Delivering Revenue, Insight
and Efficiency to Local Government

Fiscal Analysis of the
Commercial Cannabis Cultivation Industry

Prepared for
the

County of Sonoma

January 20, 2022

Table of Contents

I. Introduction

The County of Sonoma has a robust cannabis industry sector, including a large number of cannabis cultivation businesses, including 5 retailers and 140 cultivators. The County's current cannabis tax (Measure A) assesses a tax on cultivators based upon the square footage of canopy area but allows the County to change it to gross receipts so long as the equivalent rate of the tax does not exceed the maximum allowed by the measure.

Over the past year the County has looked at ways to support the emerging Cannabis industry given changes to the market. Specifically, on March 15th, 2022, the Board of Supervisors agreed to reduce the cultivation tax rate by 45%. The Board also directed an investigation into the pros and cons of changing its cultivation tax to be based on gross receipts, rather than the current square footage model.

To inform this discussion, Auditor-Controller-Treasurer-Tax Collector (ACTTC) staff engaged HdL to conduct a revenue review of a sample set of cannabis cultivators operating in the unincorporated area to determine how they would be affected by the proposed change in the tax basis.

HdL worked with the County to determine a representative sample set of cultivation businesses to be subject to the revenue review. HdL then used the information gathered through the review to prepare this fiscal analysis exploring the issues and considerations for changing the County's cultivation tax from square footage to gross receipts. This analysis addresses the following impacts:

- Impacts to cannabis cultivation businesses
- Impacts on County revenues and cannabis tax administration
- Recommended tax rates
- Revenue estimates

This report includes a detailed discussion of common cannabis cultivation tax rates and methodologies in comparable jurisdictions around the state, including both square footage and gross receipts, along with a discussion of issues and considerations regarding the relative advantages of each cultivation taxing method. The report also describes a methodology for determining comparable rates between the two taxing methods. Lastly, the report provides a recommended range of tax rates for the County's consideration as well as a projected gross receipts rate that would provide the same level of revenue as currently being generated by the County's existing square footage tax.

It is anticipated that any changes to the County's cannabis tax basis would be implemented in time to go into effect as of July 2023 for the 2023/2024 fiscal year.

II. Findings and Observations

Based on our analysis, HdL provides the following findings and observations for the County to consider in deciding whether or not to change the basis for its cultivation tax from square footage to gross receipts.

1. Changing the County's tax basis from square footage to gross receipts will have both winners and losers. Those cultivators with the highest earnings will pay more than operators of the same type and size who are making less per square foot of cultivation area. Conversely, those businesses which are struggling the most will see their taxes reduced commensurate with their lower sales. Our analysis indicates that indoor cultivators are likely to pay higher taxes with this change, while outdoor cultivators are likely to pay less.

2. Any change to the basis or rate of the County's cultivation tax is unlikely to make a difference in which businesses succeed or fail. The current reduced tax rates are on par with or below common tax rates found elsewhere in the state, including Santa Barbara County and Ventura County, which are both home to some of the largest operators in the state. These businesses appear to be operating comfortably and outcompeting growers from elsewhere in the state despite a somewhat higher tax burden. We believe that factors such as proximity to markets, cultivation infrastructure, operating efficiencies, producing under contract and distribution agreements are more indicative of business success than tax rates, alone.

3. Outdoor cultivators are financially struggling to a far greater degree than indoor cultivators. Data provided by the 7 participants in this review showed that indoor cannabis averaged $1,230/lb during the review period, while outdoor cannabis averaged$308. This is consistent with trends we have seen across the state, where outdoor cultivators are struggling to sell product at a price that even covers their own costs. While indoor cannabis may still earn prices well above $1,000/lb, outdoor and mixed-light operators have seen prices plummet to less than $300/lb, and even below $100/lb in many cases. Many outdoor cultivators have been unable to sell their product at all.

4. We do not foresee prices returning to their previous highs. Conversations with some of the largest cannabis growers in the state indicates that they are constantly working to improve yield and consistency at the lowest operationally sustainable prices possible. At least one large grower in southern California states that they are able to produce large volumes of marketable product profitably at $150/lb and have a goal of getting their cost of goods sold (COGS) down to $100/lb in the near future.

We further note that the 20 largest growers in the state have the capacity to produce enough cannabis to meet the entire demand for all of California, estimated at 2.5 million pounds[1]. While there will always be some demand for high-end specialty product, this is likely to be a small niche market, at best.

[1] See Figure 13 on Page 33.

5. Our analysis indicates that the County's current square-footage rates result in an inequitable tax burden for the outdoor cultivators in our sample group. While indoor cultivators paid an average tax rate of 0.76%, outdoor cultivators paid a rate that was over 10-times higher at 8.25% due to having only a single harvest per year and receiving a far lower market price. We note that these are averages for all indoor and all outdoor cultivators and do not reflect the County's reduced square footage rates for the smallest cultivators.

6. If the County chooses to change the basis of the cultivation tax from square footage to gross receipts, HdL recommends that the rate be set to be no lower than 1.00% and no higher than 2.50%. Our analysis indicates that a rate of 1.30% will best approximate the County's current revenues. This equates to a square footage rate of $6.50 for indoor cultivation, $1.56 per square foot for mixed-light and $0.39 per square foot for outdoor cultivation. If the County chooses to retain the current square footage structure, HdL recommends that the tax rates be adjusted to be consistent with these rates so as to provide a more equitable tax burden for all cultivation types.

Figure 1: Square Footage Equivalents for 1.30% Gross Receipts Rate

Square Footage Equivalents for 1.30% Gross Receipts Rate									
	A	B	C	D	E	F	G	H	I
Cultivation Type	Harvest Cycles /Year	Sample Area (sq ft)	Yield @ 1 lb/10 sf /cycle	Price per pound	Gross Receipts	Tax Rate % Gross Receipts	Total Annual Tax Paid	Tax Rate per Pound	Tax Rate per SF
Indoors	5	10,000	5,000	$1,000	$5,000,000	1.30%	$65,000	$13.00	$6.50
Mixed Light	3	10,000	3,000	$400	$1,200,000	1.30%	$15,600	$5.20	$1.56
Outdoors	1	10,000	1,000	$300	$300,000	1.30%	$3,900	$3.90	$0.39

III. Revenue Review Methodology

HdL conducted a revenue review of licensed cultivators in Sonoma County to determine the amount of annual revenues generated by each business. The analysis was performed on a sample set of operators, of varying size and scale, so as to be generally representative of cultivators in the County. The information gathered from this sample set will be used as a basis for projecting total annual gross receipts for cultivation businesses in Sonoma County later in the report.

The County provided HdL with a list of 35 cultivators selected to participate in the study. Another 7 operators were excluded as they were either not currently operating, not planning to operate in the future, or were the subject of permit appeal proceedings. HdL provided a template letter to the County which explained the purpose of the study and identified the records being requested. The records request included all of the following for fiscal year 2021/2022 (July 1, 2021 through June 30, 2022):

- Accounting sales reports
- METRC Transfers report
- Monthly profit and loss (P&L) statements
- Copies of invoices for four (4) sample transactions during the review period

The businesses were also asked to fill out a questionnaire (Appendix C) which asked for information regarding their operations, including all of the following:

- The total square footage of their operations
- Cultivation type and number of harvests per year
- The square footage used for flowering plants, clones and mother plants, and non-cultivation activities such as processing
- The highest, lowest and average prices received for flower, leaf and fresh whole plant

Initial letters were sent out on July 22, 2022 on County Auditor-Controller-Treasurer-Tax Collector's letterhead to communicate HdL's authority to conduct the revenue analysis, and to encourage cooperation by the businesses. The letters gave the businesses one month to respond and provided a link to a secure portal for submitting documents and records. A copy of the letter is included in the appendix.

A follow-up notification was sent by email two weeks after the original notification letter, to remind businesses of the one-month deadline to submit records. 6 businesses actively declined to participate. Another 18 did not respond to repeated letters from the County requesting their participation. This process resulted in 11 businesses responding to the County's request and providing documents and records for the analysis. However, only 7 businesses provided enough of the records necessary to conduct the review.

It had originally been intended that this revenue analysis would include 10 to 12 operators. However, our sample set was limited to only those 7 operators who were willing to participate and provided all or most of the records requested. We compared these operators with the size and type of operations for all County cultivators and noted the following deviations.

Indoor cultivation is over-represented among our sample set. While indoor cultivation makes up just 23% of the County's cultivators, it comprised 43% of our review participants. Those indoor cultivators who chose to participate had slightly smaller operations, on average, than the County as a whole, but we do not consider this difference to be significant.

Conversely, outdoor cultivation was somewhat under-represented, comprising 57% of our sample set as opposed to 69% of the County's cultivators overall. Participating outdoor cultivators were also larger than the County average. No mixed-light cultivators were willing to participate in our analysis. The differences between our sample set and all the County's cultivators is shown in Figure 2, below.

Figure 2: Participants by Cultivation Type and Size

Participants by Cultivation Type and Size							
	Initial Sample Set			Actual Participants			
Cultivation Type	**#**	**%**	**Avg. SF**	**#**	**%**	**Avg. SF**	**%**
Indoor	8	23%	15,993	3	43%	12,673	79%
Outdoor	24	69%	16,526	4	57%	23,620	143%
Mixed Light	3	9%	31,231	0	0%	-	-

In addition to these variances, we note that the participating cultivators provided documents and records with a varying degree of detail and completeness. Due to this discrepancy, HdL had to apply discretion on a case-by-case basis to determine the best methodology for estimating annual revenues for each business, depending on the information provided.

Participants provided information regarding their operations including overall square footage, canopy area, square footage utilized for clones, mother plants and non-cultivation activities, high and low prices for flower, leaf and whole plant, sample invoices and transaction and sales data. HdL used this data to estimate the gross receipts of each business. This data is shown below in Figure 3 and is discussed in detail in Section VI; *Cannabis Cultivation Tax Analysis*.

Figure 3: Revenue Review Aggregate Data (7 participating operators)

Revenue Review Aggregate Data (7 participating operators)					
	Category	**Total**	**Average**	**Indoor Average**	**Outdoor Average**
1	**Total Licensed SF**	180,270	25,753	24,383	26,780
2	**Total Verified Canopy SF**	123,422	17,632	7,267	25,405
3	**Flower High Price**		$1,066	$1,954	$400
4	**Flower Low Price**		$401	$745	$143
5	**Flower Avg. Price**		$703	$1,230	$308
6	**Leaf/Trim High Price**		$72	$40	$82
7	**Leaf/Trim Low Price**		$24	$10	$29
8	**Leaf/Trim Avg. Price**		$36	$25	$39
9	**Fresh Whole Plant High Price**		$200	$333	$134
10	**Fresh Whole Plant Low Price**		$129	$288	$49
11	**Fresh Whole Plant Avg. Price**		$171	$310	$102
12	**Gross Receipts for FY 21/22**	$19,379,543	$2,768,506	$5,986,205	$355,232
13	**Tax Paid FY 21/22**	$252,811	$36,116	$45,211	$29,295

It is important to note that our analysis is limited to only the 7 cultivation businesses which were willing to participate in our study. We had originally anticipated a more robust and representative sample set of 10 to 12 operators, but our sample set is little more than half of that number. We also note that this sample set does not include any mixed-light cultivators.

While we can still compare our sample set with the array of license types in the County, our data shows that even cultivators of the same size and using the same methods can have dramatically different gross receipts. The degree to which this sample set may be representative of all cultivation businesses in the County is therefore unknown.

In Section VI, *Cannabis Cultivation Tax Analysis,* we analyze the data generated by our revenue review but we also model it using a methodology and general assumptions that reflect industry averages. By using these two methods together we are able to corroborate our results for increased confidence in our projections.

IV. Cannabis Cultivation Tax Basis

Square Footage Tax

Cannabis cultivation can be taxed by either square footage or gross receipts, each of which has its advantages and disadvantages. A square footage tax has the advantage of being administratively simple. Because the tax is tied directly to the square footage of cultivation area on the business's permit, the amount of the annual tax liability is known in advance to both the cultivator and the host jurisdiction. Occasional site inspections can easily confirm whether cultivation activities are being limited to the permitted area, making audits easier and less expensive.

In addition, because the business is being taxed on its physical facilities rather than its sales, payment of the cultivation tax may not be subject to Internal Revenue Code (IRC) 280E which could allow the business to deduct the tax as a production expense under cost of goods sold (COGS) when reporting federal corporate income tax. This may provide an advantage to cannabis cultivators, as IRC 280E prohibits deductions or credits for cannabis businesses that are available to virtually any other business.

HdL recommends the rates for a square footage tax commonly vary between cultivation types (indoor, outdoor or mixed-light) to account for the different number of harvest cycles possible with each method and to reflect variation in market price. Because a square footage tax does not automatically increase to keep up with inflation, it is necessary to include a mechanism to adjust the tax rate annually in accordance with the Consumer Price Index (CPI).

Gross Receipts Tax

By definition, a tax on gross receipts applies to the gross income of the business. This allows the tax to be directly proportional to the business's earnings (though not the net profits). While this may be considered the "fairest" of the tax structures, the revenues generated for the host jurisdiction are less predictable as sales for the business may rise and fall. For the business, an unexpectedly good year can result in an unexpectedly large tax bill. Conversely, an unexpectedly bad year can result in lower tax liability, which may serve to cushion a temporary loss of revenue.

There are many mechanisms businesses can use to avoid taxes by reducing their reported gross receipts. Vertically integrated businesses may move product to subsidiaries in other jurisdictions without showing any "sale" because the product is still within the company. In addition, the cannabis industry still operates largely on a cash basis, making transactions harder to track and easier to obscure. In some cases, businesses may avoid entering data into METRC or other inventory software, thus under-reporting their production or gross receipts. For local jurisdictions that utilize a gross receipts tax, HdL recommends annual revenue audits to ensure that all receipts and transaction have been properly reported and all taxes fairly remitted to the host jurisdiction. This can add an additional annual expense for the cannabis operator or business, which is typically expected to cover the cost of regulation, including annual audits.

In our review, we noted a number of accounting tools and other factors that may affect how businesses report gross receipts. These factors are discussed in Appendix A and include sales volume, pricing, internal transfers between cultivation and distribution operations of the same business, apportionment, bad debt, billbacks, cash vs accrual accounting methods, inflation, market fluctuations, crop loss, and other factors. Should the County choose to change to a gross receipts tax, these factors will have to be addressed.

V. Cannabis Cultivation Tax Rates

Background

Cannabis tax rates have been settling and stabilizing around the State since the beginning of 2018. Many cities initially instituted cannabis taxes 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.

Until recently the State of California applied two separate taxes to cannabis: a cultivation tax of $10.08 per ounce of dried flower ($3.00 per ounce of dried leaf or trim) and an excise tax of 15% on the purchase of cannabis and cannabis products. The cultivation tax was eliminated as of July 1, 2022 by Governor Newsom's signing of AB 195. In addition, AB 195 also shifted the point of collection for the state's 15% excise tax from distributors to retailers, thereby simplifying the tax structure. The changes to the method of collection will become effective January 1, 2023.

AB 195 also includes an allowance to increase the rate of the excise tax through FY 2024/2025, if necessary, to maintain minimum levels of funding for certain programs for youth education, intervention and treatment, environmental restoration, and state and local law enforcement programs.

Sonoma County's cannabis tax is described in Chapter 35 of the Sonoma County Code, entitled Cannabis Business Tax Ordinance (the tax ordinance). The tax ordinance allows the County to assess the tax on cultivation by either square footage or by gross receipts. At the time the tax ordinance was approved, the staff recommendation was to "*move forward with square footage tax until a track and trace system is in place that allows the county to adequately track cannabis production to ensure accurate gross receipts reporting*."[i] The state has now implemented its METRC track and trace system, but the system only tracks the movement of product across the supply chain and does not include shipped or received dollar amounts or other information that could be used to determine the gross receipts of cannabis businesses.

Figure 4: Sonoma County Cultivation Tax Rates

Sonoma County Cultivation Tax Rates			
Outdoor Cultivation	**Maximum Rate/SF**	**Initial Rate/SF**	**Current Rate/SF**
1C - Specialty Cottage	$10.00	$1.00	$0.62
1 - Specialty	$10.00	$1.50	$0.93
2 - Small	$10.00	$2.00	$1.24
3 - Medium	$10.00	$2.00	$1.24
Mixed-Light Cultivation			
1C - Specialty Cottage	$22.00	$2.25	$1.39
1 - Specialty	$22.00	$4.50	$2.78
2 - Small	$22.00	$6.50	$4.02
3 - Medium	$22.00	$6.50	$4.02
Indoor Cultivation			
1C - Specialty Cottage	$38.00	$3.75	$2.32
1 - Specialty	$38.00	$7.50	$4.64
2 - Small	$38.00	$11.25	$6.96
3 - Medium	$38.00	$11.25	$6.96

The tax ordinance allows maximum square footage rates of up to $10 per square foot of cannabis cultivation area for outdoor cultivation, up to $22 per square foot for mixed-light cultivation and up to $38 per square foot for indoor cultivation. The tax was implemented with initial rates of up to $2 per square foot for outdoor cultivation, up to

$6.50 per square foot for mixed light and up to $11.25 per square foot for indoor cultivation. The rate varies for each cultivation type based on the size of the licensed cannabis cultivation area, with smaller operations paying one-half to one-third the rate of larger operations.

The County's tax ordinance defines *"cannabis cultivation area" as "…the total aggregate area(s) of cannabis cultivation on a single premise as measured around the outermost perimeter of each separate and discrete area of cannabis cultivation at the dripline of the canopy expected at maturity and includes, but is not limited to, the space between plants within the cultivation area, the exterior dimensions of garden beds, garden plots, hoop houses, green houses, and each room or area where cannabis plants are grown, as determined by the review authority."*

Over the past year the County has had discussions about ways to provide relief for struggling cannabis growers. On March 15 the County reduced the tax rate on cultivation by 45%, retroactive to July 1, 2021. The new rates are up to $1.24 per square foot for outdoor cultivation, up to $4.02 per square foot for mixed light, and up to $6.96 per square foot for indoor. As with the initial rates, the new rates vary based on the size of the cannabis cultivation area. The County is also considering changing its cultivation tax to be based on gross receipts, rather than the current square footage, as had been originally contemplated. The maximum, initial and current cultivation tax rates are shown in Figure 4 on the previous page.

Rate Comparison

In Figure 5, below, we have provided a sample of cannabis cultivation tax rates from a number of comparable counties and cities around California. We have selected only cities and counties that have a reasonable number of cultivation licenses issued by the state of California[2] to demonstrate rates that have not been considered prohibitive by the industry.

Figure 5: Selected Cannabis Cultivation Tax Rates

Selected Cannabis Cultivation Tax Rates							
City or County	Licenses	Previous Rates			New Rates		
		Outdoor	Mixed Light	Indoor	Outdoor	Mixed Light	Indoor
Humboldt County	1,413	$1.00/sf	$2.00/sf	$3.00/sf	$0.15/sf	$0.30/sf	$0.45/sf
Monterey County	116	$2.50/sf	$5.00/sf	$8.00/sf	$1.00/sf	$3.00/sf	$7.00/sf
Mendocino County	342	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Ventura County	74	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
City of Sacramento	90	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
City of Lompoc	78	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Santa Barbara County	553	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Yolo County	89	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Sonoma County	140	$2.00/sf	$6.50/sf	$11.25/sf	$1.24/sf	$4.02/sf	$6.96/sf
s/f = tax rate per square foot % = tax rate as a percentage of gross receipts							

[2] License information is from the Department of Cannabis Control as of September 1st, 2022. We note that this data may contain some inaccuracies as licenses in unincorporated areas are sometimes erroneously shown as being in the nearest city. We expect any such inaccuracies to be minor and inconsequential for the purposes of our comparison.

As with Sonoma County, Humboldt County and Monterey County have both taken action within the past year to reduce their tax rates for cannabis cultivation. While Monterey County reduced their rates somewhat modestly, Humboldt County reduced their rates dramatically by 85% across the board. We note that Humboldt County's rates were already among the lowest in the state even before this action and were lower even than Sonoma County's newly reduced rates.

HdL has developed a methodology for converting square footage tax rates to equivalent rates based on gross receipts, which is discussed in Section VI; *Cultivation Tax Rate Analysis*. The equivalent rates vary for each cultivation type based on the number of harvests per year and prevailing market prices. We note that these square footage to gross receipts equivalents are based on standard assumptions that may not accurately reflect individual operators. The conversion between square footage and gross receipts is discussed elsewhere in this report.

Using this methodology, Sonoma County's previous rates of up to $2.00/sf for outdoor cultivation, $6.50/sf for mixed-light and $11.25/sf for indoor equate to roughly 6.67%, 5.42% and 2.25%, respectively. The revised rates equal roughly 4.13% for outdoor cultivation, 3.35% for mixed-light and 1.39% for indoor.

Humboldt County's previous rates of $1.00/sf for outdoor, $2.00/sf for mixed-light and $3.00/sf for indoor would equate to roughly 3.33%, 1.67% and 0.60%, respectively. The revised rates equate to roughly 0.50% for outdoor, 0.25% for mixed-light and 0.09% for indoor.

The counties of Santa Barbara, Ventura and Yolo all assess a rate of 4.0% of gross receipts, as do the cities of Sacramento and Lompoc. Our methodology indicates this is roughly equivalent to $1.20 per square foot for outdoor cultivation, $4.80 per square foot for mixed-light and $20.00 per square foot for indoor cultivation. This is shown further in the report, in Figure 9 on page 16.

As shown in Figure 5, there is a great amount of variation in cannabis tax rates from different jurisdictions. While lower rates can certainly help to make a jurisdiction more attractive to prospective cannabis businesses, it's worth noting that Santa Barbara County and Ventura County are home to some of the largest cannabis cultivation operators in the state of California.

Some of the cultivators in Santa Barbara and Ventura counties hold more than 50 licenses each and have over half-a-million square feet of cultivation. The 7 largest growers in Santa Barbara County each have over 1 million square feet of cultivation[3]. This stands in stark contrast to the provisions of Sonoma County's cannabis cultivation regulations which prohibit any one person from being issued permits for more than one acre of cultivation within the County (Sonoma County Code Sec. 26-88-254).

The size of cannabis operators in Ventura and Santa Barbara counties suggests that tax rates, alone, are not the only factor in building a stable and successful cannabis industry cluster. The relatively high tax rates compared to other jurisdictions have not made Ventura County or Santa Barbara County any less attractive to the cannabis cultivation industry. Existing and available industrial greenhouse infrastructure, efficiency of operations and the ability to reliably produce large volumes of product at a consistent price and quality have enabled these large operators to outcompete legacy growers from around the state.

[3] See Figure 13 on page 33.

These large operators also have the advantage of proximity to the largest cannabis market in the state. From conversations with some of these businesses, we understand that they commonly work from a market demand model, where cannabis is grown under contract with distributors or large retailers. Effectively, their product has largely been sold before it is even planted.

This contrasts sharply with the supply-side model of many smaller growers, where they produce a volume of product and then try to market it based upon the finished quality and THC content. Many small growers operating under this model have to buy their product back from distributors who fail to find buyers. Much of this product cannot even be sold as trim and ultimately must be destroyed and composted.

VI. Cannabis Cultivation Tax Analysis

The State of California has been issuing licenses for cannabis cultivation since January 1, 2018. These licenses were initially issued by the CalCannabis Division of the California Department of Food and Agriculture (CDFA) but have since transitioned to the newly-formed Department of Cannabis Control (DCC). The Standardized Regulatory Impact Assessment prepared for CDFA as a part of its rule-making process estimated that Californians consume approximately 2.5 million pounds of cannabis per year[ii].

As of October 1, 2022, data from the DCC shows 8,112 active cultivation licenses statewide, held by 3,386 distinct businesses[4]. These licenses cover nearly 2,000 acres of canopy and are capable of producing over 17 million pounds of cannabis per year. Of these, there are 9 businesses that hold more than 100 licenses each. The largest of these holds 254 cultivation licenses. Combined, the 20 largest cultivators hold 2,232 cultivation licenses, with 500 acres of canopy capable of producing over 2.6 million pounds of cannabis per year. These 20 largest cultivators alone could supply far more legal cannabis than is consumed by all Californians, combined.

Despite this cultivation capacity, reporting from the California Department of Tax and Fee Administration (CDTFA) shows that only 2,350,000 pounds of cannabis entered the commercial market in 2020[iii] (the last year for which data is available), which is very close to the CDFA's early estimate. The huge difference between cultivation capacity and the size of the licensed market is difficult to explain. It is believed that some portion of legally cultivated cannabis is being diverted into the illicit market both within California and across the country, but the amount and the mechanism for how it is being diverted are unknown.

The cannabis cultivation market in California has 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. More than any other part of the cannabis industry, entry into the highly competitive cultivation sector can be filled with risk and requires ample capitalization and a clear strategy to win shelf space. It is not uncommon for small, independent cannabis producers and manufacturers to have to pay for retail shelf space just to get their product in front of consumers.

As discussed previously, cannabis cultivation taxes are most commonly assessed on a square-footage basis, but they may also be assessed by gross receipts or by weight. HdL has developed a methodology for converting each of these tax methods so as to create an equivalent rate with the others. This allows

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[4] The actual number of distinct businesses is likely somewhat lower, as minor typos or inconsistencies in how a name is written appear as separate business names in the DCC database.

the host jurisdiction to ensure that their cultivation tax rates are generally consistent with the rates being applied by other jurisdictions around the state, even when they are using different taxing methods.

Cultivation yield is generally assumed to average one pound of cannabis flower for every 10 square feet of cultivation area. This metric is drawn from a 2010 study by the Rand Corporation[iv]. Though the study is fairly old for such a young industry, its findings remain generally consistent with more recent studies. Some cultivation facilities can yield one pound for every eight square feet, and others cite yields that are much lower (more square feet per pound), but 10 square feet remains a convenient and commonly used metric which provides for conservative estimates. Using this figure, a 10,000 square foot cultivation facility operating 5 harvest cycles would produce around 5,000 pounds of cannabis per year.

The price per pound varies according to the cultivation methods. Cannabis grown indoors is conservatively assumed to average $1,000 per pound. While some growers are still able to obtain prices above $1,500 per pound, others are getting $800 or less. Over the long term we anticipate that wholesale prices for raw cannabis will continue to decline. Applying the $1,000 per pound figure, our 10,000 square foot facility would generate $5 million in gross receipts.

Mixed-light cultivation may occur in hoop houses using light deprivation or in industrial greenhouses using supplemental light. The quality can vary greatly, as can the price. Generally, mixed-light cannabis tends to track closer to outdoor cannabis in price. We shall assume an average price of $400 per pound for our analysis.

Outdoor cultivation has struggled to find a place in the cannabis market. Legacy growers in Humboldt and Mendocino counties had hoped the market would reward organic, sun-grown cannabis with a premium price, but the difficulty in producing consistent product in large volumes has driven the price precipitously downward. While we use $300 per pound as an average for our analysis here, we are aware that many outdoor growers are struggling to find buyers at even $100 per pound, if they can find a buyer at all.

Figure 6 (below) shows how these price, harvest and yield assumptions can be applied to determine an equivalent tax rate based on square footage, weight or gross receipts, and the total annual tax that would be paid for a hypothetical 10,000 square feet of cultivation. We have used the prices discussed above and input the County's current rates of $1.24 per square foot for outdoor cultivation, $4.02 for mixed-light and $6.96 for indoor.

As can be seen, the equivalent tax rate as a percentage of gross receipts varies greatly, with outdoor cultivation paying a rate of 4.13%, mixed-light paying 3.35% and indoor paying just 1.39%. The total annual tax paid on the same cultivation area runs from $12,400 for outdoor cultivation to $69,600 for indoor.

Figure 6: Gross Receipts Equivalents for Current Square Footage Rates

Gross Receipts Equivalents for Current Square Footage Rates									
	A	B	C	D	E	F	G	H	I
Cultivation Type	Harvest Cycles /Year	Sample Area (sq ft)	Yield @ 1 lb/10 sf /cycle	Price per pound	Gross Receipts	Tax Rate per SF	Total Annual Tax Paid	Tax Rate per Pound	Tax Rate % Gross Receipts
Indoors	5	10,000	5,000	$1,000	$5,000,000	$6.96	$69,600	$13.92	1.39%
Mixed Light	3	10,000	3,000	$400	$1,200,000	$4.02	$40,200	$13.40	3.35%
Outdoors	1	10,000	1,000	$300	$300,000	$1.24	$12,400	$12.40	4.13%

In Figure 7, we have reversed our table to input a tax rate based on gross receipts so that we can determine the equivalent square footage rates. All of our assumptions for price, yield and harvest cycles per year remain the same.

HdL commonly recommends that cannabis cultivation tax rates fall within the range of 1.00% to 2.50% of gross receipts or their square footage equivalents. Applying a gross receipts rate of 1.00% as a starting point, we can see that the equivalent tax rates per square foot would be $5.00 per square foot for indoor cultivation, $1.20 per square foot for mixed-light and just $0.30 per square foot for outdoor cultivation.

Figure 7: Square Footage Equivalents for 1.00% Gross Receipts Rate

Square Footage Equivalents for 1.00% Gross Receipts Rate									
	A	B	C	D	E	F	G	H	I
Cultivation Type	Harvest Cycles /Year	Sample Area (sq ft)	Yield @ 1 lb/10 sf /cycle	Price per pound	Gross Receipts	Tax Rate % Gross Receipts	Total Annual Tax Paid	Tax Rate per Pound	Tax Rate per SF
Indoors	5	10,000	5,000	$1,000	$5,000,000	1.00%	$50,000	$10.00	$5.00
Mixed Light	3	10,000	3,000	$400	$1,200,000	1.00%	$12,000	$4.00	$1.20
Outdoors	1	10,000	1,000	$300	$300,000	1.00%	$3,000	$3.00	$0.30

These square footage rates are all lower than the County's current rates. The current rates vary both by square footage and as a percentage of gross receipts, making it difficult to find a single point to work from for creating an equivalent rate. Figure 8, below, we have applied a tax rate of 2.50% which generates equivalent rates of $0.75 per square foot for outdoor cultivation, $3.00 per square foot for mixed-light, and $12.50 per square foot for indoor cultivation. We note that the resulting rate for indoor cultivation is higher even than the County's previous rate (before the rates were lowered in May).

Figure 8: Square Footage Equivalents for 2.50% Gross Receipts Rate

Square Footage Equivalents for 2.50% Gross Receipts Rate									
	A	B	C	D	E	F	G	H	I
Cultivation Type	Harvest Cycles /Year	Sample Area (sq ft)	Yield @ 1 lb/10 sf /cycle	Price per pound	Gross Receipts	Tax Rate % Gross Receipts	Total Annual Tax Paid	Tax Rate per Pound	Tax Rate per SF
Indoors	5	10,000	5,000	$1,000	$5,000,000	2.50%	$125,000	$25.00	$12.50
Mixed Light	3	10,000	3,000	$400	$1,200,000	2.50%	$30,000	$10.00	$3.00
Outdoors	1	10,000	1,000	$300	$300,000	2.50%	$7,500	$7.50	$0.75

If the County chooses to change the basis for its cultivation tax from square footage to gross receipts, HdL recommends that the rate be set within this range. If the County chooses to retain the existing square footage tax, HdL recommends that the rates be set consistent with this methodology to produce a gross receipts equivalent that is consistent across all cultivation types.

In Section V, *Cannabis Cultivation Tax Rates*, we noted that the counties of Santa Barbara, Ventura and Yolo and the cities of Sacramento and Lompoc all assess a rate of 4.00% of gross receipts. We also noted that Santa Barbara and Ventura counties are both home to some of the largest cannabis cultivation businesses in the state, which suggests that the 4.00% tax rate has not been seen as prohibitive to the industry. For illustration purposes we have provided Figure 9 on the next page, which shows the equivalent square footage rates in these jurisdictions.

Our methodology indicates that a 4.00% gross receipts tax rate is roughly equivalent to $1.20 per square foot for outdoor cultivation, $4.80 per square foot for mixed-light and $20.00 per square foot for indoor cultivation. While these rates are somewhat higher than the County's current rates, they are still well below the maximum rates of up to $10 per square foot for outdoor cultivation, up to $22 per square foot for mixed-light and up to $38 per square foot for indoor found in Sonoma County's cannabis tax ordinance.

Figure 9: Square Footage Equivalents for 4.00% Gross Receipts Rate

Square Footage Equivalents for 4.00% Gross Receipts Rate									
	A	B	C	D	E	F	G	H	I
Cultivation Type	Harvest Cycles /Year	Sample Area (sq ft)	Yield @ 1 lb/10 sf /cycle	Price per pound	Gross Receipts	Tax Rate % Gross Receipts	Total Annual Tax Paid	Tax Rate per Pound	Tax Rate per SF
Indoors	5	10,000	5,000	$1,000	$5,000,000	4.00%	$200,000	$40.00	$20.00
Mixed Light	3	10,000	3,000	$400	$1,200,000	4.00%	$48,000	$16.00	$4.80
Outdoors	1	10,000	1,000	$300	$300,000	4.00%	$12,000	$12.00	$1.20

The County has requested that our analysis determine the appropriate gross receipts rate that would produce the same amount of revenue as the current square footage rates. To do this required that we first determine the gross receipts of each of the participating businesses. Section III *Revenue Review* described HdL's process for conducting this review and the various documents and data sources that were analyzed. From our review we were able to determine the gross receipts of each operator for the review period (FY 21/22), the average prices being paid for cannabis being grown indoors and for outdoors, and other details of their operations.

Most significantly, our revenue review allowed us to determine the gross receipt tax rate that would be necessary to provide the same level of cannabis tax revenue generated by our sample set of businesses over the review period.

Figure 10 displays the key data generated from our revenue review. All data has been aggregated to protect sensitive or confidential sales information for the individual businesses. The 7 cannabis cultivators in our sample set have a total canopy square footage of 123,422 square feet, which averages to 17,632 square feet per operator. Line 2 shows a significant difference in the average square footage of canopy for indoor cultivation (7,267 square feet) and outdoor cultivation (24,405 square feet).

We noted a significant difference in the prices being received for cannabis grown indoors versus cannabis grown outdoors. Each cultivator was asked to note both the highest price paid (Line 3) and the lowest price paid (line 4) during the review period, as well as the average (Line 5). The average high price for indoor cultivation was nearly $2,000, with a low of $745. By contrast, the average high price for cannabis grown outdoors was just $400, with a low of $143. The overall average price for indoor cannabis was $1,230, while the overall average for cannabis grown outdoors was just $308. Conversely, we noted that outdoor cultivators received a significantly higher price for leaf or trim than did indoor cultivators.

Most importantly for our analysis, our review showed that indoor cultivators generated far greater gross receipts than outdoor cultivators (Line 12). The average indoor grow generated nearly $6 million, while the average outdoor grow generated only $355,232. These figures should not be surprising, given the average price per pound and the number of harvest cycles possible with indoor cultivation. We note, though, that this average was inflated somewhat due to the high earnings of one indoor cultivator whose gross receipts were well above the others. However, even if we exclude the earnings of this operator as an outlier, the average gross receipts of the other indoor cultivators was still nearly double the average for all outdoor cultivators.

Figure 10: Revenue Review Aggregate Data (7 participating operators)

Revenue Review Aggregate Data (7 participating operators)					
	Category	**Total**	**Average**	**Indoor Average**	**Outdoor Average**
1	**Total Licensed SF**	180,270	25,753	24,383	26,780
2	**Total Verified Canopy SF**	123,422	17,632	7,267	25,405
3	**Flower High Price**		$1,066	$1,954	$400
4	**Flower Low Price**		$401	$745	$143
5	**Flower Avg. Price**		$703	$1,230	$308
6	**Leaf/Trim High Price**		$72	$40	$82
7	**Leaf/Trim Low Price**		$24	$10	$29
8	**Leaf/Trim Avg. Price**		$36	$25	$39
9	**Fresh Whole Plant High Price**		$200	$333	$134
10	**Fresh Whole Plant Low Price**		$129	$288	$49
11	**Fresh Whole Plant Avg. Price**		$171	$310	$102
12	**Gross Receipts for FY 21/22**	$19,379,543	$2,768,506	$5,986,205	$355,232
13	**Tax Paid FY 21/22**	$252,811	$36,116	$45,211	$29,295
14	**Tax Paid as % Gross Receipts**	1.30%	1.30%	0.76%	8.25%
15	**Tax Paid at 1.00% Rate**	$193,795	$27,685	$59,862	$3,552
16	**Tax Paid at 2.50% Rate**	$484,489	$69,213	$149,655	$8,881
17	**Tax Paid at 1.30% Rate**	$251,934	$35,991	$77,821	$4,618
18	**$ Difference @ 1.30% Rate**	-$877	-$125	$32,610	-$24,677
19	**% Difference @ 1.30% Rate**	-0.35%	-0.35%	42.84%	-85.01%
20	**Average Increase; $**		$32,610		
21	**Average Increase; %**		42.84%		
22	**Average Decrease; $**		-$24,677		
23	**Average Decrease; %**		-85.01%		

By dividing the tax paid in FY 2021/2022 (Line 13) by the gross receipts of these businesses (Line 12), we are able to determine the equivalent percentage of gross receipts represented by the current square footage tax. This is shown on Line 14, which indicates that a rate of 1.30% would best approximate the County's current level of revenue. Applying this tax rate would generate $251,934 in cannabis tax revenue for the County, which is almost identical to the $252,811 produced by the current square footage rates.

Our review also indicates that the County's current square-footage rates result in a deeply disproportionate tax burden for outdoor cultivators. While indoor cultivators paid an average tax rate of 0.76% (Line 14), outdoor cultivators paid a rate that was over 10-times higher at 8.25%. We note that these are averages for all indoor and all outdoor cultivators and do not reflect the reduced square footage rates for the smallest cultivators.

Changing to a tax based on gross receipts will decrease the tax burden for some operators, but it will also increase the tax burden for others. In this way, the change in the County's tax basis will produce both winners and losers. At a rate of 1.30% of gross receipts, all of the outdoor cultivators in our sample set would see their taxes reduced by an average $24,677, or 85.01%. Conversely, all of the indoor cultivators in our sample set will see their taxes increased by an average of $32,610, or 42.84%. While this would result in a more equitable tax burden, it would not be without some pain. The only way to reduce the tax burden for all cultivators would be to reduce the amount of tax revenue generated for the County.

We have noted numerous times in our analysis that indoor cultivation generates far greater gross receipts on average than either mixed-light or outdoor cultivation. While this is true, we believe it is also important to note that gross receipts do not necessarily reflect profits. Indoor cultivation also requires a far greater capital outlay to design, build, outfit and operate the facility. Energy costs, staffing, maintenance, and other operating costs are far higher for indoor cultivation than for other methods. In addition, lease rates for appropriate industrial properties are usually far higher than rates for appropriate agricultural properties.

Using the gross receipts information from our review, we have applied our range of tax rates shown in Figures 7 and 8 to estimate the amount of revenue that would be generated by our sample set of cultivators if the County were to apply a tax based on gross receipts, instead of square footage. Our review found that these businesses generated a total of $19,379,543 in gross receipts and paid $252,811 in cannabis cultivation taxes based on the County's current square footage structure. Applying a tax rate of 1.00% to this gross-receipts figure would generate $193,795 in revenue for the County (Line 15), which is roughly 23% below the current revenues. Applying a rate of 2.50% to this figure would generate $484,489 in revenue (Line 16), which is significantly higher than the amount generated by the current square footage tax rates.

Figure 11, below, applies the rate of 1.30% to our tax rate convertor model to show the equivalent square footage rates for outdoor, mixed-light and indoor cultivation. These range from $0.39 per square foot for outdoor cultivation to $1.56 per square foot for mixed-light and $6.50 per square foot for indoor cultivation.

Figure 11: Square Footage Equivalents for 1.30% Gross Receipts Rate

Square Footage Equivalents for 1.30% Gross Receipts Rate									
	A	B	C	D	E	F	G	H	I
Cultivation Type	Harvest Cycles /Year	Sample Area (sq ft)	Yield @ 1 lb/10 sf /cycle	Price per pound	Gross Receipts	Tax Rate % Gross Receipts	Total Annual Tax Paid	Tax Rate per Pound	Tax Rate per SF
Indoors	5	10,000	5,000	$1,000	$5,000,000	1.30%	$65,000	$13.00	$6.50
Mixed Light	3	10,000	3,000	$400	$1,200,000	1.30%	$15,600	$5.20	$1.56
Outdoors	1	10,000	1,000	$300	$300,000	1.30%	$3,900	$3.90	$0.39

If the County chooses to change the basis for its cannabis cultivation tax from square footage to gross receipts, HdL recommends that the County set the rate at 1.30% to maintain the same level of revenues. If the County chooses to retain the current square footage structure, HdL recommends that the tax rates be adjusted as shown above so as to distribute the tax burden more equitably across the businesses.

As noted previously, the tax rates presented here are intended to generate the same level of revenue as is currently being generated from our sample set of businesses under the current square-footage rates. It is important to reiterate that our analysis here was limited to only the 7 cultivation businesses which were willing to participate in our study and that the degree to which this sample set may be representative of all cultivation businesses in the County is unknown.

We further note that our analysis was not intended to consider the purposes for which these revenues might be used by the County. It is understood that the County currently uses a portion of cannabis tax revenues to partially offset the administrative costs of the County's cannabis program. If the gross receipts of the subject businesses were to decline in the future, the tax rate necessary to generate the same amount of revenue for the County would have to increase correspondingly, effectively hitting businesses with a higher tax bill when their profits are down. The County may wish to consider recovering its administrative costs through annual permitting fees rather than through cannabis tax revenues.

VII. APPENDIX

A. Other Factors to Consider

In conducting our revenue review of the County's cannabis cultivators, HdL identified a number of issues that the County should take into consideration before deciding whether or not to go forward with changing the basis for the cultivation tax from square footage to gross receipts. None of these factors are prohibitive and they are not intended to dissuade the County from whichever course it chooses. Rather, these factors are listed to here solely for the County's information.

Some of these factors may require changes to how the County collects or administers the tax, or may require annual audits of cannabis cultivators to ensure they are reporting and remitting the proper portion of their gross receipts. These factors may also affect how the County budgets for anticipated cannabis cultivation tax revenues, as the revenues will be more susceptible to seasonality, changing market prices and impacts from severe weather.

Factors that will affect tax revenues if switching from square footage to gross receipts:

- **Internal Transfers:** A vertically integrated business that has a cultivation facility within the County may internally transfer product to their own distribution arm which could be located in another jurisdiction. Wholesale transactions (or "sales") would not occur between the cultivator and distributor as they are the same business. Instead, the wholesale transactions would occur when the distributor sells product to a manufacturer, retailer or another distributor. If this happens, the gross receipts and related taxes from wholesale transactions may be assigned to the jurisdiction where the distributor is located, effectively reducing or eliminating tax revenues payable to the County.
- **Apportionment:** A cultivator's wholesale transactions could be subject to apportionment as described in Section 35-18 of the cannabis business tax ordinance if the business is selling product to businesses in other jurisdictions. This could alter the amount of gross receipts and related tax revenue for the County.

  Different jurisdictions have taken various approaches to apportionment. Some jurisdictions have established a standard deduction that businesses may take, provided they can prove the sales were delivered outside the jurisdiction. For example, a city or county may reduce the tax basis by 30% for sales delivered outside the jurisdiction. Other jurisdictions have established a stricter requirement, allowing a business to only deduct 5% or 10% of sales delivered outside the jurisdiction, provided they can prove the sales were delivered outside the jurisdiction and that taxes were paid to the other jurisdiction on the delivered product. The apportionment formula a jurisdiction implements can vary – there is no set formula required by law – but it must meet certain requirements by law.
- **Bad Debt:** Two of the cultivators in our sample set noted that they had to write off significant amounts from transactions where the buyer never paid for the product or paid less than the full amount. This will reduce gross receipts and related tax revenue for the County because moneys were not collected for product sold.
- **Billbacks/Buybacks:** Distributors often buy product on speculation for the cultivator, seeking to find a buyer at an agreed-upon price. If the distributor is unable to find a buyer at that price, they may have to sell it for less and bill back the cultivator for the difference. In cases where the product goes unsold, the cultivator may buy it back from the distributor. Often these billbacks or buybacks occur weeks if not months after the cultivator has reported the product sold to the county and paid the

associated tax. Either scenario could result in the business amending its tax returns and requesting a credit or refund for the tax paid on product that was ultimately sold at a lower price or returned.

- **Cash vs Accrual:** Accounting methods may cause gross receipts to fluctuate throughout the year, as monies may not be paid timely. There may be a significant lapse between when product is transferred or sold and when the payment is actually collected.
- **Seasonality:** Outdoor and mixed-light cultivation are impacted by the changing seasons which will cause fluctuations in productivity, gross receipts and related tax revenues over the course of the year. 69% of the County's cultivators grow outdoors, so it is likely that the County's cannabis tax revenues will not be consistent throughout the year.
- **External factors:** Productivity for outdoor and mixed-light cultivation can be greatly affected by weather, pests and acts of nature. Indoor cultivation, too, can be impacted by pests, mold and pathogens. All of these factors can have the effect of reducing yield, product quality and price, leading to reduced gross receipts and related tax revenues.
- **Market pricing:** Cannabis prices for all cultivation types have declined dramatically over the past year, particularly for outdoor cultivation. While much of this is due to oversaturation of the market, it is anticipated that constant improvements to production efficiency and competitive market dynamics will continue to drive prices downward. Given this, it should be expected that the same number of cultivators producing the same volume of product will generate lower gross receipts and related tax revenues in the future.

B. Comments from Cultivators

Many of the cultivators who participated in this analysis provided general comments about the state of the industry, market conditions, prevailing prices, taxes and regulations, and other topics that may be relevant for the County's consideration. We have included these comments below. Comments which might identify a specific business have been edited to preserve anonymity, other than letters that were specifically provided as a part of the public record. In addition, some comments have been edited for minor typos and punctuation.

- "*The CA cannabis market fluctuates often. In recent years the price per pound has fallen and has not returned to the higher prices such as was seen in 2017 and prior. We believe it's directly affected by the immense outdoor farms and the black market or backdoor sales."*

- *"The price of Cannabis at the start of 2021 was around $850 per pound for saleable flower after the state cultivation tax. Over the 2021 summer, we saw pounds losing about $100 per pound per month on the spot market. By the fall harvest, many pounds on the spot market were selling between $300 and $500 a pound. Very little product was sold in January and February 2022. After February 2022, flower prices dropped to between $150 and $500 per pound. With most pounds selling at $200-$300.*

  During the same time frame cannabis byproduct prices plummeted in a similar way. Where at the beginning of 2021, a pound of trim was selling around $75 to $100 per pound, it is currently selling between $4.25 and $20 per pound. Similarly smalls, a category in between saleable flower and trim, dropped from $450 per pound at the beginning of 2021 to around $100 currently.

  Due to the shift in pricing, small scale outdoor cannabis cultivation is now done at a loss in many instances with regard to direct costs. When you add compliance or capital items into the cost equation, such as condition compliance for conditional use permits or lake and streambed alteration agreements, the losses are even more impactful. With the current market conditions and tax structure, many if not most acre and smaller operations will cease to exist by the end of 2022 or 2023."

- *"Prices are still down so we are growing way less this year just trying to cover cost so we don't have to pay processing fees like last year."*

- *"Business and sales are very slow and we have experienced major pricing pressure. The market pricing toward the end of this period is down by at least 40%, with prices falling further and further, primarily due to overproduction in other regions, the over-taxation at every level that inflates the price of regulated cannabis products, and the lack of retail access to so many markets in the state."*

- *"My farm is no longer in business. It has no money to pay accountants to collect this kind of information. I failed because the amount of money that I made was not even enough to pay the cannabis taxes, the cannabis permit fees, the cannabis state license, or its employees payroll tax. I'm no longer in the cannabis business."*

- *"Humboldt county just reduced theirs by 80%, and theirs was already less than half of Sonoma's in the first place. We need action!!!!"*

- *"I'm glad to hear the Board is trying to do something. As I'm sure you know, the industry is getting completely crushed right now between local, state, and federal taxes and the general failure of the regulatory regime to which we are subject. We continue to struggle significantly as a business, and we* *have done everything in our power to cut costs. We are currently looking at moving a mile or so north to Santa Rosa where taxes are a third of what we currently pay. If there could be some sort of long-term remedy, perhaps we could establish more of a viable industry here in the County."*

- *"I am really at a loss about how out of touch the Tax Collector Department is with the reality of the cannabis industry. The plummeting wholesale price per pound ($1000 in July to $500 in August) may not be foreseen, however, the plight of the small farmers has been and remains the same. So, why in the world would the County raise our taxes? Why is the tax rate capped at $2.25 and is the same for small and medium farms? It incentivizes the expansion of farms, which in turn creates a litany of issues. For example, neighborhood compatibility and environmental impact are exasperated by large footprint farms.*

  Regardless of farm size, now we are all struggling. You know the reality- please act. In Humboldt, the County is helping farmers and offering micro-grants to assist farmers in making it through these lean times. Their tax rate is $1/square foot. Source: https://www.google.com/amp/s/www.times-standard.com/2021/09/21/h

  Please, please, please consider an emergency reversal of these new tax rates! Help to support a thriving cannabis industry- when we succeed, the County succeeds."

- *My license on the farm expired. I am not working, and I'm struggling to pay the bills. Applying for new jobs every day. I'm actually short on all my bills right now and cannot afford to be paying for my dead business's expenses with my family's money. I don't even have $50 a month to pay you. I can't sell the farm because it isn't worth anything in its current state. It's underwater with the mortgage. We are eating via food stamps and getting government assistance for our healthcare at this time. So, until I have a job and am feeding my family out of pocket, I'm not paying the government any more money. Sorry. They can put as many liens on me as they want. They can throw me in jail if that makes them feel better. When I get paid from my lawsuit with the devil himself (PG and E), I will pay them. Right now, I don't have anything left to give them. I paid so much tax last year altogether with the IRS and the state that I didn't pay myself a dime for the entire year. I just worked my ass off for nothing."*

- *"I'm waiting on payments to be able to pay our taxes. It would be nice if the County could work put something different for taxes for farmers. Product isn't moving and we still have to pay taxes for unsold product and if we don't we have to be in fear of losing everything we've worked so hard for. We are definitely doing our best and hope the County can see that and work with us."*

- *"I would not have done this [cannabis cultivation] if I had known [about all the costs involved]. This tax relief is not enough for small farmers. We need other incentives, etc."*

- *"The market is terrible. If the flower is not grade A it has basically no value and is biomass. It costs more to grow, harvest and buck than it's worth."*

The Highland Canopy
d/b/a Sonoma Hills Farm
334 Purvine Rd.
Petaluma, CA 94562

March 14, 2022

To the Sonoma County Board of Supervisors:

The cultivators in Sonoma County and throughout the state are facing tremendous challenges and a near extinction event in the legacy regions. The county can dramatically assist operators by ceasing the burden of over-taxation, and by increasing permitting efficiencies for the active permit holders. This industry is very much in its latent stages and the success of the Sonoma County operators is incumbent on the support of our county officials. We submit the following suggestions:

- Decrease the Sonoma canopy tax by no less than 25%
- Withdraw 2022 payments for 2021 harvest in their entirety
- Shift the due dates to 9- and 12-months post-harvest date
- Increase permitting efficiencies, streamline the and provide transparency across departments

Based on the following market reasons:

Continued deceleration in market value of wholesale flower. As of this writing, the market is as follows: wholesale flower: $200-$400 / lb for outdoor flower, and wholesale trim: $5-$25/lb for outdoor trim. This is a 50-70% decrease from the wholesale market prices just 12 months ago.

While Sonoma County's projected taxation revenue is well below its projected outcome, according to your estimated budget analysis (see attached), the tax collections outweigh the program uses. At this latent stage, we can candidly state that all operators permitted under the conditional use permit program in Sonoma are under-water. None are cash flow positive, all are operating at a loss. It is unjust that the county makes a profit when we are many years away from operating at a profit.

Upon commencing operations, all Sonoma County operators have already paid tremendous fees and local taxes that are not contemplated in the canopy tax collections. Upon commencing our Medium Outdoor operation, we had incurred over 6 figures in construction costs for that license alone. At the time of writing, our local county fees are well into the 6 figure costs, and we have only 1 of 4 licenses operational.

The county departments are not in sync and there are often tremendous lags in communicating actionable next steps. We've waited up to six months at times for simple answers and approvals. In addition, certain county officials have outwardly displayed their disapproval. We've had countless comments from contractors and subcontractors that they have never been treated so poorly by county parties. We've seen direct discrimination from county officials within the building approvals department, one of which have made offensive comments towards our LGBT personnel (referencing our pride celebration flag as a "fag flag").

Payment timing is not on par with market aging. The current Sonoma taxation hits on January 30 and April 30 after the harvest year. Behind the harvest, there are tremendous number of processing steps and upon a sale, experience long aging periods typically averaging Net 60-180 days.

We are hard-working, values driven members of this community. It is our intention to operate compliantly. We have not cut corners and we have followed the steps as laid out by the county in its roll out of the conditional use permit path. We want to be in Sonoma and we have consistently focused a positive light on the county in national and regional publications. If Sonoma is to be a standard bearer of the best expression of this plant in agriculture, we need your help.

Regards,
The Highland Canopy LLC

C. Cultivation Questionnaire

Sonoma County

Cultivation Revenue Analysis Questionnaire

Required fields are noted with an asterisk(*). If a required field does not apply to your business, enter "N/A':

CANNABIS BUSINESS INFORMATION

Business Name*

Permit No. (as identified of the Notice of Participation from the County)*

Please provide your total square footage for each of the following:

Total licensed square footage*

Square Footage

Total canopy square footage that will contain mature (flowering) plants at any point in time*

Square Footage

Total square footage used solely for non-flowering plants (clones, mother plants, etc.)*

Square Footage

Total square footage used for processing and non-cultivation activities*

Square Footage

Please provide the average wholesale price per pound received during the period from July 2021 through June 2022 for each of the categories below (flower, leaf and trim, fresh whole plant). Please also provide the highest and lowest prices received for each category during the same period.

Flower average price*

$

Flower high price*

$

Flower low price*

$

Leaf and trim average price*

$

Leaf and trim high price*

$

Leaf and trim low price*

$

Fresh whole plant average price*

$

Fresh whole plant high price*

$

Fresh whole plant low price*

$

How many times per year does the business harvest the same grow area for each cultivation type?

Harvests per year - Outdoor*

In same grow area

Harvests per year - Indoor*

In same grow area

Harvests per year - Mixed Light (Tier 1) *

In same grow area

Harvests per year - Mixed Light (Tier 2) *

In same grow area

Is there any clarifying information you would like to provide about your submitted financial records that will assist the County and Hdl in making an accurate determination of your gross receipts? (E.g., one source is more accurate than another for XXX reason, P&L income includes amounts not subject to a County gross receipts tax, such as taxes, etc.)*

Please provide any additional comments that you believe may be helpful for understanding your cultivation operations including changes in canopy area, variations in prices, overall market trends or anything else you think may be useful for our analysis. *

Acknowledgement Statement

I acknowledge I have read the information and truthfully answered the questions above to the fullest extent of my knowledge. I agree that my electronic signature below is the legal equivalent of my manual/handwritten signature on this questionnaire.

Signature*

Use your mouse or finger to draw your signature above

Printed Name*

Email Address (individual submitting questionnaire)*

Submit Form

D. State Cultivation License Types

Each state license allows for a maximum cultivation area. Type 1A “Specialty Indoor” licenses allow from 501 square feet of cultivation area up to 5,000 square feet. Type 1C “Specialty Cottage” licenses allow up to 500 square feet of cultivation area. Type 2A “Small Indoor” licenses allow from 5,001 square feet of cultivation area up to 10,000 square feet. Type 3A “Medium Indoor” licenses allow from 10,001 square feet of cultivation area up to 22,000 square feet. These license types are shown below in Figure 6.

A business is limited to only one Type 3 Medium license but may hold an unlimited number of Type 2 Small licenses. It is common for businesses to hold multiple Type 2 licenses located on the same property or within the same facility.

Figure 12: State Cannabis Cultivation License Types

State Cannabis Cultivation License Types				
Type	**Activity**	**Description**	**Details**	**Notes**
1	Cultivation	Outdoor; Specialty	Up to 5,000 sf, or 50 plants on non-contiguous plots	A, B, C
1A	Cultivation	Indoor; Specialty	501 sf - 5,000 sf	A, B, C
1B	Cultivation	Mixed-Light; Specialty	2,501 sf - 5,000 sf	A, B, C
1C	Cultivation	Outdoor/indoor/mixed; Specialty Cottage	Up to 25 plants outdoor; up to 2,500 sf mixed light; up to 500 sf indoor	A, B, C
2	Cultivation	Outdoor; Small	5,001 sf - 10,000 sf	A, B, C
2A	Cultivation	Indoor; Small	5,001 sf - 10,000 sf	A, B, C
2B	Cultivation	Mixed Light, Small	5,001 sf - 10,000 sf	A, B, C
3	Cultivation	Outdoor; Medium	10,001 sf - one acre	A, B, D
3A	Cultivation	Indoor; Medium	10,001 sf - 22,000 sf	A, B, D
3B	Cultivation	Mixed-Light; Medium	10,001 sf - 22,000 sf	A, B, D
4	Cultivation	Nursery		A, B
-	Cultivation	Processor	Conducts only trimming, drying, curing, grading and packaging of cannabis	A, B, E
5	Cultivation	Outdoor; Large	Greater than 22,000 sf	A, B, F
5A	Cultivation	Indoor; Large	Greater than 22,000 sf	A, B, F
5B	Cultivation	Mixed-Light; Large	Greater than 22,000 sf	A, B, F

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	A business may hold multiple Type 1 "Specialty" or Type 2 "Small" licenses.
D	Type 3 "Medium" licenses are limited to 1 per business.
E	No Type 5 licenses shall be issued before January 1, 2023

The state has also designated a Type 5 “Large” license that will allow unlimited square footage of cultivation area under a single license, rather than “stacking” Type 3 licenses, but the state will not issue any Type 5 licenses before January 1, 2023. While businesses already have the ability to cultivate unlimited square footage, implementation of the Type 5 licenses is expected to reduce the permitting costs for doing so, further increasing operational efficiencies for the largest cultivators.

The implementation of the Type 5 licenses will not affect the size of cultivators in Sonoma County as this is limited to 1 acre by Sonoma County Code Sec. 26-88-254. However, this will decrease permitting costs for the largest growers in the state, further increasing their competitive advantage over smaller growers such as those in Sonoma County.

As of October 1, 2022, data from the Department of Cannabis Control shows 7,725 active cultivation licenses in California, which are held by 3,130 separate businesses. 2,397 businesses hold only a single license. The other 733 businesses each hold multiple cultivation licenses, with 36 of those businesses holding 20 or more licenses. 9 businesses hold over 100 licenses each, with the largest holding 254 separate licenses.

Applying standard assumptions for yield and the number of harvest cycles per year suggests that the state’s 3,130 cultivators are capable of producing over 17 million pounds of cannabis per year. This is almost 7 times the 2.5 million pounds of legal cannabis that the state’s population is estimated to consume annually. The 20 largest cultivators in California are capable of producing over 2.6 million pounds of cannabis per year, which is more than enough to supply the entire statewide demand. This is shown in Figure 13, below.

Figure 13: 20 Largest Cannabis Cultivators in California by Number of Licenses

20 Largest Cannabis Cultivators in California by Number of Licenses							
#	**Cultivation Type(s)**	**Number of Licenses**	**Total Square Feet**	**Est. Yield (Pounds)**	**Business Name**	**City**	**County**
1	Outdoor	254	2,540,000	254,000	Canyon Produce LLC	Unincorporated	Santa Barbara
2	Outdoor	252	2,520,000	252,000	Bar X Farms LLC	Unincorporated	Lake
3	Outdoor, Mixed-Light	213	2,130,000	217,000	People's Farming LLC	Lemoore	Kings
4	Outdoor	185	1,850,000	185,000	Santa Barbara Westcoast Farms	Buellton	Santa Barbara
5	Outdoor	168	1,698,560	169,856	Heirloom Valley LLC	Lompoc	Santa Barbara
6	Outdoor	159	1,580,000	158,000	CHIPS18 LLC	Santa Maria	Santa Barbara
7	Outdoor	158	1,580,000	158,000	Healy & Associates LLC	Santa Barbara	Santa Barbara
8	Outdoor	126	1,245,000	124,500	Central Coast Ag Farming LLC	Lompoc	Santa Barbara
9	Outdoor	104	1,068,560	106,856	Ag Roots LLC	Lompoc	Santa Barbara
10	Outdoor	96	960,000	96,000	GBH Cultivation LLC	Parlier	Fresno
11	Mixed-Light	70	700,000	210,000	Glass House Camarillo Cultivation	Camarillo	Ventura
12	Mixed-Light	66	660,000	164,000	Clean and Clear LLC	Lompoc	Santa Barbara
13	Mixed-Light	65	650,000	99,000	Odyssey Agricultural Development	Mendota	Fresno
14	Outdoor	55	583,560	58,356	9500 Cultivators LLC	Unincorporated	Santa Barbara
15	Outdoor	55	583,560	58,356	Castlerock Family Farms II	Buellton	Santa Barbara
16	Outdoor	47	470,000	47,000	BDZ Inc.	Lompoc	Santa Barbara
17	Outdoor	43	430,000	43,000	Boca Del Rio Agriculture LLC	Mendota	Fresno
18	Outdoor	42	420,000	42,000	Gypsy Canyon Farms	Lompoc	Santa Barbara
19	Mixed-Light	38	380,000	114,000	Valley Crest Farms LLC	Carpinteria	Santa Barbara
20	Mixed-Light	36	367,000	110,100	Ladybug Farms LLC	Salinas	Monterey
	Totals	**2,232**	**22,416,240**	**2,667,024**			
License data from the Department of Cannabis Control as of October 1, 2022. We have made slight changes to the data to correct inconsistencies in naming format. Estimated yield assumes 1 pound per 10/sf of canopy with 1 harvest per year for outdoor cultivation, 3 for mixed-light and 4 for indoor cultivation.							

E. References

[i] County of Sonoma "Summary Report to Board of Supervisors; Cannabis Tax" (March 15, 2022) file:///C:/Users/Mark/Downloads/Summary%20Report%20(2).pdf

[ii] Duncan McEwan, et al. "*Economic Impact Analysis of Medical Cannabis Cultivation Program Regulations*" ERA Economics LLC, Prepared for the California Department of Food and Agriculture, January 27, 2017

[iii] California Department of Tax and Fee Administration "*Cannabis Tax Reported Cultivation and Excise Revenue by Fiscal Year*" (Accessed January 10, 2022) https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=CannabisTaxCultivationExciseRevenue

[iv] John P. Caulkins (2010) *"Estimated Cost of Production for Legalized Cannabis",* the Rand Drug Policy Research Center