax rate for free-standing cannabis distributors.

The City retained the services of HdL Companies to conduct a fiscal analysis of the local cannabis industry to determine the impact the ordinance changes may have on business attraction, business success and resulting City revenues. Specifically, the City is interested in how these changes would affect revenue projections for Fiscal Year 2020/2021 and successive years.

The City's current and proposed cannabis tax rates are shown in Figure 2, below, along with the range of cannabis tax rates commonly recommended by HdL.

Figure 2:

Type of Business	Current Tax Rate	Proposed Tax Rate	HdL Recommended Tax Rate (range)
Cultivation	$20/sf	$20/sf	$7-$10/sf
Processing	-	$20/sf	2.00%-3.00%
Nursery	$20/sf	$1/sf	$1/sf
Manufacturing	2.50%	2.50%	2.50%-4.00%
Distribution	-	-	2.00%-3.00%
Testing	-	-	1.00%-2.00%
Retail	10.00%	5.00%	4.00%-6.00%

Generally speaking, if a city or county wishes to generate revenue from the cannabis industry through taxes, then it must consider tax rates and structures that are more equitable to those aspects of the industry it wishes to support or encourage. A lower tax may ultimately generate more revenue as a function of attracting and supporting more businesses, while higher tax rates may have the effect of discouraging businesses or decreasing their gross receipts. Simply put, cities will generate no revenue from businesses that fail in this highly competitive marketplace, or that choose to locate elsewhere in search of more favorable regulations and taxes.

Legalization and regulation of commercial cannabis has exposed this industry to competitive free-market forces from which it was previously shielded due to prohibition. Licensing, permitting, and regulatory costs, combined with State and local taxes, have added significantly to the operational costs of commercial cannabis businesses. The net effect of these forces is that wholesale prices have dropped significantly at the same time that regulatory costs are climbing. High tax rates may have been acceptable to the industry when it enjoyed high profit margins and few regulatory costs, but those same rates become prohibitive for what is now one of the most highly regulated, and most competitive, industries in the State.

Discussion of regulating and taxing the cannabis industry can too often overshadow the larger jobs and economic development issues that typically accompany efforts to attract new industry. Word that a new business or industry is looking to bring hundreds of new jobs to a community is more commonly met with open arms and offers of tax incentives. The cannabis industry is perhaps completely unique in that the inherent jobs and economic development benefits are welcomed more grudgingly and met with the disincentive of special taxes. While the tax revenue potential is attractive to local governments, imposing excessively high rates may reduce the number of businesses that step forward and decrease the likelihood that they will succeed in the regulated market.

Equally important to tax rates is setting a clear and unambiguous direction for regulatory policy. As with any other industry, the cannabis industry desires regulatory certainty. Clear regulatory policies and competitive tax rates will be essential for attracting or holding on to this industry sector, and for helping these businesses to outcompete the persistent black market.

Summary

Applying the City's current range of tax rates and structures could potentially generate $2,189,000 in annual cannabis tax revenue for the City. Applying the rates and other proposed structural changes could potentially generate up to $3,382,400 in revenue for the City, but we caution that the cultivation rate, in particular, is far above the rates seen in other nearby jurisdictions, which may make those revenues more hypothetical and less likely to materialize. Applying the range of rates commonly recommended by HdL could potentially generate $2,179,000 in annual cannabis tax revenue for the City. These rates and potential revenues are all shown below in Figure 3.

Figure 3:

Business Type	#	Current Rate	Revenue	Proposed Rate	Revenue	HdL Rate	Revenue
Cultivation[1]	6	$20/sf	$600,000	$20/sf	$2,138,400	$7/sf	$924,000
Processing	2						
Manufacturer	15	2.5%	$900,000	2.5%	$900,000	2.5%	$900,000
Retailer	2	10%	$689,000	5.0%	$344,000	4.0%	$275,000
Total			**$2,189,000**		**$3,382,400**		**$2,179,000**

[1] Differences in how cultivation rates are applied are explained in the Cultivation section.

II. The Cannabis Industry in the Santa Cruz/Watsonville Region

The amount of revenue that a city may be able to generate from a cannabis business tax depends upon the type, number and size of cannabis businesses that may choose to locate within that city. Cannabis retailers, cultivators, manufacturers, distributors and testing facilities are each interdependent upon a network of other cannabis businesses, so understanding the extent of the industry in the Santa Cruz/Monterey region provides some basis for estimating how the proposed changes to the City's cannabis taxes might impact business attraction and retention in Watsonville.

Our analysis of potential cannabis business attraction and resulting tax revenue is based on data and assumptions about the total size of the local market. The three cannabis licensing agencies for the State of California (the Bureau of Cannabis Control, the CalCannabis Division of the California Department of Food and Agriculture, and the Manufactured Cannabis Safety Branch of the California Department of Public Health) have all been issuing temporary licenses for commercial cannabis businesses since late December of 2017. In addition, HdL has worked with a number of nearby cities and counties that are developing or implementing their own cannabis regulatory and taxation programs. This data provides a wealth of previously unavailable information about the cannabis industry around the State.

For our analysis, we shall assume that wholesale cannabis businesses such as cultivators, manufacturers and distributors would primarily interact or do business with other cannabis businesses within a roughly one-hour radius. This would include the cities of Santa Cruz, Hollister, Salinas and Monterey, but would also extend as far as Greenfield and King City to the South and San Jose to the North. The three State licensing agencies have issued 394 cultivation licenses and 36 nursery licenses in Santa Cruz and Monterey counties, plus licenses for 98 distributors 70 manufacturers, 37 retailers, 6 microbusinesses and 2 testing laboratories (we have included nearby Hollister in these numbers). These numbers are shown below in Figure 4.

Figure 4:

Active Licenses in Nearby Communities								
City/County	**Cultivation**	**Nursery**	**Distributor**	**Manufacturer**	**Retailer**	**Microbusiness**	**Testing Laboratory**	**Total**
Watsonville	6	0	6	6	0	0	0	18
Santa Cruz (City)	4	0	12	19	6	3	2	46
Santa Cruz (County)	6	1	4	0	10	3	0	24
Salinas	228	20	32	11	8	0	0	299
Marina	0	0	0	0	1	0	0	1
Hollister	5	1	6	10	1	0	0	23
Greenfield	17	2	4	2	0	0	0	25
King City	10	2	10	11	2	0	0	35
Seaside	0	0	5	5	6	0	0	16
Monterey (City)	3	0	0	2	0	0	0	0
Monterey (County)	115	10	19	4	3	0	0	151
Total	**394**	**36**	**98**	**70**	**37**	**6**	**2**	**643**
Note: The number of licenses may not denote the number of businesses, as individual businesses may hold multiple licenses.								

There are an additional 70 cannabis licenses held by businesses in San Jose, which would give cannabis businesses in Watsonville convenient access to over 700 businesses or licensees in the region. Ultimately, cannabis businesses in Watsonville would have easy access to the Bay Area as a whole, which would provide ample business opportunities and access to a strong customer base. In addition, a number of cities within this region are currently in the process of permitting additional cannabis businesses or developing regulatory policies that will allow them to do so in the near future.

We anticipate that the number of cannabis businesses in the Santa Cruz/Monterey County region and the number of jurisdictions allowing and permitting them will continue to increase substantially over time. As this occurs, we would expect the decisions as to where these businesses choose to locate will be increasingly driven by the same market-based factors that influence such decisions for other types of businesses, including access to markets and consumers, available and appropriate industrial or commercial space, competitive lease rates, a ready talent pool, and a network of supporting businesses and industries. Just as businesses may choose to locate in a jurisdiction despite higher lease rates or property values, so too may they choose to overlook higher taxes, within reason. Taxes and regulations will be weighed along with all other advantages and disadvantages in determining where to locate.

The high number of licensed cannabis businesses within the Santa Cruz/Monterey County region suggests that there is already a large and diverse industry cluster that can provide a supportive network for additional cannabis businesses. Cultivators, manufacturers and distributors in Watsonville will find plenty of options for who to work with in bringing their products to market. On the other hand, the large number of businesses, and of nearby jurisdictions allowing and welcoming such businesses, also means that new cannabis businesses will have a number of available options for choosing where to locate. Higher tax rates may make locations in the City of Watsonville less competitive with other nearby jurisdictions.

III. Common Cannabis Tax Rates

There has been much discussion across the state about the impact that cannabis tax rates have had on the transition to a legal, regulated market. It has been widely reported that the illicit market still accounts for three-fourths of all cannabis sales in California[i]. The State of California originally estimated that it would take in $1 billion annually from cannabis taxes, but the first full fiscal year (FY 18/19) saw just $288 million in cannabis tax revenue[ii]. This is just over one-fourth of the amount originally projected.

While taxation is clearly a significant issue for the cannabis industry, it is not the main reason for the persistence of the black market. The figures cited above are both directly proportional to the percentage of California's cannabis market that has no legal access. 75% of cities and counties in California continue to ban cannabis retailers outright[iii] (along with other types of commercial cannabis businesses). For 75% of the state, the only access to cannabis is through the illicit market. Tax rates are irrelevant in those places where cannabis is banned.

Mapping those jurisdictions that allow legal cannabis retailers shows that consumers in more than 70% of California have to travel more than 30 minutes to their nearest licensed retailer[iv]. Consumers in about 40% of the state have to drive an hour or more to access legal cannabis. Retail studies show that 93% of consumers are only willing to travel 15 to 20 minutes to make most routine purchases[v], which suggests that even many consumers who are within 30 minutes of their nearest cannabis retailer would likely turn to unlicensed delivery services, instead, due to convenience.

These bans on licensed retailers in turn limit the amount of the statewide market that is available to licensed growers, manufacturers and distributors. Basic economics tells us that all parts of the legal cannabis supply chain must be proportional to the size of the available market. Thus, lack of access for retail sales limits the amount of cannabis cultivation, manufacturing of cannabis products, and wholesale distribution of legal cannabis. All of these, in turn, limit the amount of cannabis taxes collected by the State in direct proportion to the size of the available market.

Cannabis tax rates have been settling and stabilizing around the State since the beginning of 2018. Many cities instituted cannabis taxes prior to the implementation of statewide regulations, with a wide range of tax structures and rates as high as $30 per square foot (for cultivation) or 18% of gross receipts. Some of these “early adopter” cities have since reduced their rates to be more competitive with common rates that are now emerging around the State.

The State of California applies two separate taxes to cannabis: a cultivation tax of $9.65 per ounce of dried flower ($2.87 per ounce of dried leaf or trim)[1] and an excise tax of 15% on the purchase of cannabis and cannabis products. These two separate State taxes can add up to 26% to consumer cannabis prices, even before any local taxes are contemplated. This leaves very little room for local jurisdictions to work within if they wish to remain under the total cumulative tax rate of 30%. This is an important benchmark to allow the local industry to compete against the illicit market and against other regulated cannabis businesses from around the State (see Attachment C; *State Tax Considerations*).

The City of Watsonville currently charges a rate of $20 per square foot for cultivation, which includes any floor space used for nursery operations, whether to supply starts for the facility’s own on-site cultivation, or as a free-standing Type 4 nursery. This rate is far above what any other nearby jurisdiction charges for nurseries, as can be seen in Figure 5, below. Notably, the rates shown only apply to free-standing Type 4 nurseries, and not to nursery activities as a component of on-site cultivation.

Figure 5:

Cannabis Taxes in Nearby Jurisdictions						
	Cultivation	Nursery	Retail	Manufacture	Distributor	Testing
Watsonville Current	$20/sf	$20/sf	10.0%	2.5%	NA	NA
Watsonville Proposed	$20/sf	$1/sf	5.0%	2.5%	NA	NA
Salinas	$15/sf	NA	5.0%	5.0%	5.0%	NA
Marina	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Hollister	$7/sf	5.0%	5.0%	5.0%	5.0%	5.0%
Santa Cruz County	6.0%	7.0%	7.0%	6.0%	7.0%	7.0%
Monterey County	$8/sf	$1/sf	4.5%	3.5%	3.0%	1.0%
HdL Recommended	$7/sf	$1/sf	4.0%	2.5%	2.0%	1.0%
Gilroy and Morgan Hill currently prohibit all commercial cannabis activities. San Juan Bautista has a cannabis regulatory and tax program, but currently prohibits all commercial cannabis.						

The City’s proposed changes would bring the rates for retailers and manufacturers more in line with other jurisdictions and with the rates commonly recommended by HdL[2]. However, the rates for cultivation

[1] Cannabis cultivation taxes increased on January 1, 2020 from their prior rates of $9.25 per ounce of dried flower $2.75 per ounce of dried leaf or trim.

[2] HdL recommends tax measures include both an initial rate and a maximum rate for each type of commercial cannabis activity. This table shows only the recommended initial rate.

would still be well-above the rates seen elsewhere. It should be noted that Monterey County's current rate of $8 per square foot (for indoor cultivation) is a significant reduction from the initial rate of $15 per square foot, which was scheduled to increase by steps up to $25 per square foot by June 30th, 2022. Instead, the County revised their cultivation tax rate downward, along with the rates for other types of commercial cannabis activities. The County's cultivation tax rate is still set to increase by $1 per square foot each year, starting July 1 of 2020, but only until it gets back up to the initial rate of $15 per square foot. After that, the rate will increase in line with the Consumer Price Index (CPI).

The City's proposed rate change for nurseries would be squarely in line with what we see as prevailing rates, and with the rates HdL commonly recommends. It should be noted that Monterey County has the highest number of Type 4 nursery licenses of any county in California, with 118 of the state's 561 licenses total. The Monterey County rate thus sets a standard of sorts for nurseries around the state. As with the cultivation tax, the rate for nurseries is set to increase by $1 per square foot each year until it reaches $5 per square foot, after which it will increase in accordance with CPI.

Notably, Monterey County's Commercial Cannabis Business Tax defines a *"Nursery"* as *"a person that produces only clones, immature plants, seeds, and other agricultural products used specifically for the planting, propagation, and cultivation of cannabis".* This definition would not extend to nursery activities that are conducted by a cannabis cultivator only for purposes of providing their own in-house supply of clones, starts, or vegetative plants.

Monterey County defines *"Canopy"* as "*all areas occupied by any portion of a cannabis plant, inclusive of all vertical planes, whether contiguous or noncontiguous on any one site".* The County further clarifies that the cultivation tax will be assessed *"per square foot of canopy authorized by each County permit"* and that *"In no case shall canopy square footage which is authorized by the permit or license but not utilized for cultivation be deducted for the purpose of determining the tax for cultivation".* Monterey County's cultivation tax rate thus applies not only to areas being used for supportive nursery activities, but also to permitted square footage that is not being utilized[3].

HdL has worked with numerous local agencies around the state to develop cannabis tax measures for the ballot. The initial range of tax rates for cannabis businesses other than cultivation commonly runs from 2% of gross receipts for distributors, to 2.5% for manufacturers, and up to 4% for retailers. These rates may be adjusted up to a maximum of 3%, 4% and 6%, respectively. The most common tax rates that HdL has recommended to our clients are shown in Figure 6, below.

[3] Monterey County initially allowed for cultivators holding "temporary" licenses issued by CalCannabis to submit an initial registration form, which allowed the cultivator to self-declare the amount of actual canopy being cultivated, but temporary licenses ceased to be valid in April of 2019.

Figure 6:

Cannabis Business Type	Initial Rate	Maximum Rate
Cultivation (indoors)	$7 per square foot	$10 per square foot
Nursery	$1 per square foot	$2 per square foot
Manufacturing	2.5% of gross receipts	4% of gross receipts
Distribution	2% of gross receipts	3% of gross receipts
Retail	4% of gross receipts	6% of gross receipts
Testing	1% of gross receipts	2.5% of gross receipts

The table above includes HdL's commonly recommended rates for both distribution and testing. However, the City's 2016 cannabis tax ballot measure (Measure L) only contemplated taxes for cultivation, manufacturing and retail and did not include a tax on either distribution or testing. Given this, the City could not impose a tax on these business types without first placing the matter before the voters through another ballot measure. For this reason, our revenue projections exclude both testing and distribution.

We also note that while Measure L did not specifically include cannabis processors as a distinct business type, the definition for cultivation in Section 3-6.1202(c) includes "*any activity involving the planting, growing, harvesting, drying, curing, grading, or trimming of cannabis*". For this reason, cannabis processors would be subject to the same tax rate as cannabis cultivators. However, we anticipate that most processors would function as an accessory to their cultivation activities, whether at the same facility or a separate location. It is difficult to estimate the average square footage that may be devoted to processing activities, and thus we are unable to develop meaningful revenue projections

IV. <u>Cannabis Manufacturers</u>

The manufacturing sector is still evolving and expanding, which presents significant opportunities for innovation, business development and job growth. The range of products being produced includes an ever-increasing variety of edibles such as candies, cookies, dressings, and infused (non-alcoholic) drinks. Manufacturers may produce their own extract on site, or they may buy extract from other Type 6 or Type 7 licensees. Much like any other industry, cannabis manufacturers often depend upon other businesses to supply them with the various materials or components that go into their final product. These suppliers do not have to be located in or even near the same jurisdiction as the final manufacturer and may be located anywhere throughout the state.

Some manufacturers may handle all steps from extraction to packaging the end product in the form of vape pens or other such devices. Others may handle only discreet steps, such as making the raw cannabis concentrate, which is then sold either directly to retailers or to a Type N manufacturer who will package it into vapor cartridges or other end consumer products. Manufacturers also produce a wide variety of tinctures, as well as topicals such as cannabis infused lotions, salves, sprays, balms, and oils.

As of February 3, 2020, the Manufactured Cannabis Safety Branch (MCSB) of the California Department of Public Health shows 991 cannabis manufacturing licenses statewide. Of these, 532 are for non-volatile extraction, 272 are for volatile extraction, 148 are for non-extraction manufacturing, 22 are for packaging and labeling, and 17 are for manufacturers using a shared-use facility. These 991 businesses are owned by 957 separate companies[4].

In its regulatory impact analysis, the MCSB estimated that there may ultimately be as many as 1,000 cannabis manufacturing businesses in California, employing around 4,140 people. This would indicate an average of 4 new jobs per manufacturer, though this figure likely varies significantly depending on the size and nature of each business. We believe these figures for both the potential number of cannabis manufacturing businesses and for the average number of employees to be on the low side. HdL is aware of individual manufacturers which have over 100 employees. While this may not be the norm, it demonstrates that cannabis manufacturers have the potential to far exceed the MCSB's early predictions.

HdL has reviewed pro-formas for numerous cannabis manufacturers seeking permits in counties and cities throughout California. From our review we have seen a range of gross receipts from around $1 million to well over $20 million, with an average in the range of $2 million to $3 million.

The City has so far issued 11 local permits for manufacturers, though one has since been revoked. All businesses appear to have also been issued licenses by the California Department of Public Health's Manufactured Cannabis Safety Branch (MCSB)[vi]. The City has proposed increasing the number of permits for manufacturers up to 15. HdL believes that this is a very reasonable number, given the strong cannabis industry cluster in the surrounding region.

We have provided three scenarios to estimate the potential revenue that could be generated from a tax on cannabis manufacturers. The scenarios assume 9, 11 or 15 licenses for manufacturers, with a conservative average of $2.4 million each. We have applied the current tax rate of 2.5%, as the City is not presently proposing to change it. We have also provided projections for rates of 3.0% and 4.0%, which is the maximum tax rate HdL recommends for manufacturers. These additional rates are provided only for reference and are not a recommendation, as higher tax rates or burdensome regulations can be expected to reduce both the number of businesses and their profitability. HdL believes the City's current rate of 2.5% is appropriate and competitive.

We have applied these rates to the 3 scenarios described above. With 9 manufacturers, a tax rate of 2.5% would generate an estimated $540,000 in annual revenue for the City. A rate of 3.0% would generate $648,000, and a rate of 4.0% would generate $864,000. With 11 manufacturers, a tax rate of 2.5% would generate $660,000, a rate of 3.0% would generate $792,000 and a rate of 4.0% would generate $1,056,000. With 15 manufacturing businesses, a rate of 2.5% would generate $900,000, a rate of 3.0% would generate $1,080,000 and a rate of 4.0% would generate $1,440,000. These numbers are shown in Figure 7, below.

[4] The number of businesses holding multiple manufacturing licenses is likely higher, as numerous names in the MCSB database appear to be slight variations

Figure 7:

Cannabis Manufacturers; HdL Recommended Rates						
Type 6/7/N/P Manufacturer	# of Licenses	Avg Gross Receipts	Total Gross Receipts	Revenue @ 2.5% Tax Rate	Revenue @ 3.0% Tax Rate	Revenue @ 4.0% Tax Rate
Scenario 1	9	$2,400,000	$21,600,000	$540,000	$648,000	$864,000
Scenario 2	11	$2,400,000	$26,400,000	$660,000	$792,000	$1,056,000
Scenario 3	15	$2,400,000	$36,000,000	$900,000	$1,080,000	$1,440,000

HdL recommends that the City maintain the existing rate of 2.5% of gross receipts, as proposed. Depending upon the number of manufacturers, this rate would likely generate between $540,000 and $900,000 in annual cannabis tax revenue for the City.

V. Cultivation

The CalCannabis Division of the California Department of Food and Agriculture has been issuing temporary cultivation licenses since January 1, 2018. As of May 6, 2020, CalCannabis showed 4,178 active cultivation licenses statewide (not including nurseries or processors), held by 2,252 distinct businesses and comprising 788 acres of cultivation. We conservatively estimate these facilities to be capable of producing over 7.5 million pounds of cannabis per year. This is more than three times the estimated 2.5 million pounds per year consumed by all Californians, combined.

The cannabis cultivation market in California has already far exceeded its saturation point, which suggests that there is not enough room for those growers already licensed, much less new entrants into the market. Entry into this highly competitive marketplace can be filled with risk and requires ample capitalization and a clear marketing strategy to win shelf space. While cannabis cultivators may previously have been able to accept higher tax rates in exchange for the opportunity to be "first movers" in the marketplace, this is no longer the case.

The City of Watsonville's revised cannabis facilities ordinance incorporates the definitions promulgated for the California Cannabis Cultivation Program in Division 8 of Title 3 of the California Code of Regulations §§ 8000 et seq, 3 CCR 8000. Section 8000(f) of these regulations defines "canopy" as the following:

> *(f) "Canopy" means the designated area(s) at a licensed premises, except nurseries and processors, that will contain mature plants at any point in time, as follows:*
>
> *(1) Canopy shall be calculated in square feet and measured using clearly identifiable boundaries of all area(s) that will contain mature plants at any point in time, including all of the space(s) within the boundaries;*
>
> *(2) Canopy may be noncontiguous but each unique area included in the total canopy calculation shall be separated by an identifiable boundary that includes, but is not limited to, interior walls, shelves, greenhouse walls, hoop house walls, garden benches, hedgerows, fencing, garden beds, or garden plots; and*
>
> *(3) If mature plants are being cultivated using a shelving system, the surface area of each level shall be included in the total canopy calculation.*

By incorporating these state definitions, the City's recent revisions allow any square footage used for nursery activities to be taxed at a lower rate than square footage used for cultivation of flowering plants. This change makes the City's method of measuring the cultivation area consistent with CDFA's. As already discussed in the previous Section V, *Nurseries,* we estimate that this change will reduce the overall tax liability for cultivation activities by about 16%.

We have provided 3 scenarios for purposes of estimating the revenue impacts of the City's recent changes. Scenario 1 assumes 6 indoor cultivation sites with an average of 5,000 square feet each. Scenario 2 assumes the same 6 indoor cultivation sites but with an average of 11,000 square feet. Scenario 3 assumes 22,000 square feet. For each of these scenarios, we have assumed 20% of the overall cultivation area is dedicated to on-site nursery activities, including cloning, starts and vegetative growth. This reduces the remaining area available for cultivation of mature, flowering plants.

In Figure 11 we have applied the City's current tax structure, which assesses a tax rate of $20 per square foot to all cultivation area, whether it is used for mature plants or for nursery activities. Under Scenario 1, 6 cultivators with an average of 5,000 square feet each would generate $600,000 in annual tax revenue for the City. Six cultivators with an average of 11,000 square feet would generate $1,320,000, and six cultivators with an average of 20,000 square feet would generate $2,640,000 in annual tax revenue for the City.

Figure 11:

Cannabis Cultivation; Previous Structure									
Indoor Cultivation	# of Sites	Average Square Footage	Canopy Area (80%)	Nursery Area (20%)	Total Cultivation Area	Total Nursery Area	Cultivation Tax @ $20/sf	Nursery Tax @ $20/sf	Total Tax Revenue
Scenario 1	6	5,000	4,000	1,000	24,000	6,000	$480,000	$120,000	$600,000
Scenario 2	6	11,000	8,800	2,200	52,800	13,200	$1,056,000	$264,000	$1,320,000
Scenario 3	6	22,000	17,600	4,400	105,600	26,400	$2,112,000	$528,000	$2,640,000

In Figure 12 we have applied the City's revisions, which retain the rate of $20 per square foot for all canopy area (areas which will contain mature plants) but reduce the rate for areas used only for nurseries to just $1 per square foot. Applying these rates to 6 cultivators with an average of 5,000 square feet each would generate $480,000 from cultivation of mature plants and another $6,000 from related nursery activities, for a total of $486,000 in annual revenue for the City. Six cultivators with an average of 11,000 square feet would generate $1,056,000 in tax revenue from cultivation and an additional $13,200 from nursery activities, for a total of $1,069,200 in cannabis tax. Six cultivators with an average of 22,000 square feet would generate $2,112,000 from cultivation and an additional $26,400 from nursery activities, for a total of $2,138,400 in annual cannabis tax revenue for the City.

Figure 12:

Cannabis Cultivation; Revised Structure									
Indoor Cultivation	# of Sites	Average Square Footage	Canopy Area (80%)	Nursery Area (20%)	Total Cultivation Area	Total Nursery Area	Cultivation Tax @ $20/sf	Nursery Tax @ $1/sf	Total Tax Revenue
Scenario 1	6	5,000	4,000	1,000	24,000	6,000	$480,000	$6,000	$486,000
Scenario 2	6	11,000	8,800	2,200	52,800	13,200	$1,056,000	$13,200	$1,069,200
Scenario 3	6	22,000	17,600	4,400	105,600	26,400	$2,112,000	$26,400	$2,138,400

In Figure 13 we have applied HdL's recommended cultivation tax rate of $7 per square foot (HdL commonly recommends an initial rate of $7 and a maximum rate of $10). HdL generally recommends that Type 4 cannabis nurseries be taxed at an initial rate of $1 per square foot, with a maximum of $2 per square foot, but this rate is only applied to Type 4 nurseries, where the clones, starts or non-flowering vegetative plants are sold as an end product to other licensed cultivators. A cultivator that is conducting their own nursery operations for internal purposes (not for outside sale) would pay the same tax rate for all square footage, whether it is used for cultivation of mature, flowering plants, or only for cloning, propagation, starts or vegetative growth.

Applying the rate of $7 per square foot to 6 cultivators with an average of 5,000 square feet each would generate $210,000 in annual revenue for the City. Six cultivators with an average of 11,000 square feet would generate $462,000 in tax revenue, and six cultivators with an average of 22,000 square feet would generate $924,000 in annual cannabis tax revenue for the City.

Figure 13:

Cannabis Cultivation; HdL Recommendations									
Indoor Cultivation	# of Sites	Average Square Footage	Canopy Area (80%)	Nursery Area (20%)	Total Cultivation Area	Total Nursery Area	Cultivation Tax @ $7/sf	Nursery Tax @ $7/sf	Total Tax Revenue
Scenario 1	6	5,000	4,000	1,000	24,000	6,000	$168,000	$42,000	$210,000
Scenario 2	6	11,000	8,800	2,200	52,800	13,200	$369,600	$92,400	$462,000
Scenario 3	6	22,000	17,600	4,400	105,600	26,400	$739,200	$184,800	$924,000

HdL recognizes that the difference in revenue between the City's current tax rate and the rate commonly recommended by HdL is significant. However, the City currently only allows cultivation of up to 5,000 square feet, which must include any area used for cloning, starts or non-flowering vegetative growth. Under the current tax structure, the maximum revenue the City may receive would be $600,000. With the proposed change in how nursery areas are assessed, that revenue would decrease to $486,000. To generate more revenue than this, the City's 6 cultivators would have to succeed and expand in a highly competitive market. At the City's existing and proposed rates, the ability to expand from 5,000 square feet up to 22,000 square feet would be hampered by tax rates that are up to four times higher than in any other nearby jurisdiction, except for Salinas.

Applying the competitive rate recommended by HdL would generate significantly less revenue in a purely mathematical sense. The bigger question is whether the additional revenues from allowing increased cultivation area would actually materialize with the existing tax rate of $20 per square foot, regardless of the proposed changes to nursery areas. HdL believes that the lower tax rate would greatly increase the likelihood of business expansion and success. In other words, the City is far more likely to actually realize the $924,000 projected under Scenario 3 with the HdL recommended rate than it is to realize the increased potential revenues with either the existing or proposed tax structures. To that degree, the City may want to look upon the $924,000 figure as an increase over the current $600,000, rather than as a decrease from an entirely hypothetical $2 million.

VI. Nurseries

The City of Watsonville currently assesses its cannabis tax for cultivation at a rate of $20 per square foot, regardless of whether that space is being used for cultivation of mature, flowering plants, or as a nursery for cloning, propagation and vegetative growth. The City is now considering a reduction of that rate down to $7 per square foot for mature plants, but also allowing that the rate for any area that would only contain immature plants be reduced to just $1 per square foot. Because of the limited number of cultivation licenses available, it is assumed that the City will only be host to nursery activities as an accessory for cultivation, not as a free-standing Type 4 nursery.

The CalCannabis division of the California Department of Food and Agriculture (CDFA) defines "canopy" as *"the designated area(s) at a licensed premises, except nurseries and processors, that will contain mature plants at any point in time".* Notably, any nursery area is not included within the measured canopy area, so a cannabis grower with a Type 2A "small indoor" license for up to 10,000 square feet does not have to set aside a portion of their licensed cultivation area for cloning, propagation and vegetative growth. The entirety of their 10,000 square foot licensed cultivation area can be maintained for mature (flowering) plants[5].

In analyzing the impact of the City's proposed change, we must first estimate the percentage of cultivation area that is likely being used for nursery activities as defined. Nursery operations can vary greatly depending upon the methods and the types of tables or benches being used. Some cultivators may do all of their cloning and propagation in-house, while others may purchase 4" starts from a Type 4 nursery. Some cultivators may contract with a nursery to provide them with ready-to-flower vegetative plants, so that no floor space is given over to nursery functions.

Among those cultivation facilities that conduct all of their own cloning and propagation, there can be substantial differences in floor space utilization from the initial propagation to the finishing stage. Commonly, the initial propagation from the mother plant (or plants) takes about two weeks, during which the starts are held in an area equipped with misting systems. From there, the clones are transferred into a soil medium in small 4" pots (or similar) for another two to three weeks, after which they are again transferred into 1-gallon or 2-gallon (or larger) pots for another 4 weeks for finishing. Finally, when the plants are nearing maturity, they are moved to the designated cultivation area.

A fairly standard 10,000 square foot cultivation area with around 2,500 flowering plants may require up to 2,000 additional square feet for nursery operations to maintain a ready supply of vegetative plants

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[5] Though areas used for nursery or immature plants are not included within the designated cultivation area, they still must be shown on the premises diagram for the proposed cultivation business.

throughout the year. Though nursery regimens can vary greatly, a nursery area might commonly use 15% of its space for propagation and cloning, 25% for starts in 4" pots, and 60% for plants in the vegetative growth stage.

For purposes of our calculations, we will assume that the nursery and vegetative growth area necessary for a standard cultivation operation will use 20% of the cultivation area available. The City proposes to allow a maximum floor area of 11,000 square feet, which would have to include cultivation, nursery and processing. For purposes of illustration, we have constructed a model that assumes 8,000 square feet of cultivation, with an additional 1,600 square feet for nursery operations. Figure 9 below shows how reducing the tax rate for cultivation from $20 to $7 and reducing the rate for nursery area down to $1 per square foot would reduce the effective tax paid for the operation by 70%.

Figure 9:

Current			
	Square feet	Tax Rate/SF	Tax Amount
Cultivation Area	8,000	$20	$160,000
Nursery Area	1,600	$20	$32,000
Total	9,600		$192,000

Proposed			
	Square feet	Tax Rate/SF	Tax Amount
Cultivation Area	8,000	$7	$56,000
Nursery Area	1,600	$1	$1,600
Total	9,600		$57,600

Reduction in taxes as a percentage: -70.00%

In Figure 10, we have applied a number of common assumptions to determine the effective tax rate as a percentage of gross receipts. Assuming 4 harvest cycles per year, a conservative yield of 1 pound per 10 square feet of cultivation, and a conservative price of $1,000 per pound, our 8,000 square foot example would generate $3.2 million in gross receipts per year. A tax liability of $192,000 as shown in the "Current" example from Figure 9 would be equivalent to 6% of gross receipts. A tax liability of $57,600 as shown in the "Proposed" example would be equivalent to 1.8% of gross receipts.

Figure 10:

Effective Gross Receipts Tax Rate								
Cultivation Type	Harvest Cycles /Year	Cultivation Area (sq ft)	Yield @ 1 lb/10 sf /cycle	Price per pound	Gross Receipts	Total Annual Tax Paid	Tax Rate per Pound	Tax Rate % Gross Receipts
Current	4	8,000	3,200	$1,000	$3,200,000	$192,000	$60.00	6.00%
Proposed	4	8,000	3,200	$1,000	$3,200,000	$57,600	$18.00	1.80%

These changes will reduce the effective tax rate for cultivation, and the resulting combined tax rate would be within the range of what we commonly recommend. Common cultivation tax rates of $4 to $7 per square foot equal a gross receipts tax rate of just 1.75% to 2.10%, putting the City's proposed rates well within that range. We note that the City would have to assess the tax in two parts and would have to figure the square footage for each rate. While this adds an additional administrative step, we do not believe it would be problematic or prohibitive in any way.

VII. Cannabis Retailers

The City of Watsonville previously did not allow either storefront or non-storefront (delivery) cannabis retailers. The City will now allow for up to 3 storefront retailers, which would also be allowed to conduct sales via delivery. In addition, the City will now allow licensed cultivators and manufacturers to conduct retail sales of their own products via delivery, with a maximum of 7 such permits.

Retailers are the only cannabis business type that specifically serves the local community, rather than feeding into the statewide market, and so the number of retailers can be assumed to be somewhat proportional to the local population. Cannabis retailers address a local market demand which is generally assumed to exist within a given community regardless of whether there is any legal access. Consumer demand for cannabis is assumed to generally be a constant, regardless of its legal status or the availability of retailers, and so it's reasonable to expect that more retailers would mean fewer customers for each and, thus, lower gross receipts.

It has been anticipated that providing greater access to retailers would initially facilitate a shift in cannabis purchases happening through legal, regulated means rather than through the illicit market. Eventually, though, the local cannabis market will reach saturation, at which point new cannabis retailers will simply cannibalize sales from existing retailers. Essentially, both licensed and unlicensed cannabis retailers all divide the same pie. The taxable amount of gross sales will likely plateau at some point, regardless of the number of retailers.

Under California's regulatory program, it is anticipated that consumers will have little reason to purchase cannabis in the medical segment rather than buying in the adult use segment. Both medical and adult use cannabis will pay the State cultivation tax and excise tax, with the only advantage being an exemption from regular sales tax for qualifying patients with a State-issued identification card. Currently there are only 6,172 such cardholders in California, and just 324 cards were issued in all of Santa Cruz and Monterey counties combined in FY 2017/2018[vii]. Eligibility for this limited sales tax exemption will cost consumers approximately $100 per year, plus time and inconvenience, for a savings of 9.25% in Watsonville. It's anticipated that this will provide no price advantage for the majority of cannabis consumers[viii].

The Bureau of Cannabis Control projects that more than half of the adult use purchases currently in the illicit market will transition to the legal market to avoid the inconvenience, stigma and risks of buying unknown product through an unlicensed seller[ix]. Essentially, the easier, cheaper and more reliable it is for consumers to access quality cannabis legally, the less reason they will have to purchase it through the illicit market. That same study projects that 60% of those currently in the legal, medical cannabis market will shift to the adult use market, for the reasons noted above. The availability of legal adult use cannabis is also anticipated to produce a small 9.4% increase in consumer demand. It must be noted, though, that this transition to legal sales is dependent upon the availability of legal access. The majority of cities and counties in California do not allow or permit cannabis retailers, which has buoyed a persistent black market.

The shift from medical to adult use sales is not expected to change the overall volume of sales, only the category into which they fall. Once the legal, adult use market is properly functioning and available throughout the state, it is anticipated to capture about 61.5% of the overall cannabis market in California. The legal medical cannabis market is projected to decline to just 9% of the overall market, though this projection may change due to the increasing popularity of CBD products. The other 29.5% is expected to remain in the illicit market[x]. The vast majority of retail licenses issued by the Bureau of Cannabis Control are for retailers who will operate both medical and adult use from the same premises.

Sales tax is collected at the point of purchase, which allows storefront cannabis retailers to capture sales tax dollars from outside of their host cities. This applies to cannabis retail taxes, too. Retail studies show that 93% of consumers are willing to travel 15 to 20 minutes to make most routine purchases[xi], meaning that storefront retailers in Watsonville would potentially be able to capture sales tax (and cannabis tax) from a much larger area extending generally from as far away as Aptos, Moss Landing and Aromas. However, the region is already well served by 38 existing retailers, as shown in Figure 16, and each of these nearby communities has other retail options that would be as close, if not closer, than Watsonville.

Figure 16:

Retail Licenses in Nearby Communities			
City/County	**Retailer**	**Microbusiness w/ Retail**	**Total**
Watsonville	0	0	0
Santa Cruz (City)	6	1	7
Santa Cruz (County)	10	0	10
Salinas	8	0	8
Marina	1	0	1
Hollister	1	0	1
Greenfield	0	0	0
King City	2	0	2
Seaside	6	0	6
Monterey (City)	0	0	0
Monterey (County)	3	0	3
Total	**37**	**1**	**38**

For purchases made via delivery, the point of purchase is considered to be the location where the goods trade hands. Thus, while storefront retailers may capture sales and cannabis tax dollars from outside of the City, delivery services cannot. For this reason, the customer base for our analysis of potential cannabis tax revenue would not extend beyond the City's population of 54,000.

Estimates of the percentage of the population that uses cannabis on a regular basis vary from around 10% to 13%[xii], up to as high as 22%[xiii]. This percentage is influenced by social acceptance of cannabis within the local community. Applying these estimates to the City's population of 54,000 would yield between roughly 5,427 and 11,880 potential cannabis consumers. However, we anticipate that some portion of cannabis sales would be lost to consumers making routine trips to nearby cities such as Santa Cruz, Hollister or Salinas. For purposes of our projections we have estimated this leakage factor at 20% which brings our consumer base down to between 4,342 and 9,504.

Cannabis retailers typically average around 120 customers per day[xiv], with an average transaction of $73 and an average frequency of twice a month[xv]. This produces a range of annual gross receipts generated by cannabis consumers within the available market of between $7.6 million and $16.7 million.

As discussed previously, some 70% of cannabis sales in California remain in the black market. This is primarily due to lack of access to legal, licensed cannabis retailers, but it remains a factor even in areas where licensed retailers are common. We commonly allow for up to 60% leakage to illicit delivery services, but due to the large number of retailers in the region we have estimated such leakage at just 30% for Watsonville. This would reduce the adjusted annual gross receipts to between $5.3 million and $11.7 million.

The City's current tax rate for retailers is 10%, which is significantly above the rates HdL commonly recommends. Applying this rate to our demand-based model would generate between $532,000 and $1,166,000 in annual revenue for the City. However, we caution that such a high rate would likely increase the amount of leakage to both the illicit market and to other jurisdictions, which would reduce the amount of tax revenue.

The City is proposing to reduce the tax rate on retailers to 5.0%, which is within HdL's recommended range of 4.0% to 6.0%. Applying a tax rate of 4.0% to our estimated range would generate annual tax revenues between $213,000 and $466,000. The City's proposed initial rate of 5.0% would generate between $266,000 and $583,000, and HdL's maximum recommended rate of 6.0% would generate between $319,000 and $699,000. These estimates and all of the calculations discussed are shown in Figure 17, below.

Figure 17:

Revenue Projections for Cannabis Retailers			
	Low Estimate	"Best" Estimate	High Estimate
Watsonville population	54,000	54,000	54,000
Percentage of population that uses cannabis	10%	13%	22%
Number of cannabis users	5,427	7,020	11,880
Leakage to other jurisdictions (20%)	1,085	1,404	2,376
Total customer base	4,342	5,616	9,504
Average transaction amount	$73	$73	$73
Transaction frequency (per month)	2	2	2
Monthly gross receipts	$633,874	$819,936	$1,387,584
Annual gross receipts	$7,606,483	$9,839,232	$16,651,008
Leakage to black market (30%)	$2,281,945	$2,951,770	$4,995,302
Adjusted annual gross receipts	$5,324,538	$6,887,462	$11,655,706
Cannabis business tax rate:			
4.00%	$212,982	$275,498	$466,228
5.00%	$266,227	$344,373	$582,785
6.00%	$319,472	$413,248	$699,342
10.00%	$532,454	$688,746	$1,165,571

Applying these estimates to the City's proposed 3 storefront retailers would suggest a range of gross receipts from roughly $1.8 million to $3.9 million for each retailer. We anticipate that these would likely fall at the lower end of this range. In addition, the City will also allow cannabis cultivators and manufacturers to seek non-storefront retailer licenses, but only for the purposes of delivering their own products to retail customers within the City of Watsonville. While this may be beneficial for those businesses, we do not anticipate that it would increase to overall amount of retail cannabis sales or related tax revenue.

VIII. APPENDIX

a. Legal and Regulatory Background for California

The legal and regulatory status of cannabis in the State of California has been continually evolving ever since the passage of Proposition 215, the Compassionate Use Act of 1996 (CUA), which de-criminalized the use, possession and cultivation of cannabis for qualifying patients and their primary caregivers when such use has been recommended by a physician. The CUA did not create any regulatory program to guide implementation, nor did it provide any guidelines for local jurisdictions to establish their own regulations. The lack of legal and regulatory certainty for medical marijuana (or cannabis) continued for nearly 20 years, until the passage of the Medical Cannabis Regulation and Safety Act (MCRSA) in October of 2015. MCRSA created a State licensing program for commercial medical cannabis activities, while allowing counties and cities to maintain local regulatory authority. MCRSA required that the State would not issue a license without first receiving authorization by the applicable local jurisdiction.

On November 8, 2016, the voters of the State of California approved Proposition 64, the Adult Use of Marijuana Act (AUMA), which allows adults 21 years of age or older to legally grow, possess, and use marijuana for personal, non-medical "adult use" purposes, with certain restrictions. AUMA requires the State to regulate non-medical marijuana businesses and tax the growing and selling of medical and non-medical marijuana. Cities and counties may also regulate non-medical marijuana businesses by requiring them to obtain local permits or restricting where they may be located. Cities and counties may also completely ban marijuana related businesses if they so choose. However, cities and counties cannot ban transport of cannabis products through their jurisdictions, nor can they ban delivery of cannabis by licensed retailers to addresses within their jurisdiction (added later through regulations).

On June 27, 2017, the Legislature enacted SB 94, which repealed MCRSA and incorporated certain provisions of MCRSA into the licensing provisions of AUMA. These consolidated provisions are now known as the Medicinal and Adult-Use Cannabis Regulation and Safety Act (MAUCRSA). MAUCRSA revised references to "marijuana" or "medical marijuana" in existing law to instead refer to "cannabis" or "medicinal cannabis," respectively. MAUCRSA generally imposes the same requirements on both commercial medicinal and commercial adult-use cannabis activity, with certain exceptions. MAUCRSA also made a fundamental change to the local control provisions. Under MCRSA, an applicant could not obtain a State license until they had a local permit. Under MAUCRSA, an applicant for a State license does not have to first obtain a local permit, but they cannot be in violation of any local ordinance or regulations. The State licensing agency shall contact the local jurisdiction to see whether the applicant has a permit or is in violation of local regulations, but if the local jurisdiction does not respond within 60 days, then the applicant will be presumed to be in compliance and the State license will be issued.

MAUCRSA authorizes a person to apply for and be issued more than one license only if the licensed premises are separate and distinct. With the passage of AB 133 in 2017, a person or business may co-locate multiple license types on the same premises, allowing a cultivator to process, manufacture or distribute their own product from a single location. This includes the allowance to cultivate, manufacture, distribute or sell cannabis for both medical and adult use from a single location. Licensees of cannabis testing operations may not hold any other type of license. However, these allowances are still subject to local land use authority, so anyone seeking to operate two or more license types from a single location would be prohibited from doing so unless local regulations allow both within the same zone.

The table below provides a detailed overview of the license types available under MAUCRSA and state cannabis regulations:

State License Types Under MAUCRSA					
Type	**Activity**	**Description**	**Details**	**Licensing Agency**	**Notes**
1	Cultivation	Outdoor; Specialty, Small	Up to 5,000 sf, or 50 plants on non-contiguos plots	CDFA	A, B
1A	Cultivation	Indoor; Specialty, Small	501 sf - 5,000 sf	CDFA	A, B
1B	Cultivation	Mixed-Light; Specialty, Small	2,501 sf - 5,000 sf	CDFA	A, B
1C	Cultivation	Outdoor/indoor/mixed; Specialty Cottage, Small	Up to 25 plants outdoor; up to 2,500 sf mixed light; up to 500 sf indoor	CDFA	A, B
2	Cultivation	Outdoor; Small	5,001 sf - 10,000 sf	CDFA	A, B
2A	Cultivation	Indoor; Small	5,001 sf - 10,000 sf	CDFA	A, B
2B	Cultivation	Mixed Light, Small	5,001 sf - 10,000 sf	CDFA	A, B
3	Cultivation	Outdoor; Medium	10,001 sf - one acre	CDFA	A, B, C
3A	Cultivation	Indoor; Medium	10,001 sf - 22,000 sf	CDFA	A, B, C
3B	Cultivation	Mixed-Light; Medium	10,001 sf - 22,000 sf	CDFA	A, B, C
4	Cultivation	Nursery		CDFA	A, B
-	Cultivation	Processor	Conducts only trimming, drying, curing, grading and packaging of cannabis	CDFA	A, B, E
5	Cultivation	Outdoor; Large	Greater than 22,000 sf	CDFA	A, B, D
5A	Cultivation	Indoor; Large	Greater than 22,000 sf	CDFA	A, B, D
5B	Cultivation	Mixed-Light; Large	Greater than 22,000 sf	CDFA	A, B, D
6	Manufacturer 1	Extraction; Non-volatile	Allows infusion, packaging and labeling	OMCS	A, B
7	Manufacturer 2	Extraction; Volatile	Allows infusion, packaging and labeling, plus non-volatile extraction	OMCS	A, B
N	Manufacturer	Infusion for Edibles, Topicals	No extraction allowed	OMCS	A, B, E
P	Manufacturer	Packaging and Labeling	No extraction allowed	OMCS	A, B, E
S	Manufacturer	Shared-use manufacturer	Manufacturing in a shared-use facility	OMCS	A, B, E
8	Testing		Shall not hold any other license type	BCC	A
9	Retailer	Non-storefront retail delivery	Retail delivery without a storefront	BCC	A, F
10	Retailer	Retail sale and delivery		BCC	A, B
11	Distributor			BCC	A, B
12	Microbusiness	Cultivation, Manufacturer 1, Distributor and Retailer	< 10,000 sf of cultivation; must meet requirements for all license types	BCC	A, B

CDFA	California Department of Food and Agriculture
OMCS	California Department of Public Health, Office of Manufactured Cannabis Safety
BCC	Bureau of Cannabis Control
A	All license types valid for 12 months and must be renewed annually
B	All license types except Type 8 Testing must be designated "A" (Adult Use), "M" (Medical) or "A/M" (Both)
C	CDFA shall limit the number of licenses allowed of this type
D	No Type 5 licenses shall be issued before January 1, 2023
E	Established through rulemaking process

AUMA, and its successor MAUCRSA, required three state agencies, the Bureau of Cannabis Control, the California Department of Food and Agriculture, and the California Department of Public Health, to permit commercial cannabis licensees and to adopt regulations for the cannabis industry. On January 16, 2019, all three agencies announced that the state's Office of Administrative Law officially approved state regulations, which took immediate effect and replaced emergency regulations that had been in effect since 2017. The final regulations were largely similar to the emergency regulations, but somewhat controversially, Section 5416(d) of the Bureau of Cannabis Control regulations authorizes deliveries of cannabis products into any city or county in the state, even if a city or county has banned commercial deliveries.

b. State Tax Considerations

To determine what local tax rates might be most appropriate, they must be considered in the context of other taxes imposed by the State. Any local taxes will be in addition to those taxes applied through the Adult Use of Marijuana Act (AUMA), which imposes both a 15% excise tax on purchases of cannabis or cannabis products and a separate cultivation tax on harvested cannabis that enters the commercial market, as well as sales tax. Taxes are most commonly expressed as a percent of price or value, so some method of conversion is necessary to allow development of an appropriate cultivation tax based on square footage.

The State tax rate for cultivation is set at $9.65 per ounce of dried flower or $2.87 per ounce of dried leaf. Because these rates are set per ounce, rather than as a percentage of price paid, the tax is the same whether the cultivator is producing commercial-grade cannabis at $500 per pound or top-grade cannabis at $2,500 per pound. The cultivator is generally responsible for payment of the tax, though that responsibility may be passed along to either a manufacturer or distributor via invoice. at the time the product is first sold or transferred. The distributor is responsible for collecting the tax from the cultivator upon entry into the commercial market, and remitting it to the California Department of Tax and Fee Administration.

Cumulative Cannabis Taxes

Category	Amount	Increase	Cumulative Price
Producer Price	$1,000	$1,000	$1,000
State Cultivation Tax, per oz.	$9.65	$154	$1,154
Local Tax	5.00%	$50	$1,204
Batch Testing	$75/lb, + 0.75%	$75	$1,279
Wholesale Price w/ Taxes		$1,279	
Total Tax at Wholesale		$279	
Tax as %		27.94%	
Distributor Markup	20.00%	$256	$1,535
Local Tax	2.50%	$38	$1,574
Total Distributor Price		$1,574	
Total Taxes at Distributor		$318	
Total Tax as %		20.19%	
Retailer Markup	100.00%	$1,574	$3,147
Local Tax	10.00%	$315	$3,462
State Excise Tax	15.00%	$472	$3,934
Total Retailer Price		$3,934	
Total Taxes at Retail		$1,105	
Total Tax as %		28.08%	
CA Sales Tax (non-medical)	6.25%	$246	$4,180
Local Sales Taxes	3.00%	$118	$4,298
Total Taxes at Retail		**$1,469**	
Total Tax as %		**34.17%**	
Total Local Tax		**12.12%**	**$521.14**

The cultivation tax of $9.65 per ounce of dried flower is equivalent to $154 per pound. Just a year ago, HdL would have assumed an average wholesale market price for dried flower of around $1,500 per pound, which would make that $154 equal to 10% of value. Since then, however, prices have plummeted. Oversupply and market saturation have brought the average price for indoor cannabis down to around $1,000 per pound, or even less (cannabis prices vary greatly based on quality of the product).

Conversations with cannabis industry trade groups suggest that the cumulative tax rate on the end product should remain at or around 30%. Higher rates create too much price disparity between legal and illegal cannabis, making it harder for the regulated industry to compete with the illicit market. Higher local tax rates can also make a county or city less attractive to the industry, especially for manufacturers and distributors, which have greater flexibility in choosing where to locate. We believe that setting rates that adhere to this 30% rule will help keep the local cannabis industry competitive with other cultivators across California, thus encouraging the transition to a legal industry.

The above table shows how the cumulative tax rate on adult-use cannabis builds as the product moves towards market. The value of the product increases as it moves through the supply chain towards market, with manufacturers, distributors and retailers each adding their own markup. Testing laboratories do not add a direct markup to the product, but the cost of testing and the loss of a small test sample can add around $75 per pound. Any or all of these activities may be taxed.

This model assumes a hypothetical case where cultivation, manufacturing, testing, distribution and retail sale all happen within the same jurisdiction and are thus all subject to that jurisdiction's tax rates. In actuality, this is unlikely to be the case. Manufacturers may work with product purchased from anywhere in California, and may sell their product to retailers elsewhere, as well. The cumulative tax burden for any product at retail sale will almost always include a variety of tax rates from numerous jurisdictions.

c. General Economic Impacts

Discussion of regulating and taxing the cannabis industry can too often overshadow the larger jobs and economic development issues that typically accompany efforts to attract new industry. Word that a new business or industry is looking to bring hundreds of new jobs to a community is more commonly met with open arms and offers of tax incentives. The cannabis industry is perhaps completely unique in that the inherent jobs and economic development benefits are welcomed more grudgingly and met with the disincentive of special taxes.

As with any other industry, the cannabis industry does not exist in a vacuum. Those businesses that actually grow, process, manufacture, distribute and sell cannabis products support a wide variety of other businesses that may never touch the actual product itself. Cultivators support garden supply stores, green house manufacturers, irrigation suppliers, soil manufacturers, and a wide variety of contractors including building and construction, lighting and electrical, HVAC, permitting, and engineering. Manufacturers support many of these same businesses, plus specialized tooling and equipment manufacturers, and product suppliers for hardware, packaging, and labeling. All of these businesses support, and are supported by, a host of ancillary businesses such as bookkeepers, accountants, tax preparers, parcel services, marketing and advertising agencies, personnel services, attorneys, mechanics, facilities maintenance, security services, and others.

The economic benefits are not limited to those in the cannabis industry, itself. Cultivators bring new money into the community by selling their products into a statewide market. Their profits and the salaries they pay move into the general local economy, supporting stores, restaurants, car dealerships, contractors, home sales and other businesses. In Humboldt County, a study done in 2011 found that at least $415 million dollars in personal income was entering the local economy annually from the cannabis industry, roughly equal to one quarter of the county's entire $1.6 billion economy.

While Humboldt is likely an outlier, research done by HdL for other clients suggests that other counties and cities see similar, if smaller, economic inputs from this industry, with some in the range of $100 million dollars or more annually. As this industry adapts to a legal paradigm, the challenge for some counties will be mitigating and minimizing the economic loss as the black market slowly fades away.

Because of the emerging nature of this industry, it is currently populated primarily (but not solely) by small, independently-owned businesses. Numerous studies have demonstrated that locally-owned, independent businesses recirculate a far higher percentage of every dollar back into the local community than large, corporately-owned businesses do. The same economic development arguments that are used to support other independent, locally-owned businesses apply to this industry, too. Host cities or counties should expect to see typical economic benefits from these new (or newly daylighted) businesses on par with other new businesses, separate from any tax revenue that may be generated.

Industry experts believe that California's current statewide production is five to eight times higher than the State's population consumes, a figure derived from the SRIA done for CDFA's cannabis cultivation program. That assessment found that California's cannabis industry produces some 13.5 million pounds of cannabis per year, which would be enough to provide over half a pound of cannabis per year for every Californian 21 and over. However, the assessment also found that California's 4.5 million cannabis users only consume about 2.5 million pounds of cannabis per year.

The Bureau of Cannabis Control projects that more than half of the adult use purchases currently in the illicit market will transition to the legal market to avoid the inconvenience, stigma and risks of buying unknown product through an unlicensed seller. Essentially, the easier, cheaper and more reliable it is for consumers to access quality cannabis legally, the less reason they will have to purchase it through the illicit market. That same study projects that 60% of those currently in the legal, medical cannabis market will shift to the adult use market, for the reasons noted above. The availability of legal adult use cannabis is also anticipated to produce a small 9.4% increase in consumer demand.

Given these figures, cities and counties should expect to see some increase in retail sales as these shifts occur in the market. More significantly, the existence of legally permitted cannabis retailers will allow a far greater portion of existing cannabis sales to be captured by legal (and tax-paying) retailers.

The shift from medical to adult use sales is not expected to change the overall volume of sales, only the category into which they fall. Once the legal, adult use market is properly functioning, it is anticipated to capture about 61.5% of the overall cannabis market in California. The legal medical cannabis market is projected to decline to just 9% of the overall market. The other 29.5% is expected to remain in the illicit market.

These numbers only apply to the 2.5 million pounds of cannabis that is consumed in California, representing the potential size of the legal cannabis market. If 29.5% of the cannabis consumed in California continues to come from the illicit market, then the size of the market for legal cannabis must be adjusted downward accordingly. This would reduce the size of the legal market in California to 1.76 million pounds.

California has been issuing temporary licenses for commercial cannabis businesses since the beginning of the year. As of July 30th, 2019, CDFA's CalCannabis division shows 2,619 active cultivation licenses, capable of producing over 5.6 million pounds of cannabis per year. This amounts to over twice as much cannabis as the State's legal buyers are anticipated to consume. Were the State to issue no more licenses, we would still expect a failure rate of at least 40% in the next two years.

d. References

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