Cannabis Tax Research for the City of South San Francisco

May 2019

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Version 1.1, May 17, 2019 - Final

1. Executive Summary

The cannabis market in California is the largest cannabis market in the world, with its sheer number of potential buyers, sellers, operators, and opportunities for development. The legalization of recreational cannabis in 2016, and the commencement of licensing and operations in 2018, enabled the industry to begin offering to the public, an array of legal products, consumed for both intoxication and wellness.

With legal selling, comes the tax revenue that goes along with it, providing the state hundreds of millions of dollars to use for cannabis related administration costs, research, education, and treatment programs that counter the negative consequences of the industry.

In addition to state revenue, there is local revenue. Cities can decide whether to allow cannabis businesses to open and at what tax rate to levy on their operations. Tax revenue generated from local businesses goes immediately to a City, without having to flow through the state first.

The challenges of allowing cannabis businesses are many and can be contradictory. While operations become an additional source of revenue, if too many businesses come in to a local area, there is fear there will be new crime and quality of life-related repercussions.

Additionally, states and cities want to maximize tax revenue, but taxes that are too high push consumers to purchase from the illegal market where prices are cheaper, thus taking sales away from the legal market and tax revenue away from the government. This pattern can be negatively cyclical, as evidenced through initial high tax rates in Oakland and Berkeley, that have since been lowered.

These challenges are further complicated by the lack of historical sales data on which to perform long term analysis and make decisions. The state of California and its cities should look to other states where cannabis has been legal longer, like Colorado for example, to understand the lessons they learned on maximizing revenue, while minimizing the illegal market.

States and cities are particularly interested in determining the optimal tax rate for each cannabis business type. If cannabis were a new industry without an illegal history, that question would be easier to answer. But because the illegal market still thrives, the optimal tax rate for any business type is nuanced by the subjective nature of consumer habits in buying illegally versus legally.

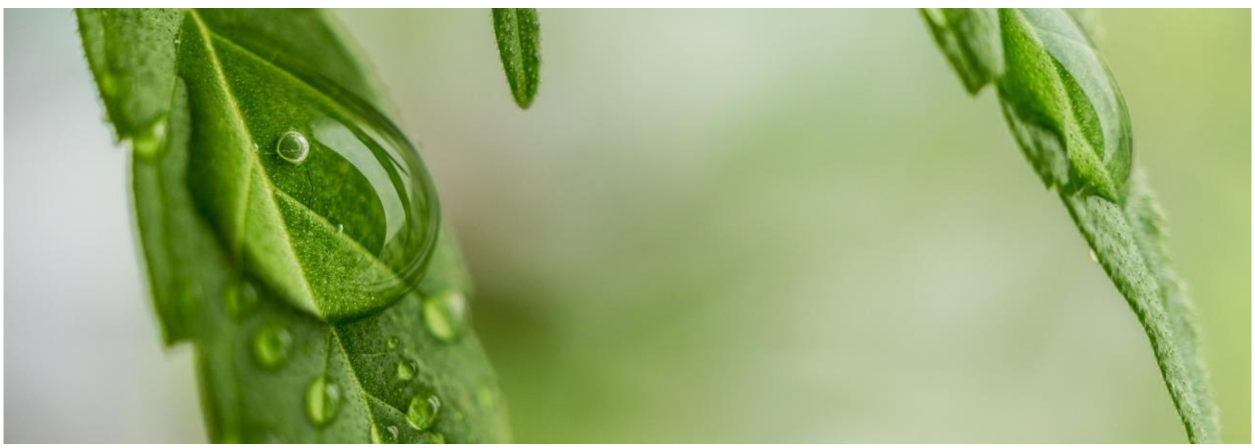
Long Term Strategy vs. Short Term Gains

Determining optimal tax rates for maximizing revenue and keeping consumers away from the illegal market is best driven through a long term strategy, rather than through a focus on short term gains. A long term strategy that includes initial low tax rates will enable the legal market to develop and eventually mature, thus providing consumers with an affordable, safe legal choice, and help drive out the illegal market.

In this report, I highlight the background and attributes of the cannabis industry, as well as describe a long term tax strategy, through the following content sections:

- Brief History of Legalization of Recreational Cannabis in California
- Summary of State and Local Tax Structure of Cannabis in California
- Licensed/Regulated Market vs. Unlicensed/Unregulated/Illegal Market
- Cannabis Lessons Learned From Other States
- Recreational Cannabis Tax Rates for Bay Area and Beyond
- Tax Rate Recommendations
- Tax Revenue Sample Scenarios

In summary, through its tax approach, South San Francisco has the opportunity to lead in a way that helps the overall legal cannabis market in California grow and mature. A mature legal market, accompanied by the right long term tax policy, generates more tax revenue in the long run. This approach produces a positively cyclical effect, instead of negatively cyclical effect.



2. Brief History of Legalization of Recreational Cannabis in California

The Control, Regulate and Tax Adult Use of Marijuana Act (AUMA), also known as Proposition 64, was approved by California voters in the 2016 general election, and legalized adult-use cannabis, effective January 1, 2018. The state of California began issuing licenses for adult-use commercial cannabis on January 1, 2018, and imposed a state excise tax of 15% on all retail sales of cannabis (delivery and dispensary) as well as a cultivation tax of $9.25 per ounce of cannabis flowers and $2.75 per ounce on cannabis leaves (dry-weight). Revenues from state taxes on cannabis fund the cost to administer and enforce state regulations, fund research on the impacts of use of medical cannabis, fund youth programs on drug education, prevention and treatment, and combat environmental damage from illegal cultivation.

State law allows cities to decide whether to allow or ban cannabis businesses locally and impose local taxes if approved by voters.

Delivery Services Throughout California

Although cities may ban cannabis businesses, state law allows cannabis to be delivered from a licensed delivery service to any location within the state (with the exception of a few places -- schools, childcare centers, for example), regardless of whether the city of that delivery address has banned cannabis operations.[1]

3. Summary of State and Local Tax Structure of Cannabis in California

- **Consumer retail sales, which includes storefront dispensary and non-storefront delivery service** are taxed with a 1) state excise tax of 15%, which is currently calculated as the average wholesale market price of the product + 60% markup margin, 2) sales & use tax (varies by county and city, anywhere from 7% - 10+%), and 3) local tax for the city in which it the retail business is based (varies by city), anywhere from 1% upwards.

- **Distribution & manufacturing businesses** are taxed with sales & use tax, plus the local tax for the city in which they are based, (varies by city), anywhere from 1% upwards.

- **Testing businesses** are not taxed with a sales and use tax, unless they sell testing kits, which are taxed with a sales and use tax. Testing business may also be subject to local taxes in the city in which they operate.

- **Cultivation businesses** are taxed with sales and use tax as well as a cultivation tax, as noted in Section 1 of this report.

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[1] On January 16, 2019, the Office of Administrative Law (OAL) officially approved state regulations for cannabis businesses across the supply chain. 16 Cal. Code Regs. § 5416(d) states, “A delivery employee may deliver to any jurisdiction within the State of California provided that such delivery is conducted in compliance with all delivery provisions of this division.”

Possible State Tax Relief bill

To facilitate reducing the price gap between illegal and legal cannabis products, the California legislature considered Assembly Bill (AB) 286 which would temporarily reduce the state excise tax on retail cannabis sales from 15% to 11% and would eliminate the cultivation tax. The measure would be in effect until July 1, 2022, after which the state excise tax would revert back to their original value. However, as of May 16, 2019, AB 286 did not pass through the State House Appropriations on a path to the State Senate[2]. Without going through the State Senate the bill cannot be approved, and appears to be at a standstill at this time, with no tax changes in effect.

4. Licensed/Regulated Market vs. Unlicensed/Unregulated/Illegal Market

Cannabis products sold in the legal market must be tested by a licensed testing facility to ensure the products do not contain pesticides or other harmful ingredients. The illegal market does not adhere to these standards. Therefore, without the extra financial burden of testing, as well as Occupational Safety and Health Administration (OSHA) and insurance requirements, illegal operators can charge approximately 60% less for product than legal operators.

At what price are consumers willing to switch from an illegal product to a legal product? There is not a definitive, uniform answer, because different consumers have different buying motivations and price points they are willing to accept. Surveys and interviews[3] conducted by business and industry groups indicate that consumers are willing to pay more for tested legal products, up to a certain point. Consumers also want to support government services that keep residents and the industry safe, also up to a certain point. Consumers don't want to be overtaxed to fund programs unrelated to cannabis.

In order to incentivize consumers to change their behavior and buy legally instead of illegally, the gap in price should be as small as possible while the legal industry establishes and develops. **One of the ways to close the price gap during the period of development is through low taxes.** Once the industry stabilizes and delivers predictable returns, cities and the state can re-evaluate tax rates to ensure maximum revenue is received.

Key research points regarding the legal versus illegal market and consumer behavior:

- There are some elements of the illegal market that will probably exist for a while.

[2] https://www.cacannabisindustry.org/ccia-legislative-tracker/
[3] https://mjbizdaily.com/wp-content/uploads/2018/08/High-Cost-of-Illegal-Cannabis_FINAL_.pdf

- There is a portion of consumers willing to pay more for the breadth and quality of tested products purchased from licensed operators.
- Consumers want to support the government to a reasonable level. Consumers don't want to pay excessive taxes to fund services unrelated to cannabis.
- Taxes rates are one of the biggest influencers in final price point in the legal market, since other parts of the supply chain offer less elasticity.

5. Cannabis Lessons Learned From Other States

The **Institute on Taxation and Economic Policy** (ITEP, itep.org) issued a report[4] on the impact of taxes on the legal cannabis industry based on data and research in states where cannabis has been legalized the longest (Colorado and Washington). The following excerpts are from the ITEP report:

Competition from illegal market. Among the biggest hurdles faced by regulators in establishing legal cannabis markets is competition from the illegal market. Cannabis prices in legal markets have typically been much higher than in the illegal market. This creates an incentive for consumers to avoid shifting their purchases to the legal market, particularly since most cannabis consumers are accustomed to shopping in the illegal market, as it was previously the only option available.

Low tax rates help combat illegal market. In the short run, states should help put their newly legal markets on a somewhat more competitive footing with the illegal market by levying a low tax rate. On its own, a low tax rate is unlikely to equalize prices across the legal and illegal markets during the early days of legalization when newly legal businesses are grappling with supply constraints. However, a low tax rate can help to ensure that states are not driving a larger wedge between prices in the legal versus illegal market.

Use cannabis tax revenues for cannabis related services. Earmarking cannabis revenues to specific public services should be done sparingly and should be limited to causes with a direct relation to cannabis, such as the regulation of the market and the implementation or expansion of substance abuse treatment programs. Arbitrary constraints on how certain revenues must be spent can make it difficult for lawmakers to craft budgets that direct public revenues to the areas where they are needed most.

Use a tax phase-in approach. Low tax rates should not be made permanent, however. While high retail prices pose a problem for law enforcement in the early stages of legal sales, very low prices are likely to be the more important issue once legal markets are fully established. For this reason, states should schedule a gradual phase-in of their ideal long run cannabis tax rate.

[4] https://itep.org/taxing-cannabis/

Wholesale prices will fall over time. The experience of states such as Colorado has shown that cannabis prices can fall dramatically as producers and retailers learn to operate more efficiently. Moreover, a potential easing of federal restrictions on access to banking, certain tax deductions, and the interstate shipment of cannabis could lead to similarly dramatic price declines in the years ahead.

Redirecting consumer habits to the legal market. After a few years of shopping in legal, regulated stores, it is unlikely that a significant number of consumers will abandon the convenience, selection, quality control, and protection from legal repercussions offered by legal stores. (Consider, for example, the small number of moonshiners operating now compared to just after the end of alcohol prohibition.) A gradual phase-in of cannabis taxes is the best way to draw consumers into the legal market without sacrificing long run revenue collections with a permanently low rate of tax. Put another way, state lawmakers should not allow what is largely a short run concern (the illegal market) to dictate tax policy for the long haul.

The approach to phase-in taxes was used at the federal level at the end of alcohol prohibition in the 1930s and it would be simple to implement in the context of cannabis taxation as well.

6. Recreational Cannabis Tax Rates for Bay Area and Beyond

The chart below highlights cannabis tax rates for cities around South San Francisco that are currently in effect or will go into effect, plus a few farther out, in order to provide sampling of tax rates around the area. This is publicly available information.

Summary

- The lion's share of legal cannabis activity has been in Oakland and Berkeley. Both cities set a tax rate of 10% for all businesses initially, but recently reduced the rate to 5% to make the legal market more competitive with the thriving illegal market.

- San Francisco has the lowest tax rates in all the bay area. San Francisco has a history of attracting industry with tax benefits, allowing the businesses to root, and then collecting the tax rewards later. Their cannabis tax approach is consistent with that philosophy.

- In San Mateo County, there is very little cannabis activity, and in Santa Clara County the only businesses are retail dispensaries in San Jose where the local tax rate is 10%.

- Most tax rates in populous Southern California areas are in the range of 5% to 10% (not included in chart below).

City	Businesses Allowed	Tax Rate against Gross Receipts (GR), unless otherwise noted)	Notes
San Francisco	All	Retail Dispensary & Delivery: 2.5% on up to $1M GR and 5% over $1M GR All other business: 1% on up to $1M GR and 1.5% over $1M GR.	Effect Tax Date: Jan 1, 2021, delayed taxation to allow business to take root
Oakland & Berkeley	All	5% for All	Was 10%, recently reduced to 5%
San Jose	All	10% for All	
Santa Clara	All	Retail & Manufacturing: 5% Cultivation: 5% Distribution & Testing: 3%	
City	Businesses Allowed	Tax Rate against Gross Receipts (GR), unless otherwise noted)	Notes
Sacramento	All	4% for All	
Daly City	All	Up to 10% on GR	Effective tax rate not yet specified
Redwood City	Cannabis Nursery businesses Delivery businesses that include storage and delivery of product	Not yet specified	-Nurseries are defined as producing only clones, immature plants, and seeds and other agricultural products specifically for planting and propagation. -Non-local retailers delivering into Redwood City would be subject to the City's cannabis business excise tax
Santa Rosa	All	Cultivation: Initial Rate: 2% of GR or $5.00 per square foot of cannabis cultivation area Manufacturing Initial Rate: 1% of GR. Distribution Initial Rate: 0% (instead subject to standard city business tax	Tax rates are in effect until June 2019, after which they will be re-evaluated.

		under Santa Rosa City Code Chapter 6-04) Retail: 3% of GR (recreational only and only after state and local regulations are in place)	
Note: the two cities below, Half Moon Bay and Pacifica, are not included in the original printed report and were added after the fact.			
Half Moon Bay	Nursery businesses only	$2 - $10 per cultivation square foot (range depends on type of lighting used to grow plants - artificial vs. natural)	See additional tax notes regarding Half Moon Bay at the end of this table.
Pacifica	All	6%	

Additional Notes on Tax Rates

Half Moon Bay

In November 2018, voters passed an ordinance in favor of authorizing the city to tax cannabis businesses at the rates listed below to fund general city services, however voters did not pass advisory ordinances allowing any cannabis business to open and operate, with the exception of nursery businesses, as noted in the table above[5]:

- $2 - $10 per square foot for cultivation;
- 6 percent of gross receipts for retail;
- 2.5 percent for testing;
- 3 percent for distribution; and
- 4 percent for manufacturing.

7. Tax Rate Recommendations

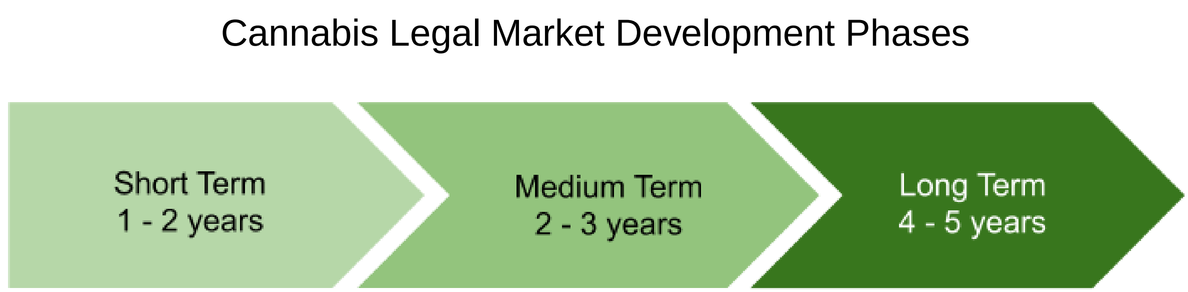
To help make legal businesses competitive with the illegal market, localities should phase in the implementation of cannabis taxes, as noted in Section 4 of this report. Evidence from Colorado and elsewhere indicates that cannabis prices in the legal market are likely to be highest in the months and years immediately following legalization, which suggests that this is the time when legal businesses will be most in need of a competitive boost delivered through lower taxes.

Rather than making short term revenue maximization the focus of tax policy, the objective should be to create a long term, stable and balanced market, where illegal sales are minimized,

[5] https://www.half-moon-bay.ca.us/604/Ballot-Measures-on-Cannabis-Regulation

supply chain is stabilized, and tax rates are proportionally, inversely aligned with cannabis price patterns over time.

Maximizing revenue comes from having the right long term strategy, which includes short, mid, and long range phases involving educating the public, changing consumer behavior, making legal cannabis affordable, and helping businesses expand in a legitimate, responsible way.



Short Term

- Set taxes low, draw businesses away from operating in the illegal market and draw consumers away from buying from the illegal market through comparable prices, tested products, and diversity of selection.
- Legal businesses establish, which means stabilizing supply chain, finding labor, establishing the right pricing structure.

Medium Term

- Legal businesses have found stable operational models, and are growing, supply chain is stabilizing.
- This is a good time to **evaluate** a tax increase that will go into effect in the long term phase.

Long Term

- The legal market is maturing, consumer habits are redirected to legal operators, supply chain and operations are stabilized, wholesale prices are down, and there are predictable returns in the market.
- Tax rates should be increased to the long term rate. During this phase, tax revenue is maximized.

Cohere Insights recommends the following initial rates for each business type based on analysis of the market and margins by business type:

Indoor Cultivation - 2%

There are three main types of indoor cultivation licenses awarded in California -- small, medium, and large. In South San Francisco, indoor cultivation applications most likely would be a small business license, which allows up to 10,000 square feet of growing area.

The goal of the state regarding cultivation licensing is to protect nascent businesses from being crushed by big farms or well-financed conglomerates. The protections are also supposed to give existing cannabis businesses operating in the illegal market an opportunity to transition to the legal, taxable market. However, the costs and regulatory requirements of entering the legal cannabis industry have persuaded many smaller cultivators to stay in the shadows, causing state tax revenue to fall short of projections.

Start-ups costs as a cultivar are high. In addition to the state cultivation tax, there are costs associated to code requirements for odor control, security measures and other things. Tax policy should incentivize business to move from the illegal to the regulated market.

If wholesale cultivation prices go down after a few years of regulation, as was the case in Washington and Colorado, indoor cultivation, (probably small license) will be hurt the most. Large scale growers are better positioned to weather a big drop in wholesale prices. While their profit margins are smaller, large growers have the scale to sell more product and still turn a profit. For small cultivators, the diminishing margins resulting from wholesale price drops can be debilitating.

Up for consideration is the number of cultivation licenses approved by the City. If there are too many indoor cultivars, competition will drive the price down and margins will be squeezed.

Summary of Small Indoor Cultivation License Issues in the state (as of May 3, 2019)
Overall in California: 78 issues
Oakland: 1
Sacramento: 1

With only two cultivars in the bay area, there is opportunity for more to open, and with a lower tax rate, South San Francisco has the opportunity to develop the local indoor cultivation market.

Testing - 1%

Testing labs have lower margins than growers, retailers, and extraction labs. Since all legal products require testing, more labs in the supply chain will reduce supply related testing bottlenecks.

Summary of Bay Area Testing License Issues (as of May 3, 2019):
Alameda County: 9 (the total is split between Oakland and Berkeley)
San Francisco: 1
San Mateo County: 0
Marin County: 1

Creating a lab requires large capital, and specialized labor and equipment. South San Francisco is an attractive option for opening a testing lab because it has a history of chemical and biotech industries, so specialized labor with lab experience is available. A low tax rate helps encourages testing businesses to open. Some cities forgo tax on testing operations altogether.

Distribution - 2%

Distribution is a high volume, lower margin business. Cannabis goods can only be transported through a distributor. A lower tax rate on distributors will help the legal market develop and help get legal prices closer to the illegal market.

For informational purposes, there are two types of distributor licenses in California: 1) distribution storage and transport (type 11), and 2) distribution transport only (type 13).

Type 11 activities include the following, plus all the activities of a type 13 license:

- Transporting cannabis goods
- Arranging for laboratory testing of cannabis goods
- Conducting quality assurance review of cannabis goods
- Ensuring goods comply with all packaging and labeling requirements.
- Storage of cannabis goods

Type 13 activities include distributing cannabis goods to the following parties:

- Licensed cultivators
- Licensed manufacturers
- Licensed distributors

Note: the following Distribution license breakdowns are not in the original printed report.

Summary of Bay Area Distribution Type 11 (storage and transport) License Issues (as of May 16, 2019):
Alameda County: 174
City and County of San Francisco: 40
San Mateo County: 2
Santa Clara County: 11
Marin County: 2

Summary of Bay Area Distribution Type 13 (transport only) License Issues (as of May 16, 2019):
Alameda County: 12
Marin County: 4

Manufacturing - 3%

Manufacturers produce branded products for retailers as well as white label products that are branded by other businesses (retailers and distributors). Manufacturing margins are higher than other cannabis business, with the exception of retail, and therefore can support a higher tax rate.

For informational purposes, there are four main license types for manufacturers:

- Type 7 – for extraction using a volatile solvent (ex: butane, propane and hexane)
- Type 6 – for extraction using a mechanical method or non-volatile solvent (ex: CO2, ethanol, water, or food-grade dry ice, cooking oils or butter)
- Type N – for infusions
- Type P – for packaging and labeling only

Each license type is inclusive of the types in the list below it. For example, a Type 7 licensee would be able to perform Type 6, N or P tasks. A Type 6 license could perform Type N or P tasks. A Type N licensee would be able to perform Type P tasks.

Summary of Bay Area Manufacturing License Issues (as of May 3, 2019):
Alameda County - 40
Marin County - 5
San Mateo County - 2
City and County of San Francisco - 13

With only two manufacturers elsewhere in San Mateo County, there lies opportunities for additional manufacturers in South San Francisco to create products.

The two manufacturing licensed operations in San Mateo County are both located in Brisbane and are Type N licensees, which are infusions. These two operations are NC4 Systems Inc and Peninsula Distribution Solutions LLC.

Delivery - 4%

Delivery businesses are consumer facing and have higher margins on the products they sell, and therefore can support higher tax rates. Licensed delivery services offer consumers a legal choice with tested products, and help drive out the legal market.

Note: Licensed delivery services can legally deliver product anywhere in the state of California, whether the local jurisdiction has banned cannabis or not, as noted in Section 1 of this report.

With a tax rate of 4%, South San Francisco is an attractive city to set up a cannabis business delivery because the rate is lower than any other city around the bay, with the exception of SF.

Summary of Delivery License Issues in California (as of May 3, 2019):
Total in California: 403
Oakland: 173
San Francisco: 38
Sacramento: 78
Marin County: 9

Double Taxation

Double taxation occurs when a cannabis business, usually delivery or distribution, is taxed on gross receipts by the city in which the business is based, as well as by the city in which it is delivering product. Double taxation is counter-productive to keeping prices low and helping the legal market develop, and therefore should be avoided as part of tax strategy.

Deferred Taxes

To further give the legal cannabis market the opportunity to develop and compete against the illegal market, some cities defer tax effective dates until a date in the future, usually one or two years out. This approach enables businesses to develop without the burden of taxes to pass on to the next level of the supply and demand chains.

The advantage of a deferred approach is that businesses are able to pass their lowest possible price to customers without undercutting their margin, while the industry levels out against the illegal market. The disadvantage is that cities generate no revenue during this time, however, they will eventually reap revenues after tax rates go into effect.

Raising Tax Rates Later On

As noted in Section 4 of this report, based on data from states where cannabis has been legal for longer, after the market stabilizes and matures, wholesales cannabis prices will likely fall, resulting in lower gross receipts, and therefore less tax revenue. Continuous monitoring of cannabis tax revenue will help the City identify when wholesale prices start to fall and when they should consider tax increases that will stabilize tax revenue and keep cannabis prices from dropping too low, which makes products more attractive to underage consumers.

8. Tax Revenue Sample Scenarios

Based on the recommended tax rates in Section 6, sample revenue scenarios for each business type are calculated below.

Note: In order to derive the sample scenarios, assumptions have been made as to the number of businesses that will operate in South San Francisco and their gross receipts.

The gross receipts estimates used in the calculation have been provided by South San Francisco's previous cannabis consultant, and **are not the product of research by Cohere Insights**. Such research is not in scope for this report.

In reality, estimated tax revenue should be represented in graduation across the initial years of business operations. Businesses will not be operating and earning at full capacity from the outset; it will take them a year or more to achieve full capacity while the market develops and the supply and demand chains stabilize. As a result, tax revenue will be lower at the outset and will gradually increase over time.

However, also over time, cannabis wholesale prices likely will fall, at which point tax revenue will also decrease. It is at this point that tax rates can be raised to offset the decline in cannabis prices.

Tax Revenue Sample Scenarios

Small Indoor Cultivation (10,000 or less of growing space)

# of Licenses	Est. GR per License	Total Est. GR	Tax Rate	Est. Tax Revenue
2	5,000,000	$10,000,000	2%	$200,000

Retailer Non-Store Front (Delivery)

# of Licenses	Est. GR per License	Total Est. GR	Tax Rate	Est. Tax Revenue
4	1,000,000	$4,000,000	4%	$160,000

Distribution

# of Licenses	Est. GR per License	Total Est. GR	Tax Rate	Est. Tax Revenue
2	2,000,000	$4,000,000	2%	$80,000

Testing

# of Licenses	Est. GR per License	Total Est. GR	Tax Rate	Est. Tax Revenue
2	1,000,000	$2,000,000	1%	$20,000

Manufacturing

# of Licenses	Est. GR per License	Total Est. GR	Tax Rate	Est. Tax Revenue
1	1,000,000	$1,000,000	3%	$30,000

Total Sample Tax Revenue	**$490,000**

9. Conclusion

To maximize cannabis tax revenue, focus on a long term strategy that sets initial tax rates on the lower end of the recommended range. The outcome of this approach will be development and stabilization of the legal industry and the deterioration of the illegal industry.

To summarize the phases of the recommended long term strategy:

Short Term

- Set initial tax rates at the lower end, using the recommendations in this report (see Section 7, page 11).
- Monitor the number of license applications received and accepted. Too many of one business type could cannibalize sales from each other.

Mid Term - in this phase, supply and demand chains stabilize

- Monitor tax revenue to identify stabilization (steady growth) and patterns in the numbers. These two things trigger the opportunity to evaluate a tax increase. Other cities set an initial lower rate for one to two years before increasing rates.

Long Term

- Legal market is maturing, consumer habits are redirected to legal operators, supply chain and operations are stabilized, wholesale prices are down, and there are predictable returns in the market.
- Tax rates should be increased to the long term rate. During this phase, tax revenue is maximized.

Photo Credit: City of South San Francisco

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