

Government Income Projections for California's Cannabis Industry

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Statement of Purposes

The purposes of this document are to analyze and project possible Government revenues, as proscribed under these Proposed Cannabis Industry Regulations, including listing which agencies will be directly involved in the permitting and taxing processes that this legislation entails. For the purposes of this document, based on the legal protections afforded to qualified individuals who produce 100% of their own medical cannabis, all calculations for government revenues herein are based on the commercial production and distribution of medical cannabis only. These regulations and revenues are not based on the private production and uses of medical cannabis. “Commercial Production of cannabis” is hereby defined as the cultivation of any cannabis plants that are intended for the medical uses of qualified patients who do not reside on the parcel(s) where such cannabis is grown. “Commercial Distribution of cannabis” is hereby defined as the resale distribution of cannabis plants, useable cannabis and cannabis plant conversions, to any qualified patients by agents representing a third party (excepting any designated primary caregivers and personal assistants, as defined in the M.M.P.A.), including but not limited to, any Collective, Cooperative, Dispensary or Delivery Service. “Private Production and Uses of Cannabis” is hereby defined as any independently or collectively / cooperatively owned useable cannabis or cannabis plant conversions that are not for resale, and any cannabis plants cultivated by or for qualified individuals who reside on the parcel(s) where such cannabis is grown.

Government Income Projections

This document examines in detail four California Government agencies that will directly oversee and generate revenues through their administration of these Proposed Cannabis Industry Regulations. It also lists other state, federal and local agencies that may be indirectly involved, or realize increased funding, from the administration of these programs. And, this document also touches on potential Private Sector benefits and improvements to California’s economy. The four main agencies are:

- I) **The Alcoholic Beverage Control Board (ABC):** Will oversee the **permitting process and registration** of all Commercial Dispensaries and Delivery Services (see pages 3-4, Tables 1:1 and 1:2), and shall be responsible for tracking this information under one secure, state-wide database.
- II) **The Board of Equalization (BOE):** Will maintain control over the **collection of all sales taxes** from Commercial Dispensaries and Delivery Services (see pages 4-6, Tables 2:1 – 2:3), and shall be responsible for tracking this information under one secure, state-wide database.
- III) **The Department of Food and Agriculture (Ag. Dept.):** Will oversee the **plant tag program** (see pages 6-8, Tables 3:3 – 3:5) and collect related fees from all commercial cultivation facilities, and shall be responsible for tracking this information under one secure, state-wide database.
- IV) **The Department of Health and Human Services:** Will continue to oversee the **Patient I.D. Card Program** (see page 9, Tables 4:1 and 4:2), and will be responsible for tracking this information under one secure, state-wide database. Note: Because this agency handles information that is considered to be confidential and protected (i.e. privacy rights of patients and

patient/doctor confidentiality), this Department shall maintain its existing protocols that protect such data (no personal information stored, no name on photo ID, security number for confirmation purposes, etc...). Additionally, this Department shall oversee the inspections and licensing of all commercial manufacturers of cannabis edibles.

VI) Other State, Federal and Local Agencies: There are many possible secondary agencies that are not directly involved in the program, at the state, federal and local levels that will likely receive increased revenues (in the form of permit and inspection fees or taxes). These include, but are not limited to, the Internal Revenue Service, the State Franchise Tax Board, City and County Departments engaged in the licensing process, and Agencies that oversee various Chain-of-Title industries. Also, cities and counties with local sales taxes will collect additional funds every year from the cannabis industry. Additionally, this proposed legislation enacts a revenue sharing plan between the Department of Food and Agriculture, with county and city law enforcement agencies, through a plant tag program (see Tables 3:3, 3:4).

VI) Private Sector Benefits: There are obvious positive indications represented by a uniformly implemented regulatory system for all medical cannabis production and dispensation within California. The cannabis industry represents one of the few new (and growing) industries, in every State where medicinal cannabis laws have been enacted. The combined industrial, medical and illegal uses of cannabis “marijuana” make it the #1 cash crop in California today; in a State that produces a large share of the world’s agricultural products. The increases in private sector job growth throughout California, represented by a well regulated and reasonably taxed cannabis industry, will be evident (and measurable) within the first year of the implementation of these Proposed Regulations.

1) ABC Income Projections

Assumptions

- A)** We based the annual Dispensary Registration fee on the number of patients per Dispensary Registration as outlined in document titled “ An Estimation of Qualified Patient Populations in California, by County” and allotting a \$5 per patient charge. (see Table 1:1) So if a county is required to have a dispensary permit for every 5000 qualifying patients, then the annual fee for that dispensary permit would be \$5 per each of 5000 patients or \$25,000 annually
- B)** We allocated a \$1,000 non-refundable application and annual renewal fee to offset the costs of processing and approving all Dispensary Registrations. (see Table 2:2)

C) References and Calculations:

Table 1:1 Annual Permit Fee

Number of Patients per Permit Required by the County	\$5.00 per patient	Assumed Number of Dispensaries in CA	Total Annual Yield from Dispensary Registrations
1250 Patients per Registrant	\$6250 per Registration	903	\$5.6 mil.
2500 Patients per Registrant	\$12500 per Registration	474	\$5.9 mil.
5000 Patients per Registrant	\$25000 per Registration	266	\$6.6 mil.

1,117,618 Patients in CA @ \$5 each = roughly \$5.6 million per year, plus application fees.

Table 1:2 Registration Application Fee

ABC Dispensary Registration Application Fee (Non Refundable)	Minimum fees Earned for Dispensary application process
903 Applicants	903*\$1000= \$903,000
474 Applicants	474*\$1000= \$474,000
266 Applicants	266*\$1000= \$266,000

rmits/permits.html> ABC County Permit Page <<http://www.abc.ca.gov/pe>

2) BOE Income Projections

Assumptions

- A) We assume that not all patients use Dispensaries for their medical needs. From viewing CA Population Densities, we assume that between 75% and 97% of qualified patients will apply for membership with one or more dispensaries, for reasons relating to their housing, health, safety or financial status. Additionally, patients living in urban areas (a large majority of the State's patients) have less direct access to cannabis farms, compared to those living in rural areas.
- B) We assume the average patient would use 3.5lbs. (See Table 2:3) to 7lbs. (see Table 2:4) of medical cannabis per year, for these calculations.

- C) We used the California BOE Sales Tax at 7.50% (Current as of 2-2013) for these calculations. Note: Many localities have levied additional local sales taxes as well.
- D) We cite the average retail price of \$4540 per pound (or \$10 per gram) of cannabis. (See Table 2:1).
- E) We used the price range of \$8-\$12 per gram as a cost average in the current dispensary market as of February-2013 (see Table 2:1).
- F) References and Calculations:

1) Standard current business licensing fees

Average business permit price in California:	\$75-200
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[California Business License](#): Says the average cost in Ca. is \$75
[Sellers Permit Guide \(BOE\)](#): California Sellers Permit Guide
www.sba.gov
[Tax Overview \(BOE\)](#): Who needs to register for a permit?

Note: The sales tax revenues generated herein represent the minimal amount due under state law. However, most cities have levied additional local sales taxes, and this additional revenue for local governments will be an added benefit.

Table 2:1 Taxation of Cannabis at Current Retail Cost

Est. Cost per Gram to Dispensary Client	Equated Cost per Pound (454g = 1 pound)	Tax Rate of 7.50%	Sales Tax Revenue Created per Pound (\$)
\$8.00	\$3,632	7.50%	\$272.40
\$10.00	\$4,540	7.50 %	\$340.50
\$12.00	\$5,448	7.50 %	\$408.60

Table 2:2 Total Tax Revenue Estimated to Pass through CA Dispensaries per year. (At Current Retail Prices)

Estimated Total Pounds per Year for CA Patient Population @ 3.5lbs. /Year/ Patient	Assumed 75%-97% of CA Patients Using Dispensaries	Tax Revenue @ \$8.00/Gram or \$272.40/lbs.	Tax Revenue @ \$10.00/Gram or \$340.50 /lbs.	Tax Revenue @ \$12.00/Gram or \$408.60/lbs.
3,911,665 lbs.	@ 75% 2,930,000 lbs.	\$798 million	\$998 million	\$1.20 billion
3,911,665 lbs.	@ 97% 3,800,000 lbs.	\$1.04 billion	\$1.29 billion	\$1.55 billion

**Table 2:3 Total Tax Revenue Estimated to Pass through CA Dispensaries per year.
(At Current Retail Prices)**

Estimated Total lbs./Year for CA Patient Population (@ 7lbs. /Year/ Patient)	Assumed 75%-97% of CA Patients Using Dispensaries	Tax Revenue @ \$8.00/Gram \$272.40 tax/lbs.	Tax Revenue @ \$10.00/Gram \$340.50 tax/lbs.	Tax Revenue @ \$12.00/Gram \$408.60 tax/lbs.
7,823,330 lbs.	@ 75% 5,867,497 lbs.	\$1.60 billion	\$2.00 billion	\$2.40 billion
7,823,330 lbs.	@ 97% 7,588,630 lbs.	\$2.07 billion	\$2.58 billion	\$3.10 billion

G) Conclusions:

We propose that the actual retail costs of cannabis may initially drop as these regulations are implemented, and that the cannabis market will stabilize once artificial stimuli to the market are eliminated (ranging from unlicensed producers and distributors unfairly competing in the market, to the lack of relationships between perceived value and quality control mechanisms, to the inclusion of medical cannabis within the scope of the “drug war”.) Additionally, enacting a comprehensive closed-loop data tracking software system will greatly reduce the criminal diversion of medical cannabis, to or from the black market, further stabilizing cannabis prices in California.

From the consumer side of this equation, we see that in order for qualified patients to afford the amounts of cannabis that a majority of them actually require; the costs of production, and the standard “mark-up” prices that retailers utilize, should reflect these ratios in related industries. For example, the development of a regulated market will encourage larger, centralized farms, thus further reducing the costs of production, while the stabilized marketplace created by these Proposed Regulations will greatly reduce the “hidden tax” of criminal law prosecutions and police property seizures that legal producers and dispensaries currently pay, in order to participate in the market.

Full Circle Cannabis Consultations is currently estimating the production costs, per pound, for indoor and outdoor cultivation, as well as the hidden costs that producers and distributors currently pay. Our results will be available for consideration as this model develops further.

3) Department of Food and Agriculture Income Projections

Assumptions

- A) We assumed that 60% of the total medical cannabis yield comes from outdoor gardens.
- B) We assumed that 40% of the total medical cannabis yield comes from indoor gardens. (Differences in this relationship, as comprehensive market tracking develops, will change some of these projections.)

- C) An average outdoor plant will yield from 1-3 pounds of processed buds per plant (as well as 1-3 pounds of leaf that can be also used for manufacturing plant conversions).
- D) An indoor plant will yield from 0.10-0.33 pounds of processed buds per plant (as well as an equal amount of leaf that can also be used for manufacturing plant conversions).
- E) A patients average yearly use of 3.5 lbs. (over 80% of the patient population) is Sourced from: 3.73 grams per day, is a personal use quantity in compliance with Health and Safety Code 11362.5 (Proposition 215). That dosage, reduced somewhat by cleaning, comes to about 4 or 5 cigarettes a day. This allows a patient to consume cannabis as needed throughout the day, to control their chronic symptoms under treatment. This baseline dosage is adequate for approximately 85% of patients.

Pasted from <<http://www.safeaccessnow.net/support.htm>>

- F) A patient’s annual usage of 7 lbs. per year. Sourced from: (The Federal Government Supplies on the average 8.24 grams a day or 6.63 lbs a year to their recognized Medical Marijuana Patients.)
Russo, Mathre, Byrne, Velin, Bach, Sanchez-Ramos and Kirilin. *Journal of Cannabis Therapeutics*, Vol. 2(1) 2002. p. 3-57. Table 1, page 9.

Pasted from <<http://www.safeaccessnow.net/support.htm>>

- G) A patient’s annual usage of 12 lbs. per year (15%). Sourced from: Safe Access Now.
Some patients need more than three pounds of cannabis bud per year. When patients want to avoid the negative effects of smoking cannabis, they utilize alternative methods of delivery. Patients who are chronic users can smoke 6-12 pounds per year. When cannabis is manufactured into edibles, it requires about four times as much as smoked amounts. When "vaporized" it typically takes twice as much. And when manufactured into concentrates, topicals and tinctures, it requires 10 times as much as smoked amounts. Additionally, cannabis providers often need to store more than a year's supply at a time for security purposes or as a buffer against future crop failures or lack of safe access.

Pasted from <<http://www.safeaccessnow.net/support.htm>>

H) References and Calculations:

Table 3:1 Ag. Dept. Farming Application Fee (Non Refundable):

Production Farms*	\$1000.00
Nurseries*	\$1000.00

Table 3:2 Ag. Dept. Farming Annual Renewal Fee:

Production Farms*	\$1000.00
Nurseries*	\$1000.00

We propose an annual \$1,000 fee to the Dept. of Food and Agriculture, by every facility, for the processing of Commercial Cultivation Applications.

* It is unclear at this time how many Commercial Cultivation facilities there will be due to too many unknowns. However, under regulations such as zoning and Registrations, there should be as many as the market will bear without any artificially imposed limitations that are outside of normal business practices.

Table 3:3 Ag. Dept. Plant Tag Program (Outdoor)

Assuming 75% patient participation in commercial cannabis	3.5 lbs. per year 838,213 Patients	7 lbs. per year 838,213 Patients	12 lbs. per year 838,213 Patients
Total Pounds Needed in CA	2.9 mil Pounds	5.9 mil Pounds	10.1 mil Pounds
With Outdoor Plants Providing 60% of Total	1.74 mil Pounds	3.54 mil Pounds	6.06 mil Pounds
1-3 lbs. per Outdoor Plant	580,000 - 1.74 mil Plants	1.18 - 3.54 mil Plants	2.02 - 6.06 mil Plants
Outdoor Tags @ \$30 a tag	\$17.4 mil - \$52.2 mil	\$35.4 mil - \$106.2 mil	\$60.6 mil - \$181.8 mil

Table 3:4 Ag. Dept. Plant Tag Program (Indoor)

With Indoor Plants Providing 40% of Total	1.17 mil Pounds	2.34 mil Pounds	4.02 mil Pounds
.1 - .33 lbs. per Indoor Plant	3.54 mil – 11.7 mil Plants	7.09 mil – 23.4 mil Plants	12.18 mil – 40.2 mil Plants
Indoor Tags @ \$5 a tag	\$17.7 mil - \$58.5 mil	\$35.5 mil - \$117 mil	\$60.9 mil - \$201 mil
Indoor & Outdoor Totals:	\$35.1 mil - \$110.7 mil	\$70.9 mil - \$223 mil	\$122 mil - \$383 mil

D) Conclusions:

The Plant Tag Program shall require that all Production Farms pay a flat fee for every production plant (that will be flowered), and that all Nurseries pay a flat fee for every batch of plants grown. At the end of those plant cycles (after harvests) these tags would be turned in to the department and new tags would have to be purchased for the next cycle of plants. We propose that a central database with a comprehensive closed loop tracking software system should be developed, and that it includes this Plant Tag information. This data base will be available for use by all relevant California Government agencies, and by the cannabis industry itself, enabling the tracking and accountability of product from seed to sale.

We have proposed 100% participation in the Plant Tag Program by all commercial producers of medical cannabis for these reasons:

1. All of the cannabis plants being grown for medical purposes will be registered and accounted for by the appropriate government agencies.
2. The high numbers of people participating in this program will provide the lowest possible costs for application reviews and registrations, while providing for sizable government revenues.
3. The total number of cannabis plants being grown for commercial uses would be on record every year, and access to such information, along with data generated by the other Departments, will assist research and accountability.

4) Department of Health and Human Services Income Projections

Assumptions

Table 4:1

MMJ Card price*:\$20.00	Assumed cost per card after it is made mandatory for all patients joining commercial dispensaries.
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* At this time, the price varies from county to county

<http://www.cdph.ca.gov/programs/MMP/Pages/Medical%20Marijuana%20Program.aspx>

We assume a yearly cost per card that is affordable to all patients considering that the card may be mandatory in order for the patient to be a member of a regulated commercial dispensary. Because of privacy protections under MMPA, only patients who join commercial production farms and dispensaries could be required to register for the I.D. program under existing CA laws.

Calculations

Table 4:2

	Number of CA patients	@ \$20 a card
CA cannabis patient population	1,117,618	\$22.4 mil
Assume 75% of Total Patient Population using Dispensary	838,214	\$16.7 mil
Assume 95% of total Patient Population using Dispensary	1,084,090	\$21.7 mil

Conclusions

We propose that California Patient I.D. cards be required for all patients who become members of any commercial dispensary (wherever third-party retail sales occur). This will help to track data such as: How many patients are using dispensaries in each county, which is needed to assess the number of Dispensary Registrations that ABC will maintain. Qualified patients who do not use dispensaries, and obtain their

medicine from personal cultivation only, would not be required to register with the I.D. program. This maintains the voluntary nature of the program under the MMPA. All cannabis farms, of any size, are required to adhere to State and local regulations and all commercial farms are required to participate in the Plant Tag Program. These and other programs, working in tandem, will greatly increase tracking and accountability of all medical cannabis transactions.

5) Other State, Federal and Local Agencies

Under this Proposed Legislation, there will be a number of other government agencies that would see secondary involvement in the registration process, as well as local agencies that will increase their funding through normal licensing fees. Additionally, the proposed split in revenues generated by the Department of Agriculture's Plant Tag Program will inure to local city and county law enforcement agencies. These other agencies (having oversight or deriving revenues) include, but are not limited to:

1. Department of Weights and Measures: Will inspect all scales used by commercial facilities to ensure accuracy.
2. OSHA and California Labor and Work Force: Will oversee compliance to a safe work environment.
3. Department of Public Health: Will inspect all commercial facilities manufacturing cannabis based edibles like any other food production facility.
4. Office of Environmental Health Hazard Assessment: Will inspect and oversee commercial facilities manufacturing condensed products through the use of chemical solvents.
5. Local Building Departments and Planning Departments: Will oversee building Registrations and inspections of new construction or improvements to facilities used for commercial farms and dispensaries as well as any private (non-commercial) operations that require Registrations, in accordance with local building and land-use codes.
6. Local Law Enforcement Agencies: Will receive additional funding from their pro-rated shares of the Plant Tag Program, in order to increase staffing and pay for local programs. *We suggest a revenue sharing plan between this State Agency (50%) and local law enforcement agencies (50%) within in each community. We further recommend that the local share of these funds be divided between each county, and the city agencies located within each county, with 50% going to County Law Enforcement Agencies and the remaining 50% divided amongst the City Law Enforcement Agencies, on a pro-rated, per-capita population basis.*
7. Local Fire Departments: Will receive additional funding, via the collection of Fire Marshal inspection fees, paid by commercial and non-commercial operations that require inspections, in accordance with local land-use codes (similar to local planning and building departments, above).

8. Internal Revenue Service: If and when federal and state tax codes are modified to allow for the commercial cultivation and dispensation of cannabis, the IRS will see increased revenues, as more people are able to properly declare earnings associated with the cannabis industry, without fear of law enforcement reprisals or unfair tax disadvantages that currently exist.
9. State Franchise Tax Board: Similarly to number eight, as more businesses begin to register and pay their taxes, without fear of government reprisals or interference from law enforcement agencies, this Agency should also see increased revenues, from all businesses that are engaged in the Chain of Title (handling) of medical cannabis.
10. City and County Governments: In all cases where local sales taxes are imposed, either generally, or specifically in regards to cannabis sales, local governments will collect additional revenues from the cannabis industry.

6) Private Sector Job Creation

The category of business called “Chain of Title Companies” includes Cannabis Producers and Cannabis Dispensaries, but also includes Processing and Handling Companies, Packaging and Labeling Companies, Secure Storage Facilities, Secured Transportation Services, Testing Laboratories, Manufacturers of cannabis plant conversions, Waste Processing Services (secured disposal or recycling), and Complete Tracking Software System(s). All of these companies play a part in the “Chain of Title” between cannabis Farms, Dispensaries and lawful Consumers, and they are all directly or indirectly involved with the handling of cannabis and the tracking of cannabis-related transactions. As such, this category of business must be tightly regulated, under one or more Licensing Agencies. These businesses will bring increased revenues to many Government Agencies, and will also increase domestic job creation throughout California.

Since there is a great need for accountability and tracking of cannabis transactions, we propose that all relevant government Agencies, along with all the above mentioned businesses, become a part of this “Chain of Title”. We propose that all such agencies and industries use only Approved Software System(s), in order to accurately track all cannabis transactions, from “seed to sale”. This will require meetings between the representatives of these Agencies, their counterparts in these Private Sector industries, State Legislators, and representatives from all Tracking Software Companies that propose doing business with California’s cannabis industry. It may be that only one software company is approved, or that one standard is developed for all software companies to adhere to. Either way, there will be one approved tracking standard, statewide.

Further investigation into the cost of operating a Cultivation Center and Dispensary will allow us to more accurately project wholesale costs and reasonable retail prices of cannabis. Looking into the private sector, employee costs, operations costs, rents, etc., and adding them to the permitting, inspection and licensing costs discussed in this document will allow us to better estimate the true costs of producing and distributing each pound of cannabis, as well as projecting additional Government revenues from increased employee income taxes.