



## California Cannabis Policy Papers:

### Cumulative Tax Analysis

#### Introduction

Three months into the implementation of California's cannabis program, there is widespread concern among business owners, policymakers, and consumers that current California cannabis taxes are encouraging the illicit market through over-taxation of the regulated market. As California considers amending its state cannabis tax rate, this paper seeks to establish a baseline for the current California tax rate as compared to the cannabis tax rate in other cannabis-legal states.

While cross-state comparisons may seem straightforward, in reality they can be difficult to calculate due to different approaches to tax policy in different jurisdictions. The most significant complication is local tax policies in cities and counties, which vary substantially across states. A second complication is reconciling taxes on cultivation, retail, and other sectors of the supply chain into a final, cumulative tax. Taxes on different parts of the supply chain have different effects, and a 15% tax on cultivators and retailers calculates to somewhat less than a 30% overall tax.

When these and other factors are taken into account, our conclusion is that the typical state and local tax in California is significantly higher than any cannabis-legal state aside from Washington.

This is particularly concerning because, at the outset of regulation, California has the strongest incentives to bring large numbers of existing, smaller operators into compliance. The state with the closest similarity to California in this respect – Oregon – has implemented a substantially lower tax rate.

## State Tax Rates

Retail taxes are easiest to compare between states. By this measure, accounting for both cannabis-specific taxes and general sales taxes, Washington's tax rate far exceeds other states. California's tax rate is second-highest, exceeding other states by about 5%.

	<b>State Cannabis Retail Tax</b>	<b>State Sales Tax (Average)</b>	<b>Total State Retail Tax</b>
<b>Washington</b>	37%	8.87%	45.87%
<b>California</b>	15%	8.5%	23.5%
<b>Colorado</b>	15%	3.65%	18.65%
<b>Nevada</b>	10%	8.1%	18.1%
<b>Oregon</b>	17%	0%	17%

In addition to a cannabis retail tax, three states levy a state cannabis cultivation tax:

	<b>State Cannabis Cultivation Tax</b>
<b>California</b>	\$9.25/oz (\$148/lb)
<b>Colorado</b>	15%
<b>Nevada</b>	15%
<b>Washington</b>	0%
<b>Oregon</b>	0%

A 15% tax on cultivation at wholesale is significantly less impactful than a 15% tax at retail, since wholesale prices are lower than retail prices. For that reason, cultivation taxes need to be converted to retail rates to compare them to retail taxes. Effective cultivation tax rates will vary based average wholesale and retail cannabis prices in a state, so the following conversions are based on estimates from recent market data, and will change over time as market prices fluctuate.

	<b>Estimated Wholesale Cannabis Price (1lb)</b>	<b>Tax on Cultivated Cannabis (1lb)</b>	<b>Estimated Retail Cannabis Price (1lb)</b>	<b>Effective Cultivation Tax</b>
<b>California</b>	NA	\$148	\$3,200	4.5%
<b>Colorado</b>	\$1,300	\$195	\$3,200	6%
<b>Nevada</b>	\$2,268	\$340.20	\$4,800	7%

Before local taxes are taken into effect, then, the baseline state tax rates for each state are estimated as follows:

	<b>State Retail Tax</b>	<b>State Cultivation Tax</b>	<b>Total State Tax</b>
<b>Washington</b>	45.87%	0%	45.87%
<b>California</b>	23.5%	4.5%	28%
<b>Nevada</b>	18.1%	7%	25.1%
<b>Colorado</b>	18.65%	6%	24.65%
<b>Oregon</b>	17%	0%	17%

## Local Tax Rates

Among the cannabis-legal states considered here, only California levies substantial taxes at the level of cities and counties.

- Oregon caps local cannabis taxes at 3%. Taxes can be assessed at retail only; other supply chain activities are not taxed locally.
- Some Colorado jurisdictions levy cannabis taxes, but these tax rates tend to be significantly lower than in California jurisdictions. Denver, where Colorado cannabis is predominantly produced and sold, taxes cannabis at 3.5% at retail only.
- Washington and Nevada have no separate local taxes.

California's local taxes are much more extensive and complex, and so their effects are examined in detail below.

For the most part, California local governments have enacted "gross receipts taxes" which are assessed on total revenue independently at each step in the supply chain. A 5% gross receipts tax assessed on a cultivator, manufacturer, distributor, testing laboratory, and retailer produces a cumulative tax burden far higher than 5%.

Below is a summary of the local tax rates in jurisdictions with significant commercial cannabis activity, organized from north to south:

<b>Jurisdiction</b>	<b>Cultivation</b>	<b>Manufacturing</b>	<b>Distribution</b>	<b>Testing</b>	<b>Retail</b>
Humboldt County	\$1/sqft outdoor; \$2/sqft mixed-light; \$3/sqft indoor	0%	0%	0%	0%
Arcata	0%	0%	0%	0%	0%
Eureka	0%	0%	0%	0%	0%
Mendocino County	2.5%	0%	0%	0%	0%
Trinity County	TBD	TBD	TBD	TBD	TBD
Yolo County	4% (June 2018 ballot)	5% (June 2018 ballot)	N/A	N/A	N/A
Sacramento	4%	4%	4%	4%	4%
Sonoma County	Scaled based on size and type. \$1-\$2/sqft outdoor; \$2.25-\$6.50/sqft mixed-light;	3%	0%	0%	2%

	\$3.75-\$11.25/sqft indoor				
Santa Rosa	2%	1%	0%	0%	3% (adult use only)
San Francisco	TBD	TBD	TBD	TBD	TBD
Richmond	5%	5%	N/A	N/A	5%
Berkeley	5% adult-use/2.5% medicinal	5% adult-use/2.5% medicinal	5% adult-use/2.5% medicinal	5% adult-use/2.5% medicinal	5% adult-use/2.5% medicinal
Oakland	10% adult-use/5% medicinal	10% adult-use/5% medicinal	10% adult-use/5% medicinal	10% adult-use/5% medicinal	10% adult-use/5% medicinal
San Jose	7%	7%	7%	7%	7%
Santa Cruz County	5%	5%	7%	7%	7%
Monterey County	\$15/sqft; \$2/sqft nurseries	5%	5%	5%	5%
Santa Barbara County	4% (June 2018 ballot)	3% (June 2018 ballot)	1% (June 2018 ballot)	1% (June 2018 ballot)	6% (June 2018 ballot)
Desert Hot Springs	\$25/sqft on first 3,000 square feet; \$10/sqft for additional space	Unclear – 0% or 10%	Unclear – 0% or 10%	Unclear – 0% or 10%	10%
Adelanto	5% or \$5/sqft	5%	5%	5%	5%
Cathedral City	\$15/sqft	\$0.40/gram for concentrates; \$0.40/item for infused products	0%	0%	10%
Coachella	\$15/sqft plus 4% gross receipts; 2% processing	2%	0%	0%	N/A
Los Angeles	2%	2%	1%	1%	5% medicinal, 10% adult use
Long Beach	\$12/sqft	6%	6%	6%	6%
San Diego	5%	5%	5%	5%	5%

Considering local retail only, most high-demand urban centers range from a tax rate of 4% (Sacramento) to 10% (Oakland and Los Angeles).

Understanding the impact of local non-retail taxes is more complex, since it involves assumptions about both the supply chain (i.e. the respective tax rates in regions where cannabis is produced, packaged, manufactured, distributed, and tested) and the value added by each supply chain step as compared to the final retail price.

Rather than trying to settle on a final cumulative tax number – an analysis which would require substantial market data and detailed economic analysis – we considered several scenarios to arrive at a general estimate of local supply chain taxes. Given the current geographic distribution of licenses around the state, we believe that each of these supply chains is realistic and will account for a reasonable proportion of cannabis sold in California.

- Tax-optimized: flower produced, packaged, distributed, tested, and sold out of Eureka would not be taxed locally prior to retail sale.
- Low-tax: flower produced in Santa Barbara (4%), then packaged, distributed and tested in Los Angeles (2% each) would be assessed a 2% overall tax rate, according to our estimates, when converted to proportion of final retail price.
- Medium-tax: a supply chain that operates only in Sacramento, with a 4% tax on each step in the supply chain, would be assessed a cumulative tax of about 3.5% prior to retail.
- High-tax: a supply chain that operates in Oakland – the city with the highest density of non-cultivation businesses in the state – would be assessed a cumulative tax of about 8.5%.

When local retail and supply chain taxes are considered together, we estimate that local taxes in California will range from 4%-18.5% of final retail price, or 11.25% on average.

## Cumulative State and Local Taxes Compared Across States

In sum, we estimate state and local taxes among cannabis-legal states as follows:

	State Tax	Retail	State Cultivation Tax	Average Local Taxes	Total State and Local Tax
<b>Washington</b>	45.87%		0%	0%	45.87%
<b>California</b>	23.5%		4.5%	4%-18.5% (11.25% average)	32%-46.5% (39.25% average)
<b>Colorado</b>	18.65%		6%	3.5%	28.15%
<b>Nevada</b>	18.1%		7%	0%	25.1%
<b>Oregon</b>	17%		0%	3%	20%

These numbers are only a general estimate of the tax rate in each state, understanding that a precise conclusion would require more detailed market and supply chain data. We encourage others to challenge and build on these assumptions, and work towards building the clearest possible picture of the situation.

Practically, however, we believe that these numbers clarify the general tax situation in each state. The bottom line is that, while Washington is likely to be the highest-tax state in most cases, California is not far behind. The tax rate in California will, in most cases, far exceed taxes in Colorado, Nevada, and Oregon.

In the current environment, this conclusion should be major cause for concern. California's regulated cannabis market—though long established—is underdeveloped compared to Washington, Colorado, or Oregon.

California also has the largest existing cannabis industry of any state and should be especially concerned about incentives that discourage businesses and consumers from participating in the regulated market. These factors would suggest that California should aim for a cumulative tax rate that is lower – not higher – than the rate in other cannabis-legal states. With that in mind, a reconsidered tax rate should be a top priority in ensuring the success of California's regulated market.