

State-backed Financial Institution  
(Public Bank)  
for the State of California  
Servicing the Cannabis Industry  
Feasibility Study  
2018

Report provided by:



<b>Title</b>	CALIFORNIA STATE BACKED BANK FEASIBILITY STUDY REPORT		
<b>Document #:</b>			
<b>Version:</b>	FINAL	<b>DATE:</b>	12/24/2018
<b>Author(s):</b>	LEVEL 4 VENTURES, INC., JADE COMPLIANCE SOLUTIONS AND RLR MANAGEMENT CONSULTING INC		
<b>Customer:</b>	CALIFORNIA STATE TREASURER'S OFFICE		
<b>Contract:</b>	SA000024-17		
<b>Project:</b>	FINANCIAL AND OPERATIONAL FEASIBILITY STUDY FOR STATE-BACKED FINANCIAL INSTITUTION TO SERVE CANNABIS-RELATED BUSINESSES		
<b>Deliverable ID:</b>	0002		

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# 1 Executive Summary

Cannabis use for recreational or medicinal use is now legal in 33 states. California has been a pioneer in this area, legalizing medical cannabis use in California since 1996, and commercial sales for recreational use as of January 1, 2018. The global consulting firm Inner City Fund (ICF) International estimates that cannabis-related tax revenue in California could generate between \$1.4 billion and \$3.0 billion per year and the industry could create over one-hundred thousand jobs, for an additional \$3.57 billion to \$4.52 billion in labor income.

However, the fact that cannabis remains a schedule one illegal drug at the federal level, in the same class as heroin and LSD, places a “Sword of Damocles” over the state in that the federal government could, if desired, prosecute anyone involved in the cannabis industry (directly or indirectly) under federal drug laws; and confiscate all funds and cannabis-related property. Accordingly, the banking industry is faced with at least four challenges when servicing the industry:

1. The bank may be at risk of criminal or civil liability under federal drug and banking laws.
2. The industry is new, rapidly evolving, and large. This creates business risks even without federal enforcement of the federal drug laws.
3. There is a significant administrative burden to properly file the required federal reports governing cannabis banking transactions, and the penalties for incorrect filings may be severe.
4. The “Know Your Customer” requirements are more significant than normal because similar transactions may be allowed (e.g., proceeds from sale of cannabis within the state) or not allowed (e.g., illegal proceeds from sale of cannabis to another state).

As a result, banks are only gradually entering this market. This limits the ability of cannabis businesses to operate in a normal business fashion using checks, credit cards, electronic transfers, and so on. There are three primary reasons that it is in the public interest to move the cannabis industry out of cash and into electronic banking:

1. Large amounts of cash make cannabis businesses, their employees, and their customers targets of violent crime.
2. State and local government agencies that collect tax and fee payments in cash from the cannabis industry incur added expenses, demands on staff time, and risks to employee safety.

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The \$3 billion in forecast annual cannabis tax revenue far exceeds the \$84.7 million and \$366 million collected in excise taxes on cigarettes and alcohol respectively.

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[Dispensaries] want to pay their taxes. They want to operate like a professional business, and they’re very frustrated because they don’t want to carry around suitcases of cash.

*California State Senator Scott Wiener*

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3. Normal access to banking services is an essential part of taking the cannabis industry out of the shadows and establishing it as a transparent, regulated, tax-paying part of the California economy. Banking relationships can help law enforcement officials and regulators distinguish legal cannabis businesses from illegal market operators.

As part of this feasibility study we conducted a comprehensive review of three alternative approaches to a public (state-backed) bank to support the cannabis industry:

1. A bank set up to exclusively provide banking services to the cannabis industry.
2. A bank that primarily provides banking services to the cannabis industry, but also offers banking services to other individuals and businesses.
3. A correspondent bank (analogous to a bankers' bank) that provides banking services to other commercial banks.

For each of the three options the state can expect to spend \$35 million on start-up costs incurred over a six-year start-up period. There is a high probability that federal regulators will not issue a master account to the bank, which is necessary for the bank to open and

conduct basic banking functions such as wiring funds. In that eventuality any start-up funds expended to that point and

during the subsequent wind-down would be wasted. If approved to open, the bank will then require just under \$1 billion in

capital, will lose money for 12 years before the bank is able to pay dividends sufficient to fully provide a return on the invested capital and begin repaying that capital, and the state of California will not begin receiving net dividends until 25 to 30 years after the bank opens, or sometime between 2050 and 2055. If federal regulations change during this time and cannabis banking becomes legal, the bank would most likely be closed at that point due to a decreased business demand for the bank and thereby incur a significant loss. If federal regulators begin to aggressively enforce federal laws the bank would be closed and deposits subject to confiscation.

Under this scenario the losses would be substantial and liabilities impossible to determine. Even if federal regulators maintain the current ambiguous situation, commercial banks will offer competing services to the industry by the time a public bank could open. Our conclusion is that no option for a public bank focused on the cannabis industry is feasible.

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A state-backed cannabis bank involves unacceptable degrees of legal, schedule, mission, and financial risks. Risk is internal and external, knowable and unknowable.

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Other solutions examined include a public credit union, the state purchase of an existing private bank, and various FinTech (financial technology) solutions that attempt to solve the problem using payment technology such as cryptocurrency. Each of these options is ultimately dependent on access to national banking and payment processing networks, so each encounters the same difficulties overcoming the federal laws that are holding back access to banking now. We conclude that none of these alternate solutions is feasible.

Our recommended approach is for the State of California to designate a lead agency with responsibility for improving access to banking by the cannabis industry, and then have that agency establish a project with primary responsibility in this area. We will refer to this as the

Cannabis Banking Project (CBP) for lack of a better term. This project will have an objective of improving access to banking services by the California legal cannabis industry. The project would primarily accomplish this through facilitation, communication, and coordination. The individuals involved must have adequate funding to support their mission, and most important, must have strong executive support at all levels of the executive branch. We do not have an opinion about which existing state department will take on this responsibility. The recommended mandate for this group would be as follows:

1. Support research and make recommendations with respect to short-term immediate solutions that might improve the ability of the state to manage cannabis-related cash payments. This group may or may not take on work related to implementation of those solutions, but if such work is undertaken it would use standard feasibility study and acquisition processes.
2. Encourage existing financial institutions to offer cannabis-related banking services. Such encouragement may include education, promotion, data sharing, legislation, and advocacy with federal and state regulators. While we believe that cannabis banking services will gradually become available even without state action, these state activities are likely to speed that process. In some areas (for example, cross department data aggregation and sharing), this organization may be involved as a facilitator, or may take the lead. If this organization takes a lead role, then such work would use standard feasibility study and acquisition processes.
3. Support the normalization of cannabis-related banking through some combination of lobbying for legal and/or regulatory reform at both the state and federal level; and potentially through judicial action.

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We interviewed dozens of cannabis business stakeholders to see how we could support the industries' banking needs. We found very limited interest in public banking from the industry.

*Ms. Molly Cohen, Senior Policy Analyst,  
San Francisco Office of the Treasurer & Tax  
Collector*

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## 2 Introduction

### 2.1 Problem Definition

Cannabis use for recreational or medicinal use is now legal in 33 states (Figure 1). California has been a pioneer in this area, legalizing medical cannabis use in California since 1996, and commercial sales for recreational use as of January 1, 2018. ICF International estimates that cannabis-related tax revenue in California could generate between \$1.4 billion and \$3.0 billion per year and the industry could create more than 100,000 jobs, for an additional \$3.57 billion to \$4.52 billion in labor income.

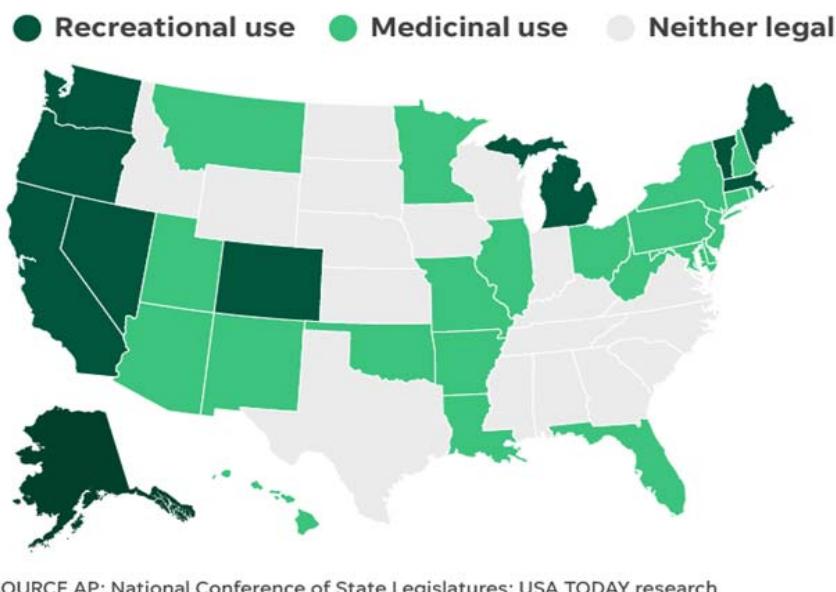


Figure 1: States with Legalized Cannabis

However, the fact that cannabis remains a Schedule One illegal drug at the federal level, in the same class as heroin and LSD, places a “Sword of Damocles” over the state in that the federal government could, if desired, prosecute anyone involved in the cannabis industry (directly or indirectly) under federal drug laws; and confiscate all funds and cannabis-related property.

Accordingly, the banking industry is faced with at least four challenges when servicing the industry:

The \$3 billion in forecast annual cannabis tax revenue far exceeds the \$84.7 million and \$366 million collected in excise taxes on cigarettes and alcohol respectively.

1. The bank may be at risk of criminal or civil liability under federal drug laws.
2. The industry is new, rapidly evolving, and large. This creates business risks even without federal enforcement of the federal drug laws.
3. There is a significant administrative burden to properly file the required federal reports governing cannabis banking transactions, and the penalties for incorrect filings may be severe.
4. The “Know Your Customer” requirements are more significant than normal because similar transactions may be allowed (e.g., proceeds from sale of cannabis within the state) or not allowed (e.g., illegal proceeds from sale of cannabis to another state).

As a result, banks are only gradually entering this market. This limits the ability of cannabis businesses to operate in a normal business fashion using checks, credit cards, electronic transfers, and so on. Shortly after California voters passed Proposition 64 legalizing cannabis, Treasurer John Chiang convened the Cannabis Banking Working Group (CBWG) consisting of 18 members representing state and local government, the cannabis industry, and the financial industry. The mission of the CBWG was to explore solutions to the banking problem created by legalized cannabis, a substance that is illegal under federal law. The CBWG correctly identified three reasons that it is in the public interest to move the cannabis industry out of cash and into electronic banking:

1. Large amounts of cash make cannabis businesses, their employees, and their customers targets of violent crime.
2. State and local government agencies that collect tax and fee payments in cash from the cannabis industry incur added expenses, demands on staff time, and risks to employee safety.
3. Normal access to banking services is an essential part of taking the cannabis industry out of the shadows and establishing it as a transparent, regulated, tax-paying part of the California economy. Banking relationships can help law enforcement officials and regulators distinguish legal cannabis businesses from illegal market operators.

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The number one issue is being able to follow the money. Lack of banking makes tracking and collecting taxes on cash operated businesses cause taxation issues. This includes collection, enforcement, and associated crime.

*Mr. Kevin Klowden  
Executive Director, Milken Institute*

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[Dispensaries] want to pay their taxes. They want to operate like a professional business, and they're very frustrated because they don't want to carry around suitcases of cash.

*California State Senator Scott Wiener*

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## **2.2 Background**

Following a year of public meetings held across the state, the CBWG issued a report with four recommendations that addressed different aspects of the banking problem, ranging from a method for safer collection of taxes to the ultimate solution – changes in federal law. Among the recommendations was a recommendation that the state conduct a feasibility study into the establishment of a state-backed financial institution (a public bank) that would provide banking services to cannabis businesses operating legally in California.

The recommended feasibility study was broken down into two parts. First, an analysis by the Attorney General's Office of the legal issues such an institution might face. Second, a study of the financial and organizational feasibility of such an institution. As stated in the CBWG report,

A feasibility study should be conducted to determine whether creation of a state-backed financial institution or a bankers' bank or corporate credit union is advisable. The study should consider costs, benefits, risks, and regulatory issues, including capitalization, deposit insurance, and access to interbank funds transfer systems. It should also examine various ownership structures, including appropriate mixes of public and private capital.

## **2.3 Issues**

This Feasibility Study Report documents work related to the financial and organizational feasibility portion of the study. The report covers the technical and

financial feasibility of establishing a public (state-backed) financial institution for the following four options: (1) Creation of an institution that would provide banking services for cannabis-related businesses operating lawfully in California; (2) Creation of an institution that would provide individual-based banking services emphasizing, but not limited exclusively to those involved with cannabis-related businesses; (3)

Creation of an institution offering banking services to other, smaller banks (i.e., a “correspondent bank”)

that would provide banking services primarily to cannabis-related businesses operating lawfully in California; and (4) Any other structure Level 4 believed may achieve the state objectives regarding providing access to banking services for the cannabis industry.

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The crime component is the most negative repercussion from the cannabis industry and any location in which the cannabis industry functions. The inability to deposit cannabis industry cash in banks has endangered all citizens involved in any cannabis business, or in association or in proximity to those businesses.

*Mr. John Bartholomew  
Treasurer and Tax Collector,  
Humboldt County*

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The technical and financial feasibility analysis for each of the options includes: (a) Capitalization requirements; (b) An assessment of the physical needs and information technology contemplated by each option; (c) Organizational and governance requirements and structures; (d) Potential

risks, including legal, regulatory, and financial, in coordination with the Attorney General's Office; (e) Compliance needs; (f) Basic pro formas of financial results, including income statements, balance sheets, and statements of cash flows for three years, five years, and ten years; and (g) The proposed method by which the institution would interact with national payment systems, the Federal Reserve system, and state or federal bank regulators. The technical and financial feasibility analysis also includes a discussion of assumptions made by Level 4 in conducting the analysis, including financial assumptions such as return on investment, return on average assets, and net interest margin; and other assumptions, including legal and regulatory..

Finally, the technical and financial feasibility analysis includes a market study to determine whether the demand-supply equation for a state-backed financial institution in each of the categories above would support the institution; and provides a bottom line conclusion regarding the value versus cost of each type of institution and if the cost exceeds the value, options for achieving at least equality in that calculation.

## 2.4 Intent of the Report

The primary questions answered by this report are:

- Can a state-backed financial institution focused on supporting the cannabis industry be opened without exposing the state and its employees to undue risk of federal prosecution or forfeiture of assets?
- Can such a bank be opened without exposing the state to financial loss or undue financial risk?
- Are alternatives available that would meet state objectives for normalizing access to banking by the cannabis industry with lower cost and/or risk compared to a state-backed financial institution alternative?

## 2.5 Constraints and Limitation

There is limited historic data on public banking available, and no data is available on public banks that are focused on supporting an illegal activity that is subject to federal forfeiture and prosecution. Accordingly, estimates related to schedule, cost, benefits, and risk will have a higher variability than would be expected for other de novo bank opportunities.

Time constraints limited the feasibility analysis period to three months through completion of the draft report. Due primarily to these time constraints, the following were outside of the scope of the study:

- A detailed study of the pros and cons of establishing a state-backed financial institution serving underrepresented communities unrelated to cannabis or general state borrowing needs.

- The provision of banking services outside of California, including any potential revenue from this source.
- A financial analysis of the impact of reclassification of cannabis by the federal government, and in particular the analysis of potential value to the state of privatization of the state interest in a financial institution.
- Public hearings, workshops, comment periods and other public review and comments beyond the interviews conducted as part of the study.

## **2.6 Evaluation of Public Banks in Other States**

Approximately 29 public banks were chartered and operated between 1917 and 2017. All public banks have ceased to exist either by regulatory order, financial failure, or the state or municipality closing the public bank, with the sole exceptions of the Bank of North Dakota and the recently approved American Samoa Bank.

The Bank of North Dakota (BND) operates in a manner similar to a correspondent bank. The BND was established in 1919, and today is a division of the North Dakota state government, operating with one office located in Bismarck, North Dakota (Bank of North Dakota, 2018). As in the Territorial Bank of American Samoa noted below, the geographical lack of banking services was a primary reason and driver for creation of the bank charter. It is able to operate with one location rather than multiple branches due to its role as a provider of participating loans in a manner similar to a correspondent bank. BND was originally established to help area farmers have access to banks when too few private/commercial banks were available in North Dakota. The BND also does infrastructure financing and prior to 2017, 37 percent of the BND portfolio was made up of student loans. The BND opened with an initial capitalization in 1919 of \$2 million in a public bond. This equates to \$325 million today after adjusting for inflation. When the initial capitalization proved inadequate several years later, the state withdrew its funds from community banks in western North Dakota leading to 18 bank failures in the following three weeks. The BND's strained financials continued for the first two decades of operation, and BND did not begin repaying the initial investment until 1945, when it provided an investment repayment of \$1,745. The BND has been sharing profits with the state each year since 1971. It is unknown if the initial expenses or capital have been offset by sharing funds to date. BND typically shares 50 percent of the bank's gross profits in transfer to the state general fund.

The territory of American began the process of establishing a public bank to replace the Bank of Hawaii after that bank's decision to exit banking services in the territory. The Bank of Hawaii's exit left the territory virtually without banking. The process of establishing the public bank started in 2015, with the Federal Reserve agreeing to provide a master account to the bank in April 2018. Various legislative changes delayed the process where initial legislation had to be redrafted and resubmitted for approval (Blackwell, 2018). The Territorial Bank of American Samoa is a very small bank based on asset size and capital, functioning with a single branch.

The Puerto Rico Development Bank was established in 1942 and failed in 2017. The bank was principally started due to geographic limitations for banking in Puerto Rico, and the bank

focused principally on infrastructure investment with some segments of the balance sheet aligned with participation loans (Christie, 2018).

When the Farmers' Bank of Delaware was founded in the 1800s, the state owned 49 percent. In 1976 the state increased ownership to 80 percent (Swayze & Schiltz, 2005). The bank struggled financially and, on the verge of financial failure, Farmers' Bank of Delaware was purchased by Girard Bank, which was later acquired by Mellon Bank, and was ultimately sold in 2001 to Citizens Financial Group. In 1888 the state government held stock worth \$360,950, a majority of the outstanding shares and received annual dividends of \$21,669 as state earnings (Scharf, 1888).

We were unable to find financial or lending data for the other failed attempts at public owned banks.

### **3 Alternatives Analyzed**

We begin by presenting our analysis of the three public banking alternatives that were the primary focus of our analysis. We reject all three alternatives as not feasible. We then review three alternate solutions that were considered but rejected. Finally, we describe our recommended alternative, which involves state support for the gradual process of normalization of banking by existing banks and credit unions to the cannabis industry.

#### **3.1 Public banking Alternatives**

We conducted a comprehensive review of three alternative approaches to a public bank to support the cannabis industry:

1. A bank set up to exclusively provide banking services to the cannabis industry.
2. A bank that primarily provides banking services to the cannabis industry, but also offers banking services to other individuals and businesses.
3. A correspondent bank (analogous to a bankers' bank) that provides banking services to other commercial banks.

We interpreted our mandate to both make recommendations with respect to the feasibility of each alternative, and to provide an analysis of what would be required for the state to start such a bank. The detailed analysis for these alternatives may be found in Appendix D.

As shown in Figure 2, the process of establishing a public bank will likely require six years before the bank can begin to offer services. Our estimate is that the possible range of time is four to nine years. In the figure, phase A consists of legal, regulatory, and legislative work necessary to allow the banking application to move forward. Phase B consists of obtaining the necessary state and federal approvals, raising the necessary capital, and preparing the bank itself for operation. The state can expect to spend \$35 million on start-up costs during this organizational period. In phase C the bank is opened, initially in Sacramento and then incrementally deploying seven branches over the course of the next five years as the operations are approved by federal regulators.

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The process of establishing a public bank will likely require six years and require over \$35 million before the bank can begin to offer services.

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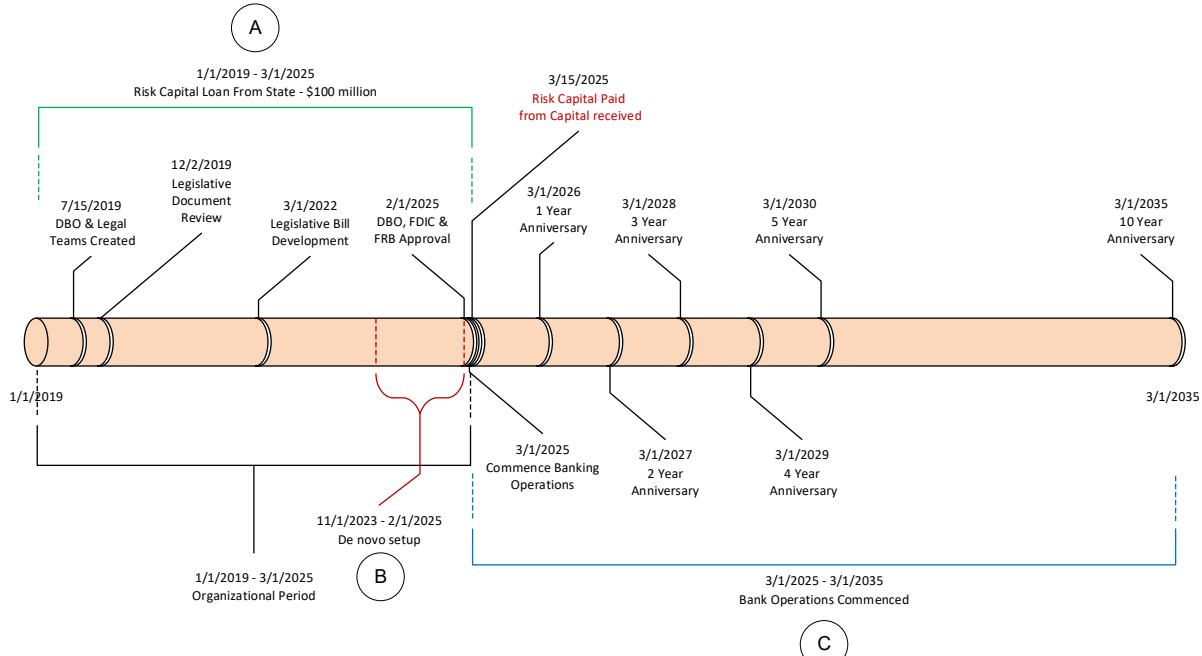


Figure 2: Anticipated Timeline to Establish a Public Bank

A bank's equity capital ratio (ECR) is the amount of capital required relative to equity (primarily deposits), so an ECR of 20% means that every \$100 in assets would require \$20 of paid-in capital, with the remaining \$80 provided by a stable deposit base. The fact that the bank customer base would be concentrated in a single, nascent industry undergoing rapid growth and change, combined with uncertainty regarding federal enforcement of cannabis-related laws, would likely result in the bank having a required ECR of 40 percent on cannabis deposits and 20 percent on non-cannabis deposits. By way of comparison, the ECR for the Bank of North Dakota is approximately 21 percent. Using forecast deposits for the bank, this results in a minimum capitalization requirement (equity investment) of close to \$1 billion.

The public bank would be legally vulnerable in several ways. The Controlled Substances Act in alignment with the Supremacy Clause<sup>1</sup> of the US Constitution makes it illegal for banks to aid and abet a cannabis business (21 USC 841, 2012). Pursuant to federal law actions surrounding providing aid, abetting, counselling, inducing, causing, or soliciting are punishable as the principal in the act. In summary, all employees, managers, directors, officers, and agents who aid in the sale, manufacture, distribution, or dispensing of cannabis are equally liable to the principal in the business and can be prosecuted as such under the federal law (18 USC 2 - Principals, 2012). California and its employees are

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California and its employees are not immune from prosecution under federal criminal statutes.

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Several statutes authorize the federal government to seize and forfeit property associated with federal criminal acts.

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<sup>1</sup> US Constitution art. VI, 2.

not immune from prosecution under federal criminal statutes. Several statutes authorize the federal government to seize and forfeit property associated with federal criminal acts. Criminal forfeiture statutes authorize the government to forfeit the proceeds of crime and other property owned by the defendant in a criminal action. Civil forfeiture is in the nature of an *in rem* proceeding: the federal government identifies property as proceeds of, or otherwise associated with, federal criminal acts and subject to confiscation. There are provisions that cover federal crimes generally, and specific forfeiture provisions associated with the Controlled Substances Act and anti-money laundering laws (18 USC 981 - Civil forfeiture, 2017) (18 USC 982 - Criminal forfeiture, 2017) (21 USC 853 - Criminal forfeitures, 2017) (21 USC 881 - Forfeitures, 2017). The Racketeer Influenced & Corrupt Organizations Act (RICO) prohibits the operation of “criminal enterprises” (18 USC - CRIMES AND CRIMINAL PROCEDURE, 2017). RICO establishes criminal and civil penalties, all of which require the government to establish that there has been some underlying criminal conduct. Unlike the Controlled Substances Act or anti-money laundering statutes, however, RICO authorizes a private cause of action: any individual or non-government entity who is harmed by conduct that could be prosecuted under RICO can sue for treble damages.

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Any individual or non-government entity who is harmed by conduct that could be prosecuted under RICO can sue for treble damages.

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The primary objective of federal banking regulators is to protect the banking system itself. They are particularly concerned about threats of contagion, in which the failure of one bank has a cascading effect on other banks, and ultimately destroys confidence in the banking system itself. While federal banking regulators are concerned about the illegality of cannabis banking, in the case of a public bank focused on cannabis they would be even more concerned about concentration risk. Concentration risk is measured using the Herfindahl index<sup>2</sup>, where an index above 0.24 is considered unacceptably concentrated in banking. Higher concentrations in a single industry put the bank at risk of failure due to industry specific downturns. The proposed public bank under all three alternatives has a Herfindahl index of 0.80 or higher, well above acceptable federal standards. This would then represent a significant threat to the banking system itself. Primarily as a result of this concentration risk, the proposed bank would likely:

- Not be eligible for depository insurance.
- Not be issued a master account, and therefore not be able to process interbank transactions. This would prevent the bank from performing such routine transactions as

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Servicing cannabis as a primary market segment represents a concentration risk of 0.80, well above acceptable federal standards for concentration risk.

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<sup>2</sup> In banking, the Herfindahl index is defined as the sum of the squares of the industry concentrations of the firms within the bank’s portfolio where the market shares are expressed as fractions. The result can range from 0 to 1.0, moving from a huge number of very diverse customers to a single monopolistic customer base. The actual formula is included in the glossary.

cashing checks drawn on other banks, issuing checks, or making employee payroll direct deposits in other banks.

In addition, because all or most of the funds on deposit would be derived from an illegal source, the bank would:

- Most likely not have access to traditional interbank investment instruments and treasury bills and notes because co-mingling of funds is prohibited.
- Likely be prohibited from interbank transfers because the receiving banks would block the funds transfer due to the illegal nature of the funds.

To be clear, without a master account issued by the Federal Reserve the bank cannot function. It would have no ability to accept and clear customer checks drawn on other banks; no ability to issue checks or otherwise make payments other than in cash; and no ability to transfer funds to other banks. In short, it would be in the same predicament currently faced by the cannabis businesses that it is supposed to help. The public bank would be a network of cash vaults that would provide customers with the ability to transact business only with other customers of the bank, with no ability to transact business outside of the public bank network. The public bank would be holding large sums of cash that cannot be invested or loaned without great risk, all subject to seizure by the federal government.

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Without a master account issued by the Federal Reserve the bank cannot function.

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Note that many of these problems are mitigated when an existing bank takes on cannabis banking as a small percentage of its business. The federal regulators are not primarily concerned (at least right now) with cannabis banking per se. They are concerned if cannabis banking represents a significant percentage of the bank's activities, and therefore puts the bank itself at risk of failure.

### **3.1.1 Cannabis Only Alternative**

The cannabis-only option has pre-opening costs of \$35 million over a six-year period. Most of the costs are full-time equivalents (FTEs) required to support the necessary legislative and regulatory changes; shepherd the various applications through the approval process; implement the needed organizational structure with supporting policies and procedures; raise capital; and procure the necessary facilities, equipment, and other items needed to actually open the doors.

Initially, the bank will have a headquarters in Sacramento and incrementally open seven branches around the state over the next five years. The bank will need to raise approximately \$1 billion in capital, and we anticipate that a significant risk premium will be built into the cost of those funds. Federal regulators will require that the bank be structured so that the bank is fully owned by a bank holding company, established as a "C" corporation (the "holding company"). The holding company will receive an initial capital infusion from state general funds, and provide an initial stock offering to the state, so the state will own 100 percent of the outstanding stock. The holding company will need to capitalize the bank as part of the pre-opening process.

If the state wishes to use debt as part of the bank capitalization, the holding company can raise money through a general obligation bond issue approved by the Legislature and approved by California's voters. However, the investment from the holding company to the Public Cannabis Bank (PCB) will be required to be an at-risk equity investment. The holding company may raise money through bonds, but the bank cannot do so directly. We believe that the federal regulators will not approve an arrangement where the public bank operates directly as a state agency, because they will require a separation of authority to mitigate the risk of political influence on the bank. The holding company structure may also offer some insulation of the state general funds and general operations from legal liabilities associated with the illegal proceeds and activities of the bank.

Even under the positive risk scenarios, the bank holding company will lose money for twelve years before the bank is able to pay dividends sufficient to fully cover the interest payments on the investment capital and allow the bank dividends to begin repaying that capital. The state of California will not begin receiving net dividends (i.e., payments beyond repayment of funds provided to the holding company) until 25 to 30 years after the bank opens, or sometime between 2050 and 2055. In the worst-case scenarios (e.g., asset forfeiture and resultant legal battles), the losses are incalculable but staggering.

### **3.1.2 Cannabis Plus Other Banking Alternative**

The cannabis plus option assumes that the bank primarily banks cannabis-related customers, but also accepts other customers that are unrelated to the cannabis industry. While this option decreases concentration in the cannabis industry, the cannabis concentration numbers are so large that the improvement is not a significant factor from a regulatory perspective. However, this expanded mission does increase the complexity of operations in that the cannabis funds and procedures must be segregated from the non-cannabis funds. In addition, the capital requirements are higher because of the incrementally larger deposits. The bank holding company will lose money for ten years before the bank dividends cover the cost of capital, and the state of California will not begin receiving net dividends until 18 to 23 years after the bank opens, or sometime between 2043 and 2048.

### **3.1.3 Correspondent Bank**

A correspondent bank (sometimes called a bankers' bank) provides banking services to other banks. It can accept and hold deposits from those banks, facilitate wire transfers, conduct business transactions, and gather or prepare necessary documentation. Correspondent banks are often used by domestic banks to facilitate transactions to/from international markets. The correspondent bank could also adopt standard practices and procedures for use by the member banks, which would provide additional comfort to regulators. In this case, the public correspondent bank would not provide standard retail and commercial banking products to consumers or businesses, but rather would facilitate the handling of cannabis-related deposits by other banks. The correspondent bank would not use the federal payment system to transfer funds interbank in the network but would function as the clearing bank for those transfers between banks in the network. Because a correspondent bank does not provide retail banking services, there would be no requirement for statewide branches. The correspondent bank could also adopt

standard practices and procedures for use by the member banks, which would provide additional comfort to regulators.

Unlike the other two public banking options considered, the correspondent bank option requires that existing banks agree to enter the cannabis banking market. The correspondent bank would still face the same regulatory hurdles described earlier and in Appendix D, in that it must still obtain regulatory approval and be assigned a master account by the Federal Reserve. We therefore see this option as representing even higher risk and uncertainty. However, if successful then the correspondent bank option will have fewer operational costs and therefore begin paying net dividends sooner. The bank holding company (the investors in the bank, whether private or public) will lose money for eight years before the bank is able to begin repaying capital, and the state of California will not begin receiving net dividends until 16 to 20 years after the bank opens, or sometime between 2041 and 2045.

### **3.1.4 Conclusions for Public Bank Alternatives**

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The alternative of creating a public cannabis bank dedicated to serving the cannabis industry should be rejected based on unacceptable risk levels, non-profitable financial forecasts, and an overall inability to achieve the desired objectives.

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*All state-backed banking options involve unacceptable degrees of legal, schedule, mission, and financial risks. Risk is internal and external, knowable and unknowable.*

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The proposed bank would be operating in violation of current federal law. This violation represents a risk to the bank assets, to any assets used as collateral for loans, and to the bank officers and employees. For example, 18 USC 2 (2015) states that, “whoever aids, abets, counsels, commands, or induces a federal crime, or causes a federal criminal act to be done, is punishable as a principal.” This would place the state in a situation where state employees were potentially facing federal convictions, jail time, and civil penalties based on the conduct of their state required job functions, and where elected officials that may hold positions in the organization (like the structure of the Bank of North Dakota) would similarly be potentially liable. This situation represents an unacceptable degree of legal risk.

The bank cannot be formed and operate under current California statutes, thus requiring multiple legislative changes to allow bank formation. By way of example, our research indicates that the bank would not be able to obtain deposit insurance either through a government agency nor from the private sector, so legislation would be needed to allow it to operate without insured deposits. State self-insured deposits would represent a significant potential liability to the state. Current financial laws do not provide for the necessary bank ownership structure, so the California Financial Code sections 1004-1005 would need to be modified. A new government entity would most likely need to be formed, and appropriations for that entity approved during the bank start-up period. The Federal Reserve will not allow the Department of Business Oversight to oversee the bank because of a conflict of interest, so a suitable arrangement for oversight by the Federal

Reserve would be required. An exemption to the California Public Records Act must be put in place to protect customer privacy. In addition, after the necessary changes are implemented legislatively in California, the Federal Reserve must approve the bank, something that may take three years before a decision is rendered. All of these result in both a long expected schedule (we are forecasting six years) and a high degree of schedule uncertainty. In addition, we anticipate that during the bank formation additional issues will arise (e.g., additional legislative changes) that will have a potential schedule impact. Overall, the formation of the bank has an unacceptably large degree of schedule risk.

The mission of the bank is to provide access to banking services to the cannabis industry because existing banks and credit unions do not adequately serve the industry. The following unacceptably high mission related risks exist:

- Federal regulations may be modified to legalize the banking of cannabis-related funds, thus changing the competitive landscape to the disadvantage of the public bank. We view this as a very high probability, high impact risk.
- Looking at the history of banking in other states where cannabis is legal, there is a high probability that commercial banks and credit unions will increasingly offer services to the cannabis industry, thus competing directly with the public bank. We view this as a very high probability, moderate impact risk.
- Federal regulators may crack down on states that have legalized cannabis use, confiscating assets and arresting individuals. We view this as a very low probability, very high impact risk.

The bank will have a prolonged start-up period (we're estimating six years) during which expenses will accrue. A normal de novo bank in the private sector may spend \$10 million in preparing to open. The proposed bank is expected to require \$35 million in startup costs and the number could be higher. Because there is no historic

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data from similar public bank start-ups to examine, and there is a high degree of schedule uncertainty associated with the start-up period, there is a large potential cost variance on the start-up costs. Similarly, the initial capitalization requirement of approximately \$1 billion has a high risk for the investors, whether those investors be the citizens of California through general fund contributions or obligations to repay borrowed bond money, private investors through an equity interest in the holding company, or any combination.

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There is a significant financial risk associated with the willingness of investors to purchase, or the taxpayers to support use of general funds, for the approximately \$1 billion dollars required for capitalization.

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The identified risks include risks internal to the project/bank; risks external to the project but under the control of the state of California; and risks external to the state, including federal law enforcement, federal regulators, existing banks and credit unions, and cannabis industry participants.

*Even in the best-case scenario across all dimensions of risk, the return on the financial investment would be measured in decades not years. In the worst-case scenarios the losses would be staggering.*

Because of the long start-up period that is anticipated and the complexity of work during that period, start-up costs are estimated to be at least \$35 million. The bank will need to raise approximately \$1 billion in capital, and investors (whether taxpayers or private investors) will expect a suitable risk premium. Primarily as a result of these two factors, even under the positive risk scenarios, the bank will continue to lose money for decades. In the worst-case scenarios (e.g., asset forfeiture and resultant legal battles), the losses are incalculable but staggering.

***Under all future scenarios, a public cannabis bank dedicated to serving the cannabis industry fails to achieve the desired objectives.***

The objective of a public cannabis bank is to provide banking services to the cannabis industry while that industry is underserved by private banks and credit unions. While the future federal actions related to cannabis banking cannot be predicted, they will certainly improve, stay the same, or get worse. If the federal government explicitly allows cannabis banking within the next several years (the situation improves), then the primary purpose of the public bank will go away prior to the bank getting fully started. If the federal government aggressively cracks down on the cannabis industry (the situation worsens), then the public bank will never open its doors. If the federal government remains in the current ambiguous situation of maintaining the illegality but not enforcing the law (the situation remains the same), then by the time the public cannabis bank opens its doors we anticipate that private banks and/or credit unions will be offering competing services within California.

## **3.2 Other Alternatives Considered but Rejected**

### **3.2.1 Public Credit Union**

A public credit union does offer several incremental advantages over a public bank. The credit union could utilize the existing Credit Union CoOp network, where depositors could make deposits at any participating credit union, and thereby alleviate the need for statewide branches. On the other hand, credit unions have very specific requirements in terms of ownership and capitalization that would complicate the process of establishing a public credit union. Most importantly, however, the issues raised above with respect to a public bank also apply to a public credit union.

*Even though this option may offer incremental advantages, a public credit union is still rejected as not feasible for the same reasons that a public bank is rejected.*

### **3.2.2 Public FinTech Solution**

FinTech solutions use technology to facilitate end-to-end payments via the internet. They include:

- A closed-loop payment network.
- A cryptocurrency solution.
- Money service business (MSB)-type solutions.

This approach offers an initial impression of solving the problem, but upon further analysis it becomes clear that the fundamental problem is unchanged and unsolved. While movement of transactions within the FinTech network would be facilitated, ultimately the money needs to cross the network boundaries into the traditional banks and payment processing systems. At that point all of the problems the industry is currently experiencing will limit the usefulness of the solution. To the extent that FinTech has a role, that role will come after access to banking is solved.

*A public FinTech solution to the problem is rejected because it fails to solve the underlying, fundamental problem of access to banking.*

### **3.2.3 State Purchase of an Existing Private Bank**

Under this alternative the state would purchase an existing private bank, thereby converting the bank to a public bank. The primary advantages would be an existing network of branch locations and existing deposits to reduce concentration in the cannabis industry. Because of the unprecedented shift in both ownership and mission, the regulatory process would likely be at least as long, and possibly longer than, the de novo option of starting a new bank. Capitalization requirements would remain high, and the potential loss of access to banking networks and insurance could put the bank's existing customer base at risk. The existing structure, policies, procedures, and so on would need to be significantly revised, and the corresponding organizational change management (OCM) issues would be significant. Ultimately, the downsides associated with this option outweigh the upsides relative to a true de novo bank.

*The state purchase of an existing private bank is rejected as not feasible due to even higher risks than the alternate public cannabis banking solutions.*

## **3.3 Recommended Alternative**

Our recommended approach is for the State of California to designate a lead agency with responsibility for improving access to banking by the cannabis industry, and then have that agency establish a project with primary responsibility in this area. We will refer to this as the

In the end, no solution that exists today will protect the banks or their associates from actions of the Federal Government if the decision is to act against the bank or their agent(s). Literally an Act of Congress is the only true alternative.

*Mr. Don Childears  
President & CEO,  
Colorado Bankers Association*

Cannabis Banking Project (CBP) for lack of a better term. This project will have an objective of improving access to banking services by the California legal cannabis industry. The project would primarily accomplish this through facilitation, communication, and coordination. The individuals involved must have adequate funding to support their mission, and most important, must have strong executive support at all levels of the executive branch. We do not have an opinion about which existing state department will take on this responsibility. The three recommended mandates for this group would be as follows:

1. Support research and make recommendations with respect to short-term immediate solutions that might improve the ability of the state to manage cannabis-related cash payments. This group may or may not take on work related to implementation of those solutions, but if such work is undertaken it would use standard feasibility study and acquisition processes.
2. Encourage existing financial institutions to offer cannabis-related banking services. Such encouragement may include education, promotion, data sharing, legislation, and advocacy with federal and state regulators. While we believe that these services will gradually become available even without state action, these state activities are likely to speed that process. In some areas (for example, cross department data aggregation and sharing), this organization may be involved as a facilitator, or may take the lead. If this organization takes a lead role, then such work would use standard feasibility study and acquisition processes.
3. Support the normalization of cannabis-related banking through some combination of lobbying for legal and/or regulatory reform at both the state and federal level; and potentially through judicial action.

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The best option would be for the state to step in and influence banks that exist today.

*Mr. Henry Levy  
Treasurer and Tax Collector,  
Alameda County*

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As part of their work, the CBP should be involved in supporting the implementation of recommendations coming out of the Cannabis Working Group, including implementation of an on-line data aggregation portal and participation in a multistate consortium to educate, share data, and advocate for federal policy changes.

### 3.3.1 Timeline

As shown in Figure 3, the number of financial institutions knowingly banking cannabis is increasing rapidly even without significant state intervention. The graph shows the number of financial institutions filing marijuana related SARs with the Federal Reserve, so it excludes institutions that are unknowingly serving MRBs. We would anticipate that normalizing financial transactions for the cannabis industry in California is likely to require a minimum of five years, with incremental progress during this timeframe. We would suggest that the CBP remain in existence until a minimum of 15 percent of financial institutions in California offer banking services to the cannabis industry. At that point a review should be conducted to prepare a wind-down plan for the project office.

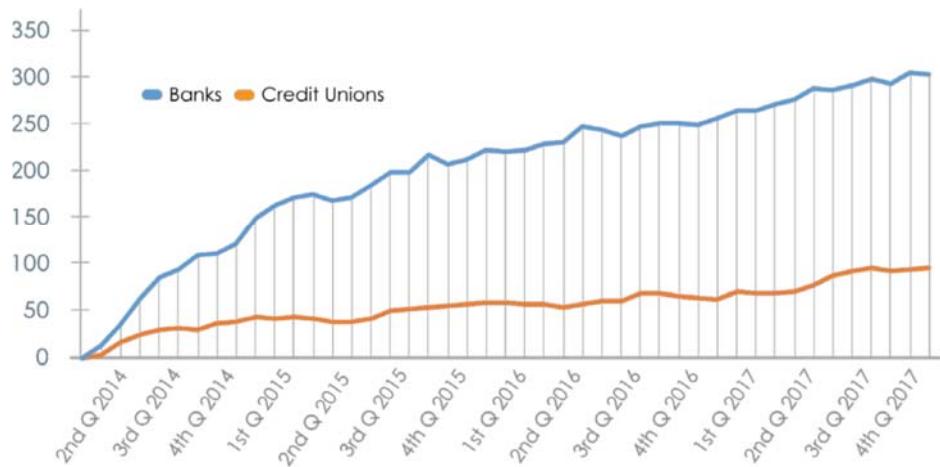


Figure 3: Depository Institutions (Nationwide) Providing Banking Services to Cannabis Businesses<sup>3</sup>

### 3.3.2 Physical and Technological Needs

The CBP will provide coordination between banks, state agencies, and federal agencies regarding data necessary to efficiently and effectively support banking for the cannabis industry. To the extent that existing efforts by others fulfill these needs the CBP will promote and support those efforts. To the extent that unmet needs are identified, the CBP will either encourage other agencies to provide the necessary support or undertake those projects independently. This work may include support for new data, but the majority of the effort is likely to involve data aggregation and supporting interfaces. As part of this review, the CBP may identify and publish best practices for financial institutions, state agencies, or others.

Beyond any projects undertaken, which will be separately budgeted, the CBP itself will require only office space and standard office equipment.

### 3.3.3 Organizational and Governance Requirements

The following state departments or divisions currently have some role related to this area:

- Bureau of Cannabis Control.
- Cannabis Control Appeals Panel.
- Department of Business Oversight.
- Department of Food and Agriculture.
- Department of Insurance.

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Initially banking was not available, we were receiving 70 percent to 80 percent of tax in cash. Today 96 percent of the “licensed entities” are providing tax payments electronically through the banks.

*Mr. Rick Garza  
Agency Director, Washington State Liquor  
and Cannabis Board*

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<sup>3</sup> Figures 3 is from *FinCEN Marijuana Banking Update* available at [https://www.fincen.gov/sites/default/files/shared/273281%20EA%204th%20Q%20MJ%20Stats\\_Public\\_Web.pdf](https://www.fincen.gov/sites/default/files/shared/273281%20EA%204th%20Q%20MJ%20Stats_Public_Web.pdf).

- Department of Justice.
  - Department of Public Health.
  - Department of Tax and Fee Administration.
  - Franchise Tax Board.
  - State Treasurer's Office.

The CBP's role will include coordination between these agencies for areas that will have an impact (positive or negative) on access to banking services by the cannabis industry. Because this organization's mandate will go across such a wide range of existing organizations, we believe that it is critical that the CBP have the full support of the governor and of senior executives within each of these organizations. The CBP will also need to establish and maintain positive relationships with California legislators to facilitate any changes that will require legislation. The CBP should also work with the Department of Justice and others to determine if there is a viable strategy for using the federal court system to help resolve the issue of access to banking services by the cannabis industry.

### 3.3.4 Investment Required

There is a high degree of uncertainty regarding the specific actions that will be undertaken directly by the CBP versus actions where the CBP will be performing a facilitation only role. As a result, the staffing and budget requirements of the CBP cannot be accurately determined until the organization has clarified the specific mission and objectives. However, we offer as a starting point the following five-year staffing profile (Table 1):

Table 1: CBP Staffing Profile

<b>Staffing</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>State FTE</b>	3	4	5	5	5
<b>Contractor</b>	-	1	2	-	-
<b>Legal</b>	1	1	1	1	1
<b>Total</b>	4	6	8	6	6

And the following five-year budget forecast (Table 2):

*Table 2: Five-year Budget Forecast*

These numbers do not include any specific projects that the CBP may take on as part of their mandate (for example, data consolidation and interfaces; improved cash collection solutions). These projects would be covered by separate feasibility studies and receive funding through normal state mechanisms for project work.

## 4 Conclusions and Recommendations

- No state-backed financial institution designed to support the cannabis industry is feasible. All alternatives fail on both risk and financial grounds.
- FinTech alternatives such as cryptocurrency and closed-loop payment solutions do not solve the problem because of the requirement to move funds into and out of the network from traditional financial institutions.
- The only effective long-term solution involves legislative and regulatory changes at the federal level to allow the legal banking of cannabis-related funds.
- Even with no state intervention, private financial institutions are gradually entering the cannabis market. This trend is expected to continue.
- A coordinated effort by the State of California may speed this process with minimal investment and risk. We recommend that the state designate a lead agency with responsibility for improving access to banking by the cannabis industry, and then have that agency establish a project with primary responsibility for improving access to banking by the cannabis industry, primarily through facilitation, communication, and coordination.

## A. Acronyms and Glossary

### A.1 Acronyms

ABA: American Bankers Association.  
ACH: Automated Clearing House.  
ALCO: Asset/Liability Management Committee.  
AMGI: Area Median Gross Income.  
AML: Anti-Money Laundering.  
ATM: Automatic Teller Machine.  
BND: Bank of North Dakota.  
BSA: Bank Secrecy Act.  
CBP: Cannabis Banking Project.  
CBWG: Cannabis Banking Working Group.  
CCO: Chief Compliance Officer.  
CDD: Customer Due Diligence.  
CEO: Chief Executive Officer.  
CFO: Chief Financial Officer.  
CIP: Customer Identification Program.  
CPA: Certified Public Accountant.  
CRA: Community Reinvestment Act.  
CRM: Customer Relationship Management.  
CSA: Credit Support Annex.  
DBO: Department of Business Oversight.  
DOJ: Department of Justice.  
FDIC: Federal Deposit Insurance Corporation.  
FinCEN: Financial Crimes Enforcement Network.  
FTE: Full-Time Equivalent.  
ICI: Inner City International.  
IDI: Insured Deposit Institution.  
IT: Information Technology.  
KYC: Know Your Customer.  
MRB: Marijuana-Related Business.  
NIM: Net Interest Margin.  
OCC: Office of the Comptroller of the Currency.  
OFAC: Office of Foreign Assets Control.  
QCT: Qualified Census Tract.  
PCB: Public Cannabis Bank  
RICO: Racketeer Influenced & Corrupt Organizations Act.  
SAR: Suspicious Activity Report.  
SOX: Sarbanes-Oxley Act.

### A.2 Glossary

#### **Automated clearinghouse (ACH)**

The ACH network is a nationwide electronic funds transfer system for participating depository financial institutions. The American Clearing House Association, Electronic Payments Network,

Federal Reserve and Visa act as ACH Operators, central clearing facilities through which financial institutions transmit or receive ACH debits and credits. In 2000 there were 6.9 billion ACH payments made worth more than \$20 trillion.

### **Audit Committee**

A selected number of members of a company's board of directors and executive staff whose responsibilities include helping auditors remain independent of management. Most *audit committees* are made up of three to five or sometimes as many as seven directors who are not a part of company management.

### **Bank Holding Company**

A bank holding company is a corporation that holds at least one quarter of the voting stock of a bank. These entities are under the supervision of the United States Federal Reserve. One of the requirements for a bank holding company is the investment of funds from third parties into the capital of the bank. In the structure of a public bank where funds are provided as investment capital to the public bank from an outside source (e.g. a public bond), such would necessitate a holding company regulated pursuant to federal law.

### **Bank Secrecy Act of 1970 (BSA)**

More formally known as The Financial Recordkeeping and Reporting of Currency and Foreign Transactions Act of 1970. Designed to aid the federal government in detecting illegal activity through tracking certain monetary transactions. Requires financial institutions, broker-dealers, casinos and money services businesses to report cash transactions over \$10,000 in aggregate per day and file reports of suspicious transactions. Also establishes certain exemptions to the currency transaction reporting requirements. The corresponding BSA regulation is found at 31 C.F.R. Part 103. See also USA PATRIOT Act which substantially amended this statute in 2001.

### **Banker's Bank**

A bank that generally is owned by a consortium of commercial banks and provides loans and other bank services to a contracted group of commercial banks in defined communities or regions. Because they provide capital to (and therefore spread risk over) an expanded number of local banks, bankers' banks enable other banks to more effectively provide banking services for a scalable expense than otherwise would be possible. Banker's banks originated in Minnesota in 1975.

### **Bond**

A debt security. Sometimes used only in reference to long-term debt securities. Sometimes called a fixed-income security even though many bonds have floating interest rates.

### **Cannabis**

A plant belonging to the family Cannabaceae of the nettle order (Urticales). By some classifications, the genus *Cannabis* comprises a single species, hemp (*Cannabis sativa*), a stout, aromatic, erect annual herb that originated in Central Asia and is now cultivated worldwide, including in Europe, southern Asia, the Middle East, India, Africa, and the Americas. A tall canelike variety is raised for the production of hemp fibre, while the female plant of a short

branchier variety is prized as the more abundant source of the psychoactive substance tetrahydrocannabinol (THC), the active ingredient of marijuana.

### **Capital**

Bank capital is the difference between a bank's assets and liabilities and it represents the net worth of the bank or its value to investors. The asset portion of a bank's balance sheet includes cash, government securities, and interest earning loans. The liabilities section of a bank's balance sheet includes loan loss reserve and any debt it owes. A bank's capital can be thought of as the margin to which creditors are covered if the bank would liquidate its assets. The main banking regulatory framework consists of international standards enacted by the Basel Committee on Banking Supervision through the international accords. These standards prove a definition of the regulatory bank capital that market and banking regulators closely monitor.

### **Capital expenditures**

Expenditures resulting in the acquisition of or addition to fixed assets. Expenditures made for the purpose of acquiring capital assets.

### **Cash and due from banks**

A banking expression used to describe the total sum of assets represented by cash, funds on deposit with the Federal Reserve bank, funds on deposit with correspondent and other banks, and items in transit to those banks

### **CDD**

Customer Due Diligence policies, procedures and processes for the purpose of determining the customer's identification and other personal information, the source of funds expected to be deposited and the use of loan proceeds disbursed.

### **Customer Identification Program - (CIP)**

A United States requirement, where financial institutions need to verify the identity of individuals wishing to conduct financial transactions with the bank and is a provision of the USA Patriot Act.

### **Clearing account**

An account used to accumulate total charges or credits so that they can be distributed later among the accounts to which they are allocated, or so that the net differences can be transferred to the proper account.

### **Collected balances**

Collected balances are bank ledger balances minus checks in the process of collection. Also called available balances, good funds, or usable funds.

### **Community Reinvestment Act (CRA)**

A federal statute enacted to require banks and savings and loan associations to meet the credit needs of their communities, including low- and moderate-income neighborhoods. California law requires banks meet satisfactory standards to hold government funds.

### **Compliance risk**

One of nine risks defined by the FFIEC. The risk to earnings or capital arising from violations of or nonconformance with laws, rules, regulations, prescribed practices, or ethical standards. This risk is incorporated in the Federal Reserve definition of legal risk.

### **Core deposits or core funding**

Deposits that form a stable source of funds for a lending bank. Core deposits are made in a bank's natural demographic market and offer many advantages to financial institutions, such as predictable costs, and a measurement of how loyal their customers are.

### **Correspondent bank**

A Correspondent bank is a financial institution:

- (1) that has authorized a Reserve Bank to settle Debit and Credit Transaction Activity to its Master Account for a Respondent or for any financial institution for which the Respondent acts as Correspondent; or
- (2) that maintains required reserve balances for one or more financial institutions in its Master Account. It is a bank that serves as a depository and provides banking services for another bank pursuant to a formal agreement between the Correspondent and market commercial bank.

### **Credit risk**

The potential that a borrower or counterparty will fail to perform on an obligation. Usually, but not always, the obligation in question is a requirement to make interest or principal payments. Sometimes called default risk, the failure to make required payments reduces the value of equity securities, debt securities, and loans.

### **Currency transaction report (CTR)**

Each financial institution (other than casinos, which instead must file a Currency Transaction Report-Casino form) must file a CTR for each deposit, withdrawal, exchange of currency or other payment or transfer, by, through or to the financial institution which involves a transaction in currency of more than \$10,000 unless a CTR Exemption form has been previously filed. See Bank Secrecy Act.

### **Current ratio**

The ratio obtained when total current assets are divided by total current liabilities. A commonly used but not always good proxy for a bank's liquidity.

### **Customer identification program (CIP)**

A requirement under the Bank Secrecy Act that all financial institutions implement a written, risk-based customer identification program, maintain information used to verify identities and compare the names of new customers against government lists of known or suspected terrorists or terrorist organizations. The proposed rule would apply to all customers seeking to open new accounts.

**De Novo Bank**

A de novo bank is a newly chartered bank that is not acquired through purchase. It could also mean a newly opened bank branch. A de novo bank could be a commercial bank, state bank, national bank, savings bank or thrift bank.

**Depository bank**

A bank used as the point of deposit for cash receipts.

**EDD**

Enhanced Due Diligence is for higher-risk customers. Additional activities are performed at account opening and during the time the customer keeps funds on deposit or remains a borrower. This includes activities such as determining the validity of the customer's customer, monitoring customer activity, monthly or quarterly interim financial statement analysis and observing the customer's business activities.

**Electronic funds transfer (EFT)**

An electronically based rather than paper-based system of transferring funds to and from accounts. Two main EFT remittance methods are wire transfers and automated clearing house (ACH).

**FDIC**

The Federal Deposit Insurance Corporation (FDIC) is an independent federal agency insuring deposits in US banks and thrifts in the event of bank failures.

**Fedwire**

An informal name for the Federal Reserve Communications System. This is the electronic communication network interconnecting Federal Reserve offices, the Federal Reserve Board, member banks, the US Treasury, and other government agencies. The Fed-wire is used for transferring member bank reserve account balances and government securities, as well as for transmitting information from the Federal Reserve System.

**Federal Financial Institutions Examination Council (FFIEC)**

A body comprising representatives from all of the federal banking regulatory organizations (the Federal Reserve System, the FDIC, the OCC, and the National Credit Union Administration). The FFIEC issues policy statements but has no power to mandate any actions. Its policy decisions must be approved by its member organizations.

**Federal funds**

Short-term investments/borrowings between banks, usually called fed funds. The investing/lending bank refers to the transaction as fed funds sold while the borrowing bank refers to the transaction as fed funds purchased. Despite its name, these transactions are not loans to or from the federal government. Nor do they include any guarantee or backing from the federal government. They are only called federal funds because the parties exchange the funds by transferring balances from the lender's account with its Federal Reserve District Bank to the borrower's account with its Federal Reserve District Bank. Fed funds' investments are usually overnight loans.

### **Federal Reserve System (“FRS”)**

The Federal Reserve System, often referred to as the Federal Reserve or simply "the Fed," is the central bank of the United States. It was created by the Congress to provide the nation with a safer, more flexible, and more stable monetary and financial system. Reserve Bank activities serve primarily three audiences—bankers, the US Treasury, and the public: Federal Reserve Banks are often called the "bankers' banks" because they provide services to commercial banks similar to the services that commercial banks provide for their customers.

### **The Financial Crimes Enforcement Network (FinCEN)**

A bureau of the United States Department of the Treasury that collects and analyzes information about financial transactions in order to combat domestic and international money laundering, terrorist financing, and other financial crimes.

### **Full faith and credit**

A pledge of the general taxing power for the payment of debt obligations. Bonds carrying such pledges are referred to as general obligation bonds or full-faith-and-credit bonds.

### **Funding liquidity risk or funding risk**

The potential that an institution will be unable to meet its obligations as they come due because of an inability to liquidate a sufficient quantity of assets or to obtain a sufficient quantity of new liabilities that can be used as liquidity to meet its obligations.

### **General Fund—Per Government California Code Section 16300**

The California State General Fund is used to budget for revenues not specifically designated to be accounted for by any other fund. The primary source of revenues is personal income tax, sales and use tax, and corporation tax.

### **General obligation (GO)**

A municipal obligation that is supported by the full faith and credit and the full taxing authority of the municipality (as opposed to support from only the revenues from specific user fees).

### **Gramm-Leach Bliley Act of 1999 (GLBA)**

Major banking legislation designed to significantly enhance the powers and authority of financial institutions by allowing the formation of new financial holding companies. Financial holding companies are authorized to engage in: underwriting and selling insurance and securities, conducting both commercial and merchant banking, investing in and developing real estate and other "complimentary activities." The statute also restricts the disclosure of nonpublic customer information by financial institutions and provides the major financial regulators with increased authority.

### **Herfindahl Index**

In banking, the Herfindahl Index is defined as the sum of the squares of the industry concentrations of the firms within the bank's portfolio where the market shares are expressed as fractions. The result can range from 0 to 1.0, moving from a huge number of very diverse customers to a single monopolistic customer base. The formula is:

$$H = \sum_{i=1}^n S_i^2$$

where H is the Herfindahl Index, S<sub>i</sub> is the percentage of industry concentration in the portfolio, and N is the number of industries represented.

### **Insurance of Accounts**

See Federal Deposit Insurance Corporation. Refers to deposit accounts being insured against loss due to the bank's insolvency. Insurance limits and conditions are set by the FDIC from time to time. Historically, other insurance providers have offered insurance of deposit accounts similar to limits and conditions provided by the FDIC. Currently, however this alternate source of insurance is not in use by US based banks.

### **Know Your Customer (KYC)**

A process by which banks obtain information about the identity and address of their customers. This process helps to ensure banks' services are not misused. The KYC procedure is to be completed by the bank at account opening and also periodically updated to ensure the Know the Customer Account (KYA) is current.

### **Legal risk**

The risk to earnings or capital arising from unenforceable contracts, lawsuits, adverse judgments, or nonconformance with laws, rules, and regulations. One of six risks defined by the Federal Reserve.

### **Liquidity**

Both the capacity and the perceived capacity to meet all obligations whenever due and to take advantage of business opportunities important to the future of the enterprise. The capacity and the perceived ability to meet known near-term and projected long-term funding commitments while supporting selective business expansion.

### **Liquidity risk**

For a financial institution, the risk that not enough cash will be generated from either assets or liabilities to meet cash requirements. For a bank, cash requirements are primarily made up of deposit withdrawals or contractual loan funding's. One of six risks defined by the Federal Reserve and one of nine risks defined by the Office of the Comptroller of the Currency (OCC). The OCC defines liquidity risk as the risk to earnings and capital arising from a bank's inability to meet its obligations when they become due, without incurring unacceptable losses. The Federal Reserve uses a broad definition of liquidity risk as the potential that an institution (a) will be unable to meet its obligations as they come due because of an inability to liquidate assets or obtain adequate funding (referred to as "funding liquidity risk") or (b) cannot easily unwind or offset specific exposures without significantly lowering market prices because of inadequate market depth or market disruptions ("market liquidity risk").

**Marijuana and Medical Marijuana (see Cannabis)**

“Medical cannabis goods” are medical cannabis, including dried flower, and manufactured medical cannabis products.

**Marijuana-Related Business (MRB)**

Any business that directly or indirectly assists in growing, producing, buying, selling or otherwise distributes marijuana (a "Marijuana Business"), a business that leases real property or otherwise provides space to a Marijuana Business, or a business that provides equipment which is directly used to grow, package, manufacture, or produce marijuana.

**Money laundering**

The conversion or transfer of property derived from a criminal offense for the purpose of concealing, or disguising, the illicit origin of the property, or of assisting any person who is involved in the commission of such an offense, to evade the legal consequences of the action; the concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from a criminal offense.

**Net interest margin (“NIM”)**

The amount of interest income minus interest expense, usually expressed as a percentage. The net interest margin percentage is calculated by dividing interest income less interest expense by average earning assets. If interest income includes tax-free income, that income should be "grossed up" to its taxable equivalent before calculating the percentage. (To gross up tax-free income to its taxable equivalent, divide the income by one minus the marginal income tax rate.) The net interest margin expressed as a percentage of earning assets is often confused with the net spread. The spread is the difference between the average rate earned on assets minus the average rate paid on liabilities. That spread would only equal the net interest margin percentage if the dollar amount of earning assets equaled the dollar amount of interest-bearing liabilities.

**Net noninterest expense**

Total noninterest expense minus total noninterest income. A measure used by financial institutions to monitor the extent to which fees and other sources of noninterest income offset noninterest expenses. For a financial institution, expenses other than interest expense are almost always much larger than income other than interest income. Also called net overhead. Often expressed as a percentage of average earning assets. See noninterest income and noninterest expense.

**Non-Bank Financial Institution (NBFI)**

NBFI facilitate bank-related financial services, such as investment, risk pooling, contractual savings, and market brokering. An NBFI may legally deliver financial products to the public without securing a bank charter.

**Noninterest expense**

For a financial institution, operating expense from sources other than interest expense. The main components of noninterest expense are usually personnel, occupancy, equipment, and professional services.

**Noninterest income**

For a financial institution, operating income from sources other than interest income. The main components of noninterest income are fees such as deposit service charges, funds transfer fees, trust fees, brokerage fees, etc.

**OFAC**

The Office of Foreign Assets Control (OFAC) of the US Department of the Treasury administers and enforces economic and trade sanctions based on US foreign policy and national security goals against targeted foreign countries and regimes, terrorists, international narcotics traffickers, those engaged in activities related to the proliferation of weapons of mass destruction, and other threats to the national security, foreign policy or economy of the United States.

**Off-balance sheet**

A term used to describe contingent liabilities, contingent assets, and commitments that are legally binding but are not assets or liabilities shown on the balance sheet under GAAP. Examples include loan commitments and letters of credit.

**Patriot Act**

Short name for the "Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001" ("USA PATRIOT Act"). The Patriot Act was signed by President Bush on October 26, 2001. This act contains a number of significant regulatory requirements for banks. Section 314(b) permits financial institutions, upon providing notice to the United States Department of the Treasury, to share information with one another in order to identify and report to the federal government activities that may involve money laundering or terrorist activity. Section 326 of the USA PATRIOT Act requires that financial institutions implement reasonable procedures to:

- (1) verify the identity of any person opening an account;
- (2) maintain records of the information used to verify the person's identity; and
- (3) determine whether the person appears on any list of known or suspected terrorists or terrorist organizations. Additional provisions prohibit banks from having accounts with shell banks, address availability of bank records, and change and clarify suspicious activity report requirements.

**Primary Service Area**

Description of the market that a proposed financial institution intends to serve.

California Code of Regulations, § 10.3155. Authority Cited: Section 215 of the State of California Financial Code. Reference: Section 360, Financial Code.

**Pro formas or pro forma statements**

Financial information, often just balance sheets and income statements, prepared by adjusting a recent financial report to show the effect of recent or planned changes.

**Regulation CC**

A Federal Reserve Board regulation governing the availability of funds and collection of checks.

The regulation sets legal limits on the time banks can take before making deposited funds available for withdrawal.

### **Regulation DD**

Regulation DD is a directive set forth by the Federal Reserve. Regulation DD was enacted to implement the Truth in Savings Act that was passed in 1991. This act requires financial institutions to provide certain uniform information about fees and interest when opening an account for a customer.

### **Regulation E**

Regulation E is a Federal Reserve regulation that outlines rules and procedures for electronic funds transfers (EFTs) and provides guidelines for issuers and sellers of electronic debit cards.

### **Regulation O**

Regulation O is a Federal Reserve regulation that places limits and stipulations on the credit extensions a member bank can offer to its executive officers, principal shareholders and directors.

### **Reputation risk**

One of nine risks defined by the OCC and one of six risks defined by the Federal Reserve. The risk to earnings or capital arising from the possibility that negative publicity regarding the institution's business practices, whether true or not, will cause a decline in its customer base, costly litigation, or revenue reductions. The Federal Reserve and the OCC define reputation risk in almost exactly the same way.

### **Reserve requirements**

The percentages of different types of deposits that banks are required to hold on deposit at the Federal Reserve or as cash in their vaults. These requirements are determined by the Federal Reserve Board and function as a tool to control monetary policy.

### **Residual value**

Term used to describe the market or sale value of leased equipment (net of removal or disposal costs) at the end of the lease term. In most cases, it is projected or estimated. Sometimes called salvage value. With some exceptions, national bank lessors are subject to a rule that limits the residual value assumption made at the time the lease is created to 25 percent of the equipment's cost. Bank holding company leasing subsidiaries are subject to a 20 percent limit on the residual assumption.

### **Respondent Bank (cross reference Correspondent Bank)**

A Respondent is:

- (1) a financial institution that settles debit and credit transaction activity for some or all of its reserve bank transactions in the master account of a correspondent; or
- (2) a financial institution that maintains its required reserve balances in the master account of a correspondent. To establish a correspondent/respondent settlement relationship, both the correspondent and the respondent must complete a "Transaction and Service Fee Settlement Authorization" form.

**Risk Management Committee (RMC)**

Risk Management Committee is an independent committee of the Board of Directors that has, as its sole and exclusive function, responsibility for the risk management policies of the Bank's enterprise-wide operations and oversight of the operation of the Bank's enterprise-wide risk management framework.

**Settlement risk**

Federal Reserve definition of risk relating to the possibility that operational problems might interrupt or delay the settlement of a purchase or sale of a financial instrument.

**Strategic risk**

One of the federal regulatory defined risks. The risk to earnings or capital arising from a bank's adverse business decisions or improper implementation of those decisions.

**Suspicious Activity Report (SAR)**

All financial institutions operating in the United States, including insured banks, savings associations, savings association service corporations, credit unions, bank holding companies, non-bank subsidiaries of bank holding companies, Edge and Agreement corporations, and US branches and agencies of foreign banks are required to provide this report following the discovery of: insider abuse involving any amount, violations aggregating \$5,000 or more where a suspect can be identified, violations aggregating \$25,000 or more regardless of a potential suspect, or transactions aggregating \$5,000 or more that involve potential money laundering or violations of the Bank Secrecy Act. Casinos must file an SARC Form and Securities Brokers and Dealers are required to file an SAR-S Suspicious Activity Report. See also Bank Secrecy Act.

**Systemic liquidity risk**

Liquidity risk arising from causes external to the entity.

**Tier 1 capital**

A regulatory definition of bank capital. Tier 1 capital consists of common shareholders' equity, perpetual preferred shareholders' equity with noncumulative dividends, retained earnings, and minority interests in the equity accounts of consolidated subsidiaries.

**Tier 2 capital**

A regulatory definition of bank capital. Tier 2 capital consists of subordinated debt, intermediate-term preferred stock, cumulative and long-term preferred stock, and a portion of the bank's allowance for loan and lease losses.

**Total risk-based capital**

A regulatory definition of bank capital. The sum of tier 1 plus tier 2 capital.

**Transaction risk**

One of the regulatory risks identified by federal regulators. The risk to earnings or capital arising from problems with service or product delivery. The Federal Reserve and most banks refer to this risk as operations or operational risk.

**Treasuries**

An informal name for securities issued by the US Department of the Treasury.

**Treasury inflation-protected securities (TIPS)**

Securities issued by the US Treasury that provide inflation protection to investors. These securities have a fixed coupon rate and maturity date. However, the interest payment is based on a principal amount that is adjusted semiannually to reflect changes in the Consumer Price Index (CPI).

**Truth-in-Lending Act**

A Federal statute that governs a number of practices related to bank loans - especially, but not only, consumer loans. The Federal Reserve Board of Governors has adopted Regulation Z to implement this statute. The regulation has specific requirements giving some borrowers the right to rescind certain loans and very specific requirements about how banks must disclose rescission rights. The regulation also includes very detailed requirements for calculating and disclosing annual percentage rates for many loans.

**Wire transfers**

One of the two major methods of electronic funds transfer. Only the payer can originate the remittance. A wire transfer's information format is completely flexible, but this flexibility adds significantly to the bank's labor costs and results in much higher fees.

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## B.2 Stakeholder Interview List

*Table 1: Stakeholder Interview List*

Stakeholder Organization	Area of Focus	Interview Category	Location
Alameda County Treasurer	County Treasury	Taxation	Oakland
California Department of Justice	Legal	City, County, or State	Sacramento
California Bureau of Medical Cannabis Regulation (Now Bureau of Cannabis Control)	Regulating cannabis licenses for MRBs.	MRB	Sacramento
CA Dept of Tax and Fee Administration	Taxation and Fee Administration	Taxation	Sacramento
California Association of Treasurers and Tax Collectors (CACTTC)	Tax Collection	Taxation	San Francisco
Calif Senate Comm on Banking & Fin's Inst.	Banking and Finance	Business Oversight & Banking	Sacramento
California Bankers Association	Banking	Business Oversight & Banking	Sacramento
California Cannabis Industry Association	Legal Resource for lawmakers supporting the legal cannabis industry	MRB	Sacramento
California Community Banking Network	Community Banks Advocacy Group	Business Oversight & Banking	Irvine
California Department of Finance	State Finance	Business Oversight & Banking	Sacramento
California Department of Insurance	Regulate CA insurance market	City, County, or State	Sacramento
California Growers Association	Growers Association	City, County, or State	Sacramento

Stakeholder Organization	Area of Focus	Interview Category	Location
California State Association of Counties	County government representation on state legislature.	City, County, or State	Sacramento
California State Treasurer's Office	State Treasury	City, County, or State	Sacramento
Cato Institute	Banking Regulations	Business Oversight & Banking	Boston
City and County of San Francisco	City Administration	City, County, or State	San Francisco
City of Oakland, Assistant to City Administrator	City Administration	City, County, or State	Oakland
Clark Neubert LLP	External Legal	Business Oversight & Banking	San Francisco
Colorado Bankers Association	Banking	Business Oversight & Banking	Denver
CRESCOLabs	MRB	MRB	San Francisco
California Employment Development Department	Employment Support, Insurance, and Payroll Tax Collection	City, County, or State	Sacramento
Federal Guarantee Insurance Brokers, Inc.	Insurance		Pasadena
Freedman & Koski	Cannabis Consulting	MRB	Denver
Independent Banking Consultant - Dante Tosetti Consulting	Banking - Consulting	Business Oversight & Banking	San Francisco
League of California Cities	California Cities advocate	City, County, or State	Sacramento
Los Angeles County	Tax Collection	Taxation	Los Angeles
Milken Institute	Economics Research	City, County, or State	Los Angeles
NCS Analytics	Data and Reporting	MRB	Denver
Office of California Sen Robert Hertzberg	Legislation	City, County, or State	Sacramento
Oregon State Treasury	Treasury	Taxation	Portland
Salal Credit Union	Banking (Credit Union)	Business Oversight & Banking	Seattle
SVP Government Relations	Banking	Business Oversight & Banking	Sacramento

Stakeholder Organization	Area of Focus	Interview Category	Location
The Findley Reports on Financial Institutions	Data and Reporting	Business Oversight & Banking	Anaheim
Treasurer Humboldt County	Tax Collection	Taxation	Eureka
Washington Department of Financial Institutions	Banking and Finance	Business Oversight & Banking	Washington
Washington State Liquor and Cannabis Board	Liquor & Cannabis	MRB	Olympia

## C. Summary of Literature

This appendix contains a brief summary of documents that were reviewed as part of this feasibility study.

### C.1.1 Cannabis and the Banking Industry

Table 1: Cannabis and the Banking Industry

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
Banks and Credit Unions Working with Cannabis Business in the US - New Frontier	<p>Summary: Graph demonstrating number of banks reporting to FinCEN as of 3/18.</p> <p>Key Points:</p> <ul style="list-style-type: none"><li>• 411 banks filed Marijuana Related Suspicious Activity Reports (SARs).</li><li>• 12,133 cannabis accounts terminated.</li><li>• 51,391 total number of SARs filed.</li></ul>	"Banks and Credit Unions Working with Cannabis Business in the US" New Frontier. July 15, 2018. <a href="https://newfrontierdata.com/marijuana-insights/banks-credit-unions-working-cannabis-business-u-s">https://newfrontierdata.com/marijuana-insights/banks-credit-unions-working-cannabis-business-u-s</a>	7/18
Colorado's Perspective on the Cannabis Conundrum – American Bankers Association (ABA) Banking Journal	<p>Summary: Don Childears – President and Chief Executive Officer (CEO) of Colorado (CO) Bankers Association (CBA) – gives his opinion on the current state of banking cannabis.</p> <p>Key Points:</p> <ul style="list-style-type: none"><li>• Colorado had \$1.51 billion in sales, almost all in cash.</li><li>• \$247 million in taxes collected in 2017.</li><li>• CBA has been a repeated supporter for Safe Harbor for banks.</li><li>• Follow up on the nationwide conference on banking the cannabis industry, held 8/9 – 8/10 (Richard Ormond).</li></ul>	"Colorado's Perspective on the Cannabis Conundrum - ABA ..." June 28, 2018. <a href="https://bankingjournal.aba.com/2018/06/colorados-perspective-on-the-cannabis-conundrum">https://bankingjournal.aba.com/2018/06/colorados-perspective-on-the-cannabis-conundrum</a>	6/28/18
Credit Union National Association (CUNA) supports cannabis banking legislation - CUInsight	Summary: CUNA's support of banking the cannabis industry, outlining their support of HR2215 (SAFE Banking Act), S. 1152 (Senate SAFE Banking Act), and S.3032 STATES Act of 2018.	"CUNA Supports Cannabis Banking Legislation." CUInsight. June 13, 2018. <a href="https://www.cuinsight.com/press-release/cuna-supports-cannabis-banking-legislation">https://www.cuinsight.com/press-release/cuna-supports-cannabis-banking-legislation</a> .	6/13/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
Dante Tosetti CBWG Testimony	<p>Summary: Dante Tosetti's remarks to the Cannabis Bank Working Group (CBWG), including a description of his background (Former Federal Reserve Bank Examiner) and the residual impact to the financial system as a result of the ambiguous and challenging cannabis banking environment.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• The Bank Secrecy Act (BSA) fines have totaled greater than \$12 billion since 2009, with spending on compliance and prevention growing to more than \$8 billion.</li> <li>• LA County Tax Collector indicates 60% of taxes are paid by check.</li> <li>• It is important to separate legal operating businesses from illegal ones, and the complicated banking environment makes that more challenging.</li> <li>• Current US Department of the Treasury Financial Crimes Enforcement Network (FinCEN) guidance does not provide a clear definition of a Marijuana Related Business (MRB). The definition of an MRB should be set by the bank because the bank management &amp; Board of Directors are the only ones who can define their customer base.</li> <li>• FinCEN guidance references BSA/Anti-money-laundering (AML) Examination Manual used by all federal regulatory bodies, giving consistent guidance throughout the nation.</li> <li>• Tosetti believes that the SAR filing requirements for MRBs is in fact a safe harbor, while no safe harbor is absolute.</li> <li>• Tosetti believes solutions do not need to solve all problems at once; solutions should advocate for cannabis; and any solution must expect regulatory push back.</li> <li>• Historically in California (CA) there were challenges prior to the establishment of banking institutions. Banking products were not initially intended for the working class; AP Giannini changed that with Bank of America. East West Bank was established to bridge the financial services between the East and the West. Silicon Valley Bank (SVB) was a bank established to challenge traditional conservative banking approaches.</li> <li>• Steps for banks deciding whether to enter the industry: <ul style="list-style-type: none"> <li>○ Read and fully understand FinCEN guidance.</li> <li>○ Specifically define MRBs.</li> <li>○ Start a dialogue with the other 340 chartered institutions.</li> </ul> </li> </ul>	<p>Tosetti, Dante. Dante Tosetti's prepared remarks to the State of California - Cannabis Banking Working Group. May 4, 2017. Glaser Center, Santa Rosa.</p>	5/4/17

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
Despite DOJ actions, lots of opportunity for credit unions in pot banking/ Panel   Credit Union Journal	<p>Summary: Credit union panel on cannabis banking post Cole Memo rescission.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• National Association of Credit Union Service Organizations support banking opportunities for credit unions in the cannabis.</li> <li>• Maps Credit Union (\$690 million) has been serving industry since 2014, as a means of supporting the community and the safety of its residents.</li> <li>• Maps had \$30 million in deposits when the memo was rescinded, and they needed to order \$30 million in cash and be ready to drop the accounts within 24 hours.</li> <li>• The product line works because the product can stand on its own and not require additional funding from the collective bank.</li> <li>• AML software is a must as well as a Maps Compliance Officer.</li> <li>• John Vardaman indicates nothing changed with the memo rescission, since FinCEN guidance stood.</li> <li>• Fourth Corner Credit Union (FCCU) settled with Federal Reserve Bank (FRB) – Kansas City and moved toward opening a master account, but still has an issue regarding insurance.</li> </ul>	<p>Bartlett, Michael. "Despite DOJ Actions, Lots of Opportunity for CUs in Pot Banking: Panel." Credit Union Journal. April 17, 2018.</p> <p><a href="https://www.cujournal.com/news/despite-doj-actions-lots-of-opportunity-for-credit-unions-in-pot-banking-panel">https://www.cujournal.com/news/despite-doj-actions-lots-of-opportunity-for-credit-unions-in-pot-banking-panel</a>.</p>	4/17/18
FIN-2014-G001	<p>Summary: FinCEN Guidance on BSA Expectations regarding MRBs.</p> <p>Key Points:</p> <p>FinCEN references the 8 key points to the Cole Memo:</p> <ul style="list-style-type: none"> <li>• Preventing the distribution of marijuana to minors.</li> <li>• Preventing revenue from the sale of marijuana from going to criminal enterprises, gangs, and cartels.</li> <li>• Preventing the diversion of marijuana from states where it is legal under state law in some form to other states.</li> <li>• Preventing state authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal activity.</li> <li>• Preventing violence and the use of firearms in the cultivation and distribution of marijuana.</li> <li>• Preventing drugged driving and the exacerbation of other adverse public health consequences associated with marijuana use.</li> </ul>	<p>Department of Treasury Financial Crimes Enforcement Network. "FIN-2014-G001". February 14, 2014.</p> <p><a href="https://www.fincen.gov/sites/default/files/shared/FIN-2014-G001.pdf">https://www.fincen.gov/sites/default/files/shared/FIN-2014-G001.pdf</a></p>	2/14/14

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
	<ul style="list-style-type: none"> <li>• Preventing the growing of marijuana on public lands and the attendant public safety and environmental dangers posed by marijuana production on public lands.</li> <li>• Preventing marijuana possession or use on federal property.</li> </ul> <p>In assessing the risk of providing services to a marijuana-related business, a financial institution should conduct customer due diligence that includes:</p> <ul style="list-style-type: none"> <li>• Verifying with the appropriate state authorities whether the business is duly licensed and registered.</li> <li>• Reviewing the license application (and related documentation) submitted by the business for obtaining a state license to operate its marijuana-related business.</li> <li>• Requesting from state licensing and enforcement authorities available information about the business and related parties.</li> <li>• Developing an understanding of the normal and expected activity for the business, including the types of products to be sold and the type of customers to be served (e.g., medical versus recreational customers).</li> <li>• Ongoing monitoring of publicly available sources for adverse information about the business and related parties.</li> <li>• Ongoing monitoring for suspicious activity, including for any of the red flags described in this guidance.</li> <li>• Refreshing information obtained as part of customer due diligence on a periodic basis and commensurate with the risk.</li> </ul> <p>SAR Filing Requirements include:</p> <ul style="list-style-type: none"> <li>• “Marijuana Limited” – Standard, ongoing SAR filings identifying the customer is a legitimately operating MRB.</li> <li>• “Marijuana Priority” – Escalated filing indicating potentially suspicious activity by the MRB.</li> <li>• “Marijuana Termination” – Filing required when an MRB’s account is closed due to activity by the MRB.</li> <li>• Red Flags outlined by FinCEN (See FinCEN Red Flags and Guidance.docx).</li> <li>• Ongoing Currency Transaction Report (CTR) requirements remain.</li> </ul>		

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
Fourth Corner Receives Fed Account - Westworld	<p>Summary: Fourth Corner Credit Union (FCCU) being granted a conditional account by FRB.</p> <p>Key Points: Original application denied, but suit filed by FCCU resulted in 10<sup>th</sup> Circuit Court overturning the decision (6/17).</p> <p>Requirements from FRB include:</p> <ul style="list-style-type: none"> <li>• FCCU must satisfy all requirements of Department of Financial Services (DFS) and Colorado law, including obtaining share deposit insurance.</li> <li>• FCCU shall provide letter from DFS attesting to their compliance with all requirements and permitted to provide banking services.</li> <li>• FCCU shall provide letter proving it has obtained share deposit insurance from the National Credit Union Association (NCUA), or from a private provider.</li> <li>• FCCU shall adopt bylaws disallowing it from providing banking services to MRBs until it is federally legal.</li> <li>• FCCU shall not seek to amend the bylaws above after receiving the account, until serving those businesses is federally legal.</li> <li>• CEO Deidra O'Gorman indicates that FRB's definition of MRB is plant touching, so they will move forward on their plan to service ancillary MRBs. However, they still need to attain insurance and were initially denied coverage by the NCUA. That decision was upheld by US District Court of Colorado (<a href="http://www.nafcu.org">www.nafcu.org</a> 7/5/18).</li> </ul>	<p>Wallace, Alicia. "Marijuana-focused Credit Union Gets Conditional OK from Federal Reserve." The Cannabist. February 07, 2018.</p> <p><a href="https://www.thecannabist.co/2018/02/06/fourth-corner-credit-union-colorado-marijuana-federal-reserve/98347/">https://www.thecannabist.co/2018/02/06/fourth-corner-credit-union-colorado-marijuana-federal-reserve/98347/</a>.</p>	2/9/18
Donald Trump Would "probably" Support Legalizing Colorado's Marijuana Industry	<p>Summary: Review of Gardner-Warren STATES Act of 2018.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Measure would not legalize cannabis, but rather respect states' rights regarding banking cannabis.</li> <li>• Measure would reduce reliance and prevalence of cash in the cannabis industry.</li> <li>• Bill would provide some restrictions, like age and restriction of sale at transportation facilities.</li> </ul>	<p>Matthews, Mark K. "Donald Trump Would "probably" Support Legalizing Colorado's Marijuana Industry - through Bid by Cory Gardner and Elizabeth Warren." The Denver Post. June 08, 2018.</p> <p><a href="https://www.denverpost.com/2018/06/08/colorado-marijuana-industry-sanctioning-donald-trump/">https://www.denverpost.com/2018/06/08/colorado-marijuana-industry-sanctioning-donald-trump/</a>.</p>	6/8/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
H.R. 2215, the Secure and Fair Enforcement Banking Act of 2017_06122018	<p>Summary: CUNA Letter to Congress supporting H.R. 2215 - SAFE Banking Act.</p> <p>Key Points: Support for bill is not based on legalization, but rather on supporting Credit Unions (CUs) in legal states the ability to safely bank the industry.</p>	<p>"Strengthening of the Tenth Amendment Through Entrusting States (STATES) Act of 2018." Jim Nussle to Sens. Elizabeth Warren and Corey Gardner. June 12, 2018.</p> <p><a href="https://www.cuna.org/uploadedFiles/Advocacy/Actions/Comment_Calls,_Letters_and_Testimonies/2018/Letters/S. 3032, the Strengthening the Tenth Amendment Through Entrusting States (STATES) Act of 2018.pdf">https://www.cuna.org/uploadedFiles/Advocacy/Actions/Comment_Calls,_Letters_and_Testimonies/2018/Letters/S. 3032, the Strengthening the Tenth Amendment Through Entrusting States (STATES) Act of 2018.pdf</a>.</p>	6/12/18
Marijuana Fact Book 2017 - Banking And Business Challenges	<p>Summary: Banking details from MJ Biz' annual report.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• MRBs receiving some form of banking services from banks: 57% direct; 83% indirect.</li> <li>• MRBs receiving banking services from CUs: 34% direct; 13% indirect.</li> <li>• MRBs receiving banking services from specialized firms: 5% direct; 2% indirect.</li> <li>• MRBs receiving banking services from other sources: 4% direct; 2% indirect.</li> <li>• Number of banks providing services to MRBs: <ul style="list-style-type: none"> <li>◦ March 2014 – 51.</li> <li>◦ March 2016 – 301.</li> </ul> </li> <li>• Monthly Cost of Banking: <ul style="list-style-type: none"> <li>◦ \$250 – 57% direct; 88% indirect.</li> <li>◦ \$251 - \$500 – 12% direct; 5% indirect.</li> <li>◦ \$501 - \$1,000 – 16% direct; 4% indirect.</li> <li>◦ \$1,001 - \$2,000 – 9% direct; 2% indirect.</li> <li>◦ \$2,001+ - 6% direct; 1% indirect.</li> </ul> </li> <li>• Single biggest issue resulting from not having access to banking: <ul style="list-style-type: none"> <li>◦ Safeguarding cash – 32%.</li> </ul> </li> </ul>	Marijuana Business Daily	4/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
	<ul style="list-style-type: none"> <li>○ Paying employees &amp; vendors – 31%.</li> <li>○ Other – 26%.</li> <li>○ Transporting money – 9%.</li> <li>○ Preventing employee theft – 2%.</li> <li>● Top challenges for cannabis businesses:           <ul style="list-style-type: none"> <li>○ Federal laws/intervention – 39%.</li> <li>○ Compliance – 35%.</li> <li>○ Growth/scalability – 33%.</li> <li>○ Lack of banking – 27%.</li> <li>○ Taxation – 26%.</li> <li>○ Licensed competitors – 24%.</li> <li>○ Finding qualified staff &amp; management – 21%.</li> <li>○ Insufficient # of vendors/partners – 17%.</li> <li>○ Fundraising – 17%.</li> <li>○ Black-market competitors – 15%.</li> <li>○ Disagreement on direction of company – 10%.</li> </ul> </li> <li>● Top challenges for cannabis businesses rankings:           <ul style="list-style-type: none"> <li>○ Lack of banking service – 2017 (4); 2016 (2).</li> <li>○ Taxation – (5).</li> </ul> </li> </ul>		
Maryland Banking Solutions - WaPo	<p>Summary: Description of banking services to MRBs in Maryland – Severn Savings Bank.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>● Account holders cannot write checks or take out loans.</li> <li>● Account holders can use debit cards to buy supplies, they have access to payroll, and they can purchase marijuana through wire transfers.</li> <li>● Account holders focus on accounting for every dollar and every piece of inventory.</li> <li>● Account holders paid \$3000 to open the account and monthly fees total around \$1,750.</li> </ul>	<p>"How a Maryland Bank Is Quietly Solving the Marijuana Industry's Cash Problem." The Washington Post. January 02, 2018.</p> <p><a href="https://www.washingtonpost.com/local-md-politics/how-a-maryland-bank-is-quietly-solving-the-marijuana-industrys-cash-problem/2018/01/02/a6317088-e0ec-11e7-bbd0-9dfb2e37492a_story.html">https://www.washingtonpost.com/local-md-politics/how-a-maryland-bank-is-quietly-solving-the-marijuana-industrys-cash-problem/2018/01/02/a6317088-e0ec-11e7-bbd0-9dfb2e37492a_story.html</a>.</p>	1/2/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
MRB and Banking	<p>Summary: Federal guidance regarding the enhancement of the availability of financial services for MRBs.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>The subterfuge of clandestine banking relationships causes a lack of transparency in the financial system.</li> <li>Partner Colorado Credit Union – serves \$100 million a month in MRB funds and has had 7 regulatory audits.</li> <li>This paper estimates that between .2% and 3.9% of banks provide banking services to MRBs, with a majority of them being smaller sized community banks and credit unions, which limits the amount of volume they can take on.</li> <li>This paper asserts that the successful operation and audit of Partner Colorado Credit Union shows there is acceptance at the federal level for cannabis banking, even if there is no tolerance for cannabis itself.</li> <li>It can be argued that private banks opting to operate in full compliance with FIN-2014-G001 and with oversight by their regulators are operating more safely and soundly than banks choosing to avoid the product line all together, thereby failing to identify MRBs in their existing client base.</li> </ul>	<p>Tosetti, Dante. "Federal Guidance to Enhance the Availability of Financial Services for, and the Financial Transparency of, Marijuana-Related Businesses: the Distinctly Separate Federal Approaches Between Marijuana- Related Businesses and Marijuana-Related Business Banking." July 28, 2018.</p>	7/28/18
Powell says Fed won't let banks take marijuana money until federal guidance comes - MarketWatch	<p>Summary: The review of the FRB's stance on not supporting federal cannabis banking.</p> <p>Key Points: Mandate has nothing to do with marijuana, rather the disparity between state and federal laws.</p>	<p>Goldstein, Steve. "Powell Says Fed Won't Let Banks Take Marijuana Money until Federal Guidance Comes." MarketWatch. June 14, 2018.  <a href="https://www.marketwatch.com/story/powell-says-fed-wont-let-banks-take-marijuana-money-until-federal-guidance-comes-1015285001">https://www.marketwatch.com/story/powell-says-fed-wont-let-banks-take-marijuana-money-until-federal-guidance-comes-1015285001</a></p>	6/14/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
		federal-guidance-comes-2018-06-13.	
S. 1152, the Secure and Fair Enforcement Banking Act of 2017_06122018	<p>Summary: CUNA Letter to Senate supporting S. 1152 - SAFE Banking Act.</p> <p>Key Points: Support for bill is not based on legalization, but rather on supporting the CUs in legal states in their ability to safely bank the cannabis industry via safe harbor.</p>	<p>"CUNA Letter to Senate supporting S. 1152 - SAFE Banking Act." Jim Nussle to Sens. Elizabeth Warren and Corey Gardner. June 12, 2018.</p> <p><a href="https://www.cuna.org/uploadedFiles/Advocacy/Actions/Comment_Calls,_Letters_and_Testimonies/2018/Letters/S.%201152,%20the%20Secure%20and%20Fair%20Enforcement%20Banking%20Act%20of%202017_06122018.pdf">https://www.cuna.org/uploadedFiles/Advocacy/Actions/Comment_Calls,_Letters_and_Testimonies/2018/Letters/S.%201152,%20the%20Secure%20and%20Fair%20Enforcement%20Banking%20Act%20of%202017_06122018.pdf</a></p>	6/12/18
S. 3032, the Strengthening the Tenth Amendment Through Entrusting States (STATES) Act of 2018	<p>Summary: CUNA Letter to Senate supporting S. 3032 – STATES Act of 2018.</p> <p>Key Points: Support for bill is not based on legalization, but rather on supporting the CUs in legal states the ability to safely bank the industry by protecting states' rights.</p>	<p>" CUNA Letter to Senate supporting S. 3032 – STATES Act of 2018." Jim Nussle to Sens. Elizabeth Warren and Corey Gardner. June 12, 2018.</p> <p><a href="https://www.cuna.org/uploadedFiles/Advocacy/Actions/Comment_Calls,_Letters_and_Testimonies/2018/Letters/S.%203032,%20the%20Strengthening%20the%20Tenth%20Amendment%20Through%20Entrusting%20States%20Act%20of%202018.pdf">https://www.cuna.org/uploadedFiles/Advocacy/Actions/Comment_Calls,_Letters_and_Testimonies/2018/Letters/S.%203032,%20the%20Strengthening%20the%20Tenth%20Amendment%20Through%20Entrusting%20States%20Act%20of%202018.pdf</a></p>	6/12/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
	<p>Summary: Review of Gardner-Warren STATES Act of 2018.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Measure would not legalize cannabis, but rather respect states' rights regarding cannabis.</li> <li>• Measure would allow the federal government to still enforce illegal trafficking to states where it is not legal.</li> <li>• The legislation would also invest \$500 million over 5 years to Dept of Health and Human Services for Medical Marijuana research (MMJ).</li> <li>• States would be allowed to seal or expunge individual marijuana possession records.</li> </ul>	20(STATES)%20Act%20of%202018.pdf	6/28/18
Warren, Gardner Unveil Marijuana Bill Easing Federal Enforcement	<p>Summary: Review of Gardner-Warren STATES Act of 2018.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Measure would not legalize cannabis, but rather respect states' rights regarding cannabis laws.</li> <li>• Measure would reduce reliance and prevalence of cash in the cannabis industry.</li> <li>• Bill would provide some restrictions, like age and restriction of sale at transportation facilities.</li> </ul>	Cirillo, Jeff. "Warren, Gardner Unveil Marijuana Bill Easing Federal Enforcement." Roll Call. June 07, 2018. <a href="https://www.rollcall.com/news/policy/warren-gardner-unveil-marijuana-bill-easing-federal-enforcement">https://www.rollcall.com/news/policy/warren-gardner-unveil-marijuana-bill-easing-federal-enforcement</a> .	6/7/18
Where Pot Entrepreneurs Go When the Banks Just Say No - The New York Times	<p>Summary: Review piece of banking solutions in the United States (US) for cannabis companies.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Partner Colorado Credit Union's (PCCU) cannabis clients deposited \$931 million in 2017 (estimated to be the largest amount of deposits in the country).</li> <li>• Many of the banks providing the services require a Non-Disclosure Agreement regarding their relationship.</li> <li>• Chris Myklebust and Sundie Seefried have visited many states discussing how CO is handling the banking solution.</li> </ul>	Mandelbaum, Robb. "Where Pot Entrepreneurs Go When the Banks Just Say No." The New York Times. January 04, 2018. <a href="https://www.nytimes.com/2018/01/04/magazine/where-pot-entrepreneurs-go-when-the-banks-just-say-no.html">https://www.nytimes.com/2018/01/04/magazine/where-pot-entrepreneurs-go-when-the-banks-just-say-no.html</a> .	1/4/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
	<ul style="list-style-type: none"> <li>• In CO, even opponents to cannabis legalization support banking the proceeds, not just because of safety but to increase financial transparency and improve tax assessment and collection.</li> <li>• PCCU's lawyer warned Seefried and her board that they could potentially face racketeering charges from the federal government.</li> <li>• PCCU utilizes a deposit requirement to help oversee the banking activity in relation to sales.</li> <li>• PCCU charges .45%-.3% for the plant-touching banking clients.</li> <li>• PCCU has received 4 subpoenas on their over 200 clients; none have ever been indicted.</li> </ul>		
Banking Access Strategies for Cannabis-Related Businesses	<p>Summary: Report provided by Treasurer John Chiang's Cannabis Banking Working Group.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• 25% compound annual growth will result in North America's cannabis sales exceeding \$20 million by 2021.</li> <li>• State and local governments collecting taxes in cash have added expenses, time, and risks to employee safety.</li> <li>• \$1 billion is estimated new tax revenue.</li> <li>• \$7.6B estimated for cannabis sales by 2020.</li> <li>• Lack of banking solutions causes multiple issues for the state <ul style="list-style-type: none"> <li>◦ Crime.</li> <li>◦ Inefficient, insecure tax collection.</li> <li>◦ Struggles getting cannabis out of the black-market.</li> </ul> </li> <li>• 4 proposed solutions <ul style="list-style-type: none"> <li>◦ Cash Handling for the collection of taxes and fees – Utilize existing financial institutions and armored carriers to manage the collection of cash for taxes.</li> <li>◦ Expanding cannabis industry access to banking services under current law – address the data collection and reporting capabilities through state and local online portals to oversee the activity in accordance with FIN 2014-G001.</li> <li>◦ State-backed financial institutions.</li> </ul> </li> </ul>	<p>"Cannabis Banking Working Group." Cannabis Banking Working Group Final Report. November 7, 2017. <a href="https://www.treasurer.ca.gov/cbwg/resources/reports/110717-cannabis-report.pdf">https://www.treasurer.ca.gov/cbwg/resources/reports/110717-cannabis-report.pdf</a>.</p>	11/7/17

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
	<ul style="list-style-type: none"> <li>○ Full access to banking services: federal Solution – create a multistate consortium to educate and advocate for federal changes necessary to open banking channels.</li> </ul>		
American Bankers Association (ABA) Cannabis Bill Section by Section 082718	<p>Summary: Proposed Draft Cannabis Banking Legislation</p> <p>Key Points:</p> <p>Relationship to Money Laundering</p> <ul style="list-style-type: none"> <li>• This section provides that any proceeds from legitimate transactions connected to legal state cannabis activity is not money laundering under 18 USC. 1956 or 1957, or any other provision of law (including RICO).</li> <li>• Cannabis businesses operation outside of state or tribal law could still be prosecuted for money laundering.</li> </ul> <p>Supervision of Depository Institutions</p> <ul style="list-style-type: none"> <li>• This section provides that a person or business that is required to be licensed or otherwise authorized to engage in cannabis activities by state or tribal law must provide evidence of that authorization to a depository institution and that is sufficient to show that the person and business is a cannabis legitimate business under the Act.</li> <li>• For a person or business that merely provides products or services to an entity that is required to be licensed or otherwise authorized to engage in cannabis activities by state or tribal law, there is a presumption that the person or business is a cannabis legitimate business under the Act. This would include businesses such as landlords, security companies or other types of suppliers.</li> <li>• While banks would still be required to adhere to existing know-your-customer and due-diligence standards under the Bank Secrecy Act, they would not incur any additional due diligence obligations than would be required for other customers and would not be subject to liability or penalties for customer errors or deception.</li> <li>• This section prohibits federal banking regulators from terminating deposit insurance, taking adverse or corrective supervisory action, or otherwise penalizing or discouraging a depository institution from providing financial products and services to a cannabis legitimate business that is licensed under state or tribal law.</li> </ul>	American Bankers Association. ABA Cannabis Bill Section by Section 082718. August 27, 2018. Proposed Draft Cannabis Banking Legislation	8/27/18

DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
	<ul style="list-style-type: none"> <li>Requires the federal banking regulators to issue guidance and examination procedures for the treatment of cannabis accounts through the Federal Financial Institutions Examination Council (FFIEC) within 6 months of enactment of the Act after obtaining input from the public.</li> </ul>		
Cannabis One Page 9-5-18	<p>Summary: ABA Overview of Cannabis Banking.</p> <p>Key Points:</p> <p>Recommended Action Items</p> <ul style="list-style-type: none"> <li>Congress should approve a legislative solution that provides banks with clarity regarding the regulatory treatment of cannabis accounts and the ability to serve cannabis-related businesses in states where the activity is legal, if banks choose to do so.</li> <li>Regulators should properly instruct examiners on how to handle cannabis-related accounts (including industrial hemp), including secondary relationships with landlords, suppliers, or investors.</li> <li>FinCEN should maintain the guidance on the treatment and reporting of suspicious activity for cannabis-related accounts, and provide clarity on banking “ancillary” accounts (e.g., suppliers, vendors, landlords and employees of cannabis businesses).</li> </ul>	American Bankers Association. ABA Cannabis One Page 9-5-18. September 5, 2018. ABA Overview of Cannabis Banking.	9/5/18
Feinstein Grassley FinCEN letter & FinCEN response Feinstein Grassley	<p>Summary: Letter to, and response from, FinCEN regarding guidance issued on FIN 2014-G001.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>FinCEN does not purport to enhance the availability of financial services for illegal drug traffickers. The primary objective of FinCEN's guidance is to enhance the financial transparency, which is core to FinCEN's mission and fundamental purpose of the BSA. Given law enforcement's priorities with respect to marijuana-related crimes, some financial institutions may accept the risks associated with providing financial services to state-regulated marijuana-related businesses. Consistent with its mission, FinCEN wants to ensure that any such financial activity that occurs is transparent and subject to appropriate anti-money laundering safeguards.</li> </ul>	"Feinstein Grassley Letter to FinCEN." Dianne Feinstein and Charles Grassley to Jennifer Shasky Calvery - Director - US Dept of Treasury - Financial Crimes Enforcement Network. April 4, 2014. Senate Caucus on Internal Narcotics Control, Washington, DC.	4/4/14 5/8/14

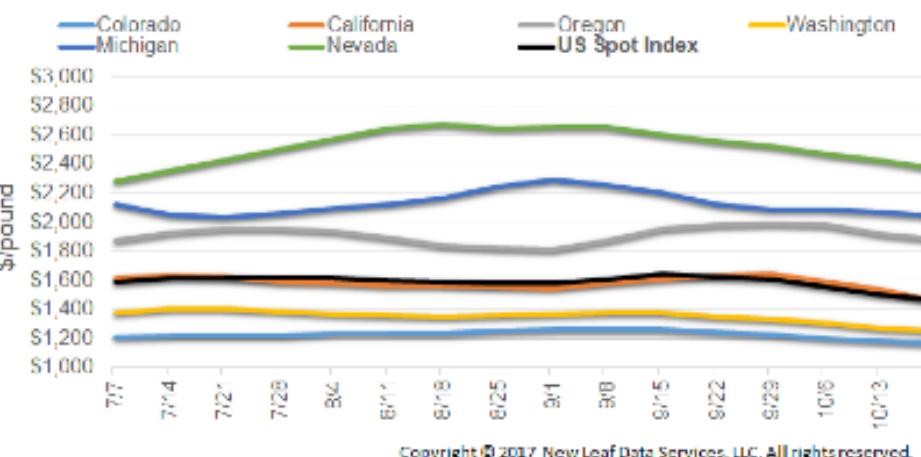
DOCUMENT NAME	SUMMARY	SOURCE CITATION	SOURCE DATE
	<ul style="list-style-type: none"> <li>FinCEN's guidance has not impact on the application of federal criminal laws. We defer to the Department of Justice's views on the matter in question as outlined in its separate guidance dated 2/14/14.</li> <li>We defer to the Department of Justice on all matters pertaining to the criminal treatment of marijuana activity, including asset forfeiture.</li> <li>FinCEN's guidance does not alter any provisions of the BSA, including criminal penalties for in 31 USC § 5322 &amp; 31 CFR § 1010.840.</li> <li>Only the Department of Justice has discretion to determine whether to prosecute violations of the BSA.</li> <li>FinCEN has no independent litigation authority. We defer to the Department of Justice on any questions concerning Federal Rules of Evidence. We note, however, that suspicious activity reports (SARs) are confidential, prosecutors must consult with FinCEN's counsel before disclosing SARs in discovery, and, as a matter of policy, FinCEN discourages the use3 of SARs against the filing institution as that could chill the filing of such reports in the future.</li> <li>As with all regulatory matters, in the past we have received questions from FIs both through our Helpline and at industry-sponsored outreach events where FinCEN was a participant. We do not maintain statistical records on informal contracts with FIs or the particular questions asked</li> </ul>	<p>"FinCEN Response to Sens. Feinstein Grassley." Jennifer Shasky Calvery to The Honorable Dianne Feinstein &amp; The Honorable Charles E. Grassley. May 8, 2014. Senate Caucus on Internal Narcotics Control, Washington, DC.</p>	

### C.1.2 Cannabis Economic Forecasts

Table 2: Cannabis Economic Forecasts

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
2018-California-Cannabis-Forecast - GreenMarketReport	<p>Summary: Green Mark Report's 2018 Cannabis Forecast for California.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>California's substantial black-market poses potential challenges in getting the industry more regulated.</li> <li>In four month sample (March to June 2017), sales by state(BDS Analytics): <ul style="list-style-type: none"> <li>CA - \$894mm (MMJ only).</li> <li>CO - \$516mm.</li> <li>Washington (WA) - \$302mm.</li> </ul> </li> </ul>	Green Market Report	1/18

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>○ Oregon (OR)- \$163mm.</li> <li>● Nevada's first four months of Adult Use Sales - \$163mm.</li> <li>● CA is responsible for 34% of all legal sales in sample.</li> <li>● ICF International whitepaper: <ul style="list-style-type: none"> <li>○ believes CA could reach \$15.9 to \$20.2 billion.</li> <li>○ Estimates 7.7 million cannabis consumers using between 108 and 137 million grams per month.</li> <li>○ Estimates 7.3% of sales is from out of state, worth a potential 95.4 million grams of their own.</li> <li>○ Estimates total demand at 1.3 – 1.6 billion grams per year, worth \$9.1 - \$11.5 billion in sales using CO low end per gram pricing (7.14).</li> </ul> </li> <li>● According to Cannabis Benchmarks© spot prices as of Nov 2017 were between \$500 and \$2500/pound (lb) with an average of \$1318, and expect costs to rise through the first year until prices settle.</li> <li>● Wholesale prices in CO were \$2000/lb when adult use was first implemented in Jan '15, and dropped to \$1115 by Nov '17.</li> </ul> <p>“New Leaf Cannabis Benchmarks Graph – Spot Prices” p6</p>		

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<p style="text-align: center;"><b>Cannabis Benchmarks® State Level Spot Pricing</b>  Trailing 4 Week Average \$/pound - Week Ending Oct 20, 2017</p>  <p style="text-align: center;">Copyright © 2017 New Leaf Data Services, LLC. All rights reserved.</p> <ul style="list-style-type: none"> <li>• State taxes for cultivators: \$9.25/ounce (oz) flower, \$2.75/oz trim, \$1.29/fresh plant; 15% sales tax (plus any local tax). Fitch Ratings estimates total taxes could reach 45%, compared to 20% - Oregon and 10%-20% - Arkansas. The higher taxes are likely to keep more black-market operations in business, especially considering 280e deduction restrictions.</li> <li>• ICF estimates tax revenue could reach \$2.4 billion to \$3.0 billion for CA. For comparison, tax revenue on cigarettes is \$84.7 million and alcohol is \$366 million.</li> <li>• Los Angeles City Controller estimates there are 1,700 dispensaries in Los Angeles alone, with only 139 tax licenses issued as of the report.</li> <li>• CA market is very diverse; the top 5 brands own 52% of concentrates market and 42% of edibles; the next 5 own 14% and 17% respectively.</li> <li>• Flower is still the dominant product in sales.</li> <li>• IFC's economic impact determined the industry could generate 81,000 – 103,000 new jobs, resulting in \$3.57 to \$4.52 billion in labor income in primary jobs.</li> </ul>		

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>Indirect job impact in secondary jobs also includes security, janitorial services, lab testing, and light manufacturers. All told this would support \$8.37 and \$10.64 billion in total industry activity. The value to the economy would be between \$5.51 and \$7.01.</li> <li>Green Market Report projects new jobs to hit 162,000; noting that \$996 million in sales resulted in 18,000 full time jobs in CO (10/16), meaning each job needed \$55,000 to support it. \$9 billion in sales = 162,000 jobs.</li> </ul>		
California Cultivation Licenses Top Counties - New Frontier	<p>Summary – Breakdown of licenses by county.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>Santa Barbara (33%), Humboldt (14%), Mendocino (13%), and Monterey (8%) counties account for 74% of the 3,040 license issued as of 7/18/18.</li> <li>Northern counties average 90 licenses per county, southern counties average 151.</li> <li>Mendocino County is estimated to have over 10,000 cultivators, but have just 430 licenses issued.</li> </ul>	New Frontier Data	7/29/18
California Legal Cannabis Projections - New Frontier	<p>Summary – California legal cannabis projections.</p> <p>Key Points</p> <ul style="list-style-type: none"> <li>2018 sales \$0.8 billion adult; \$1.1 billion MMJ – 2025 \$4.0 billion adult; \$0.8 billion MMJ.</li> <li>California share of US market 2015 – 48%; 2025 – 21%.</li> <li>\$175million tax revenue was budgeted for CA by June 2018. Quarter 1 collections were \$33.6 million (19.6% of six-month budget).</li> </ul>	New Frontier Data	5/20/18
Green Rush/ How Cannabis Legalization Will Impact California	<p>Summary: Synopsis on impacts to CA of adult-use legalization.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>Indicates US Market could reach \$24 billion by 2025 (New Frontier).</li> </ul>	Visual Capitalist	2/19/18

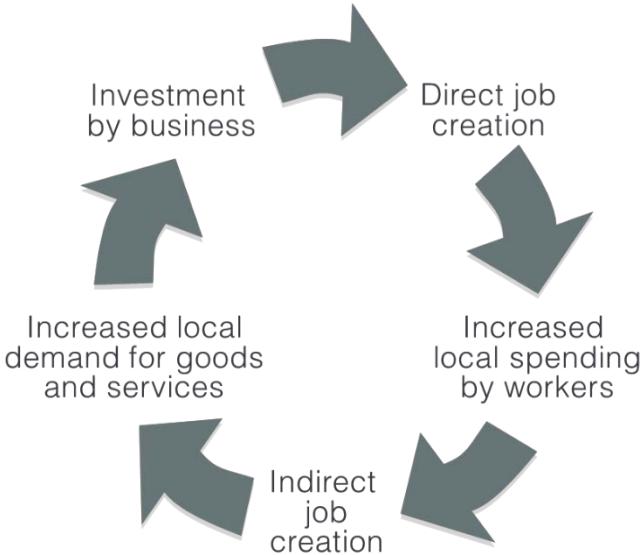
DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>State Licensed US Market expected to see 16% CAGR in the next decade (New Frontier).</li> <li>2017 Gallup poll indicates 64% support for cannabis legalization.</li> <li>CA is 6<sup>th</sup> largest economy in the world, with \$2.6 trillion GDP (BEA, IMF).</li> <li>Emerald Triangle largest producers in the world (CDFA, The Hill).</li> <li>Of the estimated 8.5 billion in total cannabis sales, \$2.8 is from medical market sales; the other \$5.7 billion is unregulated sales.</li> <li>Estimated \$1.5 billion market in 2018, grow to \$4 billion by 2020 (Investing News).</li> <li>Taxes could reach \$1 billion in revenue (Legislative Analyst's Office).</li> </ul>		
New Frontier Data Downgrades CA Cannabis Sales Projections by \$2 Billion - New Frontier	<p>Summary: New Frontier's new sales projections following Quarter (Q)1 2018.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>State collected \$33.6 million in Q1 of the projected \$175m 6-month budgeted collections.</li> <li>Reduced projected sales from \$3.8 billion to \$1.9 billion; 2025 \$4.72 billion vs \$6.7 billion.</li> <li>New Frontier indicates the reduction is a result of slow adaptation of heavily regulated market.</li> <li>New Compound Annual Growth Rate (CAGR) is 13.7% through 2025; MMJ -5.4% CAGR (1.2 billion to .76 billion) – Adult-Use 25.5% CAGR (\$0.8 billion to \$3.96 billion).</li> </ul>	<p>"New Frontier Data Downgrades CA Cannabis Sales Projections by \$2 Billion." New Frontier. May 23, 2018. Accessed October 11, 2018.  <a href="https://newfrontierdata.com/marijuana-insights/new-frontier-data-downgrades-ca-cannabis-sales-projections-2-billion/">https://newfrontierdata.com/marijuana-insights/new-frontier-data-downgrades-ca-cannabis-sales-projections-2-billion/</a>.</p>	5/22/18
The-California-Cannabis-Marketplace - BDS Analytics	<p>Summary: Review of CA Cannabis Marketplace.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>In four month sample (March to June 2017), sales by state: <ul style="list-style-type: none"> <li>CA - \$894 million (MMJ only).</li> <li>CO - \$516 million.</li> <li>WA - \$302 million.</li> <li>OR - \$163 million.</li> </ul> </li> <li>Nevada's first four months of adult use sales - \$163 million</li> <li>CA is responsible for 34% of all legal sales in sample.</li> </ul>	BDS Analytics	9/17

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>• CA Buying Habits: Flower 55%, Concentrates 25%(61% Vape), Edibles 12%, Other 8%.</li> <li>• In concentrate, top 5 brands have 52% market share, next 5 have 14%, which is more diverse than CO and WA (85% and 91% market share of top 10 respectively), but less than WA (43%)</li> </ul>		
What Does Weed Cost? The Complete Weed Price Breakdown - Honest Marijuana	<p>Summary: Breakdown of retail cannabis prices.</p> <p>Key Points: CA rates are \$8.93/gram (gm); \$31.25/8<sup>th</sup>; 62.50/4<sup>th</sup>; \$99.95/half; \$199.89/ounces;</p>	Honest Marijuana	6/1/18
California Cannabis Market, law, size, forecast - Cannabusinessplans.com	<p>Summary: Assessment of CA cannabis market.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Recreational cannabis sales officially began in California and during the first six months of 2018 the number of granted licenses jumped from 1,272 licenses on January 17th to 6,421 licenses on June 30th. The number of licenses grew during the first six months of 2018. <ul style="list-style-type: none"> <li>◦ Cultivation – 1001%.</li> <li>◦ Distributor and delivery – 263% and 252%.</li> <li>◦ Respectively manufacturing – 175%.</li> <li>◦ Microbusiness – 160%.</li> <li>◦ Retail/dispensary – 113%.</li> <li>◦ Testing licenses – 107% .</li> </ul> </li> <li>• New Regulations. <ul style="list-style-type: none"> <li>◦ The monetary value of product that delivery drivers may carry at any time was increased from \$3,000 to \$10,000.</li> <li>◦ Drivers must receive orders and stock their vehicles at a physical location before hitting the road to deliver them.</li> <li>◦ Single facilities that house multiple licensees now may utilize the same common areas, such as break rooms and restrooms.</li> <li>◦ Industry-friendly tweaks eliminated unnecessary overlaps for security and testing samples.</li> </ul> </li> </ul>	Cannabis Business Plans	7/18

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>○ A handful of changes favored by the Growers Association were added, such as expanded water source protection and transportation of immature plants.</li> <li>● Packing and Labeling Requirements. <ul style="list-style-type: none"> <li>○ A retailer shall not accept cannabis goods that are not properly packaged and labeled. A retailer shall not package or label cannabis goods, even if the cannabis goods were in inventory before July 1, 2018. However, for medicinal sales, retailers will place a sticker on cannabis goods stating, “FOR MEDICAL USE ONLY” upon sale to a qualified medicinal consumer, unless the statement is already printed on the package.</li> <li>○ A retailer may not send unpackaged cannabis goods to another licensee for packaging or labeling. Cannabis goods in possession of a retailer that do not meet packaging and labeling requirements must be destroyed.</li> <li>○ Exit packaging is not required to be child-resistant and can no longer be used to satisfy the child- resistant packaging requirements. All cannabis goods must be in child-resistant packaging prior to delivery to a retailer.</li> </ul> </li> <li>● Tetrahydrocannabinol (THC) Limits. <ul style="list-style-type: none"> <li>○ Edible cannabis products may not exceed 10 milligrams of THC per serving and may not exceed 100 milligrams of THC per package.</li> <li>○ Non-edible cannabis products shall not contain more than 1,000 milligrams of THC per package if intended for sale only in the adult-use market; non-edible cannabis products shall not contain more than 2,000 milligrams of THC per package if intended for sale only in the medicinal market.</li> <li>○ Market could reach \$5 billion (UCAIC).</li> <li>○ \$2.7billion in sales expected to grow more than 18% to \$5.6 billion by 2020 (Arcview Group).</li> <li>○ Estimated 29% of cannabis customers will stay in the black-market and save 15% (UCAIC).</li> <li>○ After adopting regulations, market share would be 61.5% legal adult use; 29.6% unregulated adult use. MMJ makes up about 9% of overall market.</li> </ul> </li> </ul>		

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>○ CA state dispensaries sold \$2,757 million worth of cannabis products, compared to \$1,129 million in Colorado's robust cannabis marketplace, \$975 million in Washington, and \$502 million in Oregon.</li> <li>○ Within the first quarter of calendar year 2018, the cultivation tax generated \$1.6 million, the excise tax generated \$32 million, and the sales tax generated \$27.3 million in revenue, according to the California Department of Tax and Fee Administration.</li> </ul>		
2018-Cannabis-Trend-Report-5	<p>Summary: Review of market trends and niche growth sectors.</p> <p>Key Points: Areas of growth/concentration include:</p> <ul style="list-style-type: none"> <li>● Women in Cannabis – Women make up 27% of executives (compared to 23% nationwide) – 35% in dispensaries, 42% in ancillary brands. On the consumer side, Cannabis Consumer Coalition identified 53% responders were female, 42% male.</li> <li>● Publicly traded cannabis companies: <ul style="list-style-type: none"> <li>○ AgTech – companies are signing supply agreements with Canada provinces. Canopy is expected to have over 5 million square feet worldwide.</li> <li>○ Hollyweed – entertainment industry has slowly embraced support for the industry, increasing its acceptance and exposure. Partnership between Lord Jones (edible maker) and Standard International to open a location in the Standard Hollywood lobby.</li> <li>○ Infused Cannabis Beverages – Lagunitas Brewing Company releasing “Hi-Fi Hops”, India Pale Ale (IPA) inspired cannabis drink with no alcohol (because it's prohibited) and 5 milligrams (mg)/5mg. THC/cannabidiol (CBD) and 100mg THC options. Constellation has material holdings in Canopy.</li> <li>○ Blockchain &amp; Cryptocurrency – cannabis Initial Coin Offering (ICO) offered to the market results an unregulated funding method. ICOs are used to deal with the banking issue and cash problems, notably PotCoin and ParagonCoin. Blockchain is also integrating into the supply chain, seed-to-sale tracking, and improving the quality of electronic medical records.</li> </ul> </li> </ul>	AxisWire	Q1 2018

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>○ International Trade.</li> <li>○ Music Industry.</li> </ul>		
Legal Cannabis Industry Poised For Big Growth	<p>Summary: Expected growth of the cannabis industry.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Legal worldwide cannabis spending expected to reach \$57 billion by 2027 (Arcview Market Research), with 67% adult-use and 33% MMJ.</li> <li>• North America Spending expected to climb from \$9.2 billion in 2017 to \$47.3 billion in 2027.</li> </ul>	Tom Pellechia - Forbes	3/1/18
California marijuana market off to slow start	<p>Summary: Description of CA cannabis Q1 sales.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Sales through February were \$339 million (BDS Analytics).</li> <li>• 85 – 90% of industry in CA is still not licensed (Chris Beals – President and GC WeedMaps).</li> <li>• Taxes and regulations causing major licensing hurdles along the supply chain.</li> <li>• Taxes in CO fell below budget in year 1 and have exceeded every year following.</li> </ul>		
MPG Impact of Marijuana on Colorado-Final	<p>Summary: Review of the economic impact legalizing cannabis had on CO.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Monetary impact of \$1 spent in: Retail Cannabis – \$2.40; Manufacturing - \$2.34; Cultivation – \$2.13. For Perspective, federal gov't - \$2.43; Business Services \$2.13; General Manufacturing \$1.94.</li> <li>• 14.1% demand growth rate from '14 – '15; projected to remain at 11.3 through 2020.</li> <li>• Sales by licensed vendors grew 56.4% from 14-15 by weight, and expected to grow 16.2% until 2020.</li> <li>• As the sales grow, the prices will drop and moderate the revenue growth rate related to quantity of sales.</li> <li>• Legal marijuana created 18 thousand (K) new jobs in 2015 – 12.6K in plant touching, 5.4K in ancillary.</li> </ul>	Marijuana Policy Group	10/16

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<ul style="list-style-type: none"> <li>Tax collection grew from \$63.4 million (83%-17% adult use to MMJ) in 2014 to \$121.2 million (91%-9% respectively) in 2015.</li> </ul>  <pre> graph TD     A[Investment by business] --&gt; B[Direct job creation]     B --&gt; C[Increased local spending by workers]     C --&gt; D[Indirect job creation]     D --&gt; E[Increased local demand for goods and services]     E --&gt; A   </pre>		

DOCUMENT NAME	SUMMARY					SOURCE	SOURCE DATE					
		Type of Impact										
Description		Direct	Indirect	Induced	Total							
Local government passenger transit	1.000	1.497	0.994	3.491								
Other federal government enterprises	1.000	1.031	0.389	2.421								
<b>Marijuana Retail</b>	<b>1.000</b>	<b>1.029</b>	<b>0.369</b>	<b>2.398</b>								
<b>Marijuana Manufacturing and Baking</b>	<b>1.000</b>	<b>0.984</b>	<b>0.355</b>	<b>2.340</b>								
Religious organizations	1.000	0.837	0.443	2.281								
Architectural, engineering, and related services	1.000	0.500	0.751	2.251								
Dry-cleaning and laundry services	1.000	0.442	1.033	2.475								
Environmental and other technical consulting services	1.000	0.428	0.822	2.250								
Promoters of performing arts and sports and agents for public figures	1.000	0.788	0.455	2.242								
Business and professional associations	1.000	0.314	0.922	2.236								
Offices of physicians	1.000	0.377	0.841	2.218								
Independent artists, writers, and performers	1.000	0.804	0.389	2.193								
<b>Marijuana cultivation</b>	<b>1.000</b>	<b>0.793</b>	<b>0.332</b>	<b>2.126</b>								
Wholesale Trade	1.000	0.543	0.443	1.987								
Manufacturing	1.000	0.584	0.357	1.940								
Retail trade	1.000	0.522	0.363	1.884								
Mining	1.000	0.292	0.497	1.789								
Gambling industries (except casino hotels)	1.000	0.401	0.332	1.733								
Racing and Track Operation	1.000	0.228	0.278	1.506								
Amusement parks and arcades	1.000	0.273	0.213	1.486								

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
Jul 2018 CA Licenses	<p><b>THE GROWTH OF MARIJUANA LICENSES IN CALIFORNIA: Q1-Q2 2018</b></p> <p><b>Q2 2018</b></p> <p><b>6,421</b> TOTAL MARIJUANA LICENSES</p> <p><b>5,369</b> TOTAL MARIJUANA LICENSES</p> <p><b>5,000+</b> LICENSES WERE ISSUED IN THE FIRST QUARTER OF 2018</p> <p><b>GROWTH OF CA LICENSES</b></p> <p><b>CANNABIZ MEDIA</b></p> <p><small>Copyright © 2018 by CANN Media LLC via Cannabiz Media. Source: Cannabiz Media License Database. <a href="http://www.cannabizmedia.com">www.cannabizmedia.com</a></small></p>	<p>"California Adds 6421 Cannabis Licenses in First Half of 2018." New Cannabis Ventures. July 20, 2018.</p> <p><a href="http://www.newcannabisventures.com/california-adds-6421-cannabis-licenses-in-first-half-of-2018/">www.newcannabisventures.com/california-adds-6421-cannabis-licenses-in-first-half-of-2018/</a>.</p>	

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<p>During the first six months of 2018, since California began issuing temporary marijuana licenses for adult-use cannabis, the number of granted licenses jumped from 1,272 licenses on January 17th to 6,421 licenses on June 30th. That's a growth rate of 405%.</p> <p>The number of cultivation licenses grew the most during the first six months of 2018 (1001% growth). Distributor and delivery licenses grew at similar rates (263% and 252%, respectively) followed by manufacturing licenses with a 175% growth rate and microbusiness licenses with a 160% growth rate. Retail/dispensary licenses grew by 113%, and testing licenses grew by 107%. California began issuing event licenses in May 2018, and by the end of June, 64 event licenses had been granted.</p> <p>The data also shows that California dominates the US marijuana market accounting for 40% of active marijuana licenses nationwide. In total, 100% of microbusiness and event licenses are in California as are 75% of distributor licenses. The state also accounts for 48% of all cultivation licenses in the country, 41% of delivery licenses, 29% of manufacturing licenses, 22% of testing licenses, and 20% of retail/dispensary licenses.</p>		

## C.2 Government Owned Banks

Table 3: Government Owned Banks

Document Name	Summary	Source	Source Date
Promises of Public Banks Don't Match Reality-American Banker	<p>Summary: Mark Calabria, Director of Financial Regulation Studies, Cato Institute, cites examples to support his contention that public banks have not performed well historically and there is no good reason to form them now.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Several public banks are under consideration including Colorado, Seattle and Santa Fe but government banks are a cure worse than the disease.</li> <li>• Public banks date back to 1408 in Genoa, Italy. Banco di San Giorgio failed in part because of loan losses to its sponsoring government. The first American public bank,</li> </ul>	<p>"Promises of Public Banks Don't Match Reality." American Banker. March 05, 2015. <a href="https://www.americanbanker.com/opinion/promises-of-public-banks-dont-match-reality">https://www.americanbanker.com/opinion/promises-of-public-banks-dont-match-reality</a></p>	3/5/15

Document Name	Summary	Source	Source Date
	<p>formed in Vermont in 1806, failed after six years costing the citizens of Vermont the equivalent of almost \$3 billion in today's dollars. Seven other states established public banks in the 1800's, with the last of them closing in 1859. They were characterized by rampant corruption due to politics.</p> <ul style="list-style-type: none"> <li>• There are foreboding examples abroad as well. Germany has an extensive system of public banks, the most prominent being Landesbanken. They are a minority of Germany's financial system but contributed the bulk of the subprime losses in 2008.</li> <li>• The only state-run and state-owned American bank is The State Bank of North Dakota, which is generally well-run. Much of its below-market lending has been to the fossil fuel industry which tends to subsidize the powerful and connected. Another issue is a hidden subsidy because it pays below market rates on state deposits.</li> <li>• Academic research confirms undesirability of government-owned banks. The most comprehensive study done by Harvard University (see Government Ownership of Banks) finds lower economic growth and growth of productivity.</li> <li>• Lending decisions at government owned banks become increasingly driven by politics rather than economics.</li> </ul>		
Questions for analysis of a State Bank	<p>Summary: Questions for further consideration of a State Bank</p> <p>Key Points: Some of the decisions that policymakers will have to make when designing a state bank:</p> <ul style="list-style-type: none"> <li>• Start-up Capital: Will the most profitable scenarios be politically feasible? Are there other effects to the state from increasing its portfolio of government offered bonds? Could the bonds or stock sale be designed in a way that promotes the health of the state pension funds as well? Will the start-up phase see a ramping up of loan to assets or capital itself?</li> <li>• Deposits: Where will the deposits come from? Will they only be from the state itself? What amount of state deposits will be put into the bank and under what schedule (similar to the capital ramp up decisions)? How can in-state small and medium sized banks best utilize the depository services and letters of credit this banker's bank would provide?</li> <li>• Loans: What limitations will be put on loans and other economic development tools for the bank? Are only participation loans going to be allowed? Will the bank be allowed to purchase real estate loans from the secondary market, like BND does? Will there be provisions for loans targeted toward specific economic development purposes, such as agricultural start-ups or venture capital investments (again, similar to BND), or even clean energy or infrastructure projects that fit with the goals of the state? How can in-state small and medium sized banks best utilize the participation loans and correspondent lending services?</li> <li>• State Dividend: This is another subject that we have looked at in the analysis, and while we find that higher dividends make the quickest return to the state, lower dividends grow the state bank's capital and eventually result in higher profits in out</li> </ul>	Washington State Bank Analysis. Publication. State of Washington Bank Analysis. Eugene, Oregon: Center for State Innovation, 2010.	December 2010

Document Name	Summary	Source	Source Date
	<p>years. Policymakers will have to answer the question, is it better to get a return right away or build up a pool of funds that can be leveraged to help future generations?</p> <p>Summary: A study on public banks, focusing on the Bank of North Dakota.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Long lead times relating to creation, planning and profitability. <ul style="list-style-type: none"> <li>◦ These are clearly very long timeframes. A public state bank would take extended time to start-up operations, to assemble its loan portfolio, and to mature its operations. The Bank of North Dakota has been in operation for over 90 years, progressively increasing both the magnitude of its operations and its return to the state.</li> </ul> </li> <li>• Precedent in low Return on Equity (ROE). <ul style="list-style-type: none"> <li>◦ The Bank of North Dakota comparison provided very little (10%) or almost all (90%) of the state bank's profits. However, by year 40, if the bank consistently returned most profits to the state, the year-by-year return would be only about \$20 million compared to the \$175 million in dividends if the state let the bank keep and accrue most of its profits (see Appendix 4 for the data behind these charts).</li> </ul> </li> <li>• Of specific note the public bank studies anticipate, as in North Dakota, that the principal deposits incorporate and in many cases are the state tax funds. As the loans are also principally provided by the state, the example differs from this cannabis bank model where all deposits are generated by the bank itself.</li> <li>• With those amounts included, actual net profit to the state would be about \$6.6 million per \$100 million in start-up capital (assuming the leverage ratio, etc. outlined above) and net state ROE would be around 6.65%. Since this analysis is meant to inform policymakers, we have set-up a fiscal impact calculator that allows one to set capital, leverage ratio, loan to asset ratio, state dividends, bond coupon rate, bond term, and bond sinking fund interest rate, based on capitalization from a bond.</li> </ul>	<p>Washington State Bank Analysis. Publication. State of Washington Bank Analysis. Eugene, Oregon: Center for State Innovation, 2010.</p>	December 2010
Asset and loan statistics – Oregon State Bank review	<p>Summary: Asset and loan statistics for Oregon State</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Assets in Oregon small &amp; medium sized banks in Q3 2010 \$24,252,389,000</li> <li>• 1% higher loan to asset ratio projected due to a State Bank</li> <li>• Increased amount of total loans \$242,523,890</li> <li>• Increased amount of small business real estate loans \$40,259,010</li> <li>• Increased amount of small business C&amp;I loans \$21,853,113</li> <li>• Increased amount of small business jobs due to real estate loans 332</li> <li>• Increased amount of small business jobs due to C&amp;I loans 687</li> <li>• Estimated total effect on small business jobs due to a state bank 1,019</li> </ul>	Oregon State Bank Analysis. Publication. Banking, State of Oregon - State Bank Analysis. Eugene, Oregon: Center for State Innovation, 2010.	December 2010

Document Name	Summary	Source	Source Date
LA City Report	<p>Summary: A history of public banking proposals nationwide and the (public) Bank of North Dakota summary.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Several States have proposed establishing public banks including, Illinois, Massachusetts, Arizona, Maine, California, and Hawaii. None of these proposals were approved by legislature.</li> <li>• North Dakota Founded in 1919, the Bank of North Dakota (BND) in the wake of economic hardship that led to heightened anti-big-bank and anti-big-business sentiment. <ul style="list-style-type: none"> <li>◦ One of BND's most significant purposes has been participatory lending with community banks in order to stabilize the state economy</li> <li>◦ BND did not make transfers to the state general fund until 1945, which suggest a public bank would take decades to become profitable. Since 1971, however, the BND has shown a profit each year.</li> </ul> </li> </ul>	Tso, Sharon M. Public Bank Framework and Existing Housing and Economic Programs. Report no. 18-02-0178. Chief Legislative Analyst, City of Los Angeles. Los Angeles, CA: City of Los Angeles, 2018.	February 2018.
City of Los Angeles	<p>Summary: The definition of public banking, a look at established public banks, and discussion regarding the consideration of the Municipal Bank of Los Angeles.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• A summary of the Bank of North Dakota.</li> <li>• The most recent interest in public banking can also be attributed to the consolidation of local community banks with larger national and international institutions.</li> <li>• Defining public banks and municipal banks and pros and cons of introducing public banks into an industry dominated by commercial banks.</li> <li>• A review of the literature concerning public banks has not led to the identification of a consistent definition of such a financial institution beyond the core concept of public ownership.</li> <li>• Discussion regarding the consideration of the formation of the Municipal Bank of Los Angeles</li> </ul>	Tso, Sharon M. Public Bank Framework and Existing Housing and Economic Programs. Report no. 18-02-0178. Chief Legislative Analyst, City of Los Angeles. Los Angeles, CA: City of Los Angeles, 2018.	February 2018
Boston MA study on public bank.	<p>Summary: The study found that the evidence on the benefits of having a state-owned bank is mixed.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• The Bank of North Dakota has arguably increased the lending capacity of North Dakota's small banks.</li> </ul>	Report of the Commission to Study the Feasibility of Establishing a Bank Owned by the Commonwealth. Publication no. Section 180 of Chapter 240 of	

Document Name	Summary	Source	Source Date
	<ul style="list-style-type: none"> <li>The Bank of North Dakota's contributions to stabilizing the state economy and finances appear to be relatively minor.</li> <li>The Bank of North Dakota was capitalized through a \$2 million bond issue in 1919 and today's equivalent in Massachusetts would be about \$3.6 billion, or about 21% of the states' direct debt outstanding.</li> <li>An aggressive schedule of withdrawing funds from private institutions could disrupt the economy and a gradual phase-in would delay any benefits of state-owned bank lending.</li> </ul>	the Acts 2010. Commission on Public Banking, Commonwealth of Massachusetts. Boston, MA: Commission, 2011.	
Boston MA findings and recommendations regarding a Public Bank.	<p>Summary: The Commission finds no compelling rationale, at this time, to establish a state-owned bank in Massachusetts.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>Access to capital remains a challenge for small businesses of the Commonwealth</li> <li>Policymakers should monitor the efforts and activities of the Massachusetts Growth Capital Corporation</li> <li>The Treasurer should monitor and report on the outcomes of the Small Business Banking Partnership program</li> </ul>	Report of the Commission to Study the Feasibility of Establishing a Bank Owned by the Commonwealth. Publication no. Section 180 of Chapter 240 of the Acts 2010. Commission on Public Banking, Commonwealth of Massachusetts. Boston, MA: Commission, 2011.	
Public Banks perform worse than public banks worldwide due to political interference	<p>Summary: Public banks throughout the world perform poorly when compared to non-public banks, and the private banks perform better than all other counterparts worldwide.</p> <ul style="list-style-type: none"> <li>The study reviewed public and private bank data from 100 countries during the period of 1993 through 2007.</li> <li>The findings reflect the political interferences found cite and explain impacts from political considerations in operations and lending, executive turnover, and political elections creating instability in the banks.</li> <li>Government supported or backed banks and government owned banks are interchangeable in findings, as are private owned banks and privately held banks.</li> <li>The findings reflect a historical representation identifying four similar factors, multiplicity of goals, monopoly positioning, weak managerial and executive structures, and lack and control of budgetary constraints.</li> <li>Public banks by their nature are designed to maximize social welfare rather than profitability, and as such create a mechanism for pursuing the goals and aspirations of individual politicians at the expense of business design, structure and risk control.</li> </ul>	Shen, Chung Hua. "Why Do Government Banks Perform Worse - A Political Interference View." PhD diss., National Taiwan University, Taiwan, 2009.	2009
The Future of State-Owned Financial Institutions	Research shows where public financial institutions are owned by the state, there will be slower financial development, and less efficient financial systems, less private sector credit, and slower growth of Gross Domestic Product (GDP).	Caprio, Gerard. The Future of State-owned Financial Institutions. Washington, D.C.:	2006

Document Name	Summary	Source	Source Date
	Experts discussed the challenge presented by state-owned financial institutions and cross disciplinary solutions for policymakers and banking regulators.	Brookings Institution Press, 2004.  Binns, David, Richard Hemming, and James Hanson. The 17th Asian Finance Association Conference, Carlton Hotel, Auckland, New Zealand: AsianFA/FMA 2006 Meeting: Bridging Finance Theory and Practice, 10-12 July 2006: Book of Abstracts. Auckland, N.Z.: Massey University, Dept. of Finance, Banking & Property and Dept. of Commerce, 2006.	
History on public banking with information on failures.	<p>Summary: A history of public banking and subsequent failures, starting in 1408.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Public banking's initial mission statement was to eradicate selfish banking practices by self-interested bankers.</li> <li>• Proponents of public banking might point to the Bank of North Dakota, generally a well-run institution, currently the only state-run and state-owned American bank.</li> <li>• One issue of concern with BND is lack of transparency in some areas.</li> <li>• Harvard University economists, find that higher government ownership of banks is associated with slower subsequent development of the financial system, lower economic growth, and, in particular, lower growth of productivity.</li> </ul> <p>When the government owns the banks, lending decisions become increasingly driven by politics rather than economics.</p>	Calabria, Mark. "Promises of Public Banks Don't Match Reality." American Banker, March 5, 2015.	2015
Legal Memorandum from Davis Polk and Wardwell		"Bank Regulatory Considerations to Establishing a Public Bank in the State of California." Davis Polk & Wardwell to Lawyers Committee for Civil Rights of the San Francisco Bay Area,	2017

Document Name	Summary	Source	Source Date
Federal Reserve Bank of Chicago	The structure of modern central banks and the history of pre-Napoleonic era public banks.	November 18, 2017, 1-38.	2014
Montana Partnership Bank (Correspondent banking similar to ND Bank)	<p>Summary: This document provides a summary of Montana Organizing Project (MOP) using the BND model as a comparison and guide.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Montana Public Funds: Building a Partnership Bank <ul style="list-style-type: none"> <li>◦ Montana Organizing Project (MOP) is a collaboration of diverse community, civic, labor and faith groups and community members who have come together to form an organization. We actively work for economic, racial and social justice, promoting the dignity and empowerment of people with low and middle incomes whose voices have not been heard in their communities.</li> <li>◦ A Montana Partnership Bank is the key to directing more public investments into Montana communities. Such a bank would also increase the resilience of Montana's economy and provide more returns at the community and state levels, by partnering — not competing — with local financial institutions.</li> </ul> </li> <li>• How Bank of North Dakota works <ul style="list-style-type: none"> <li>◦ BND operates as a bank, which gives it greater capacity and flexibility to deploy public funds to local communities.</li> <li>◦ Over this decade, BND has typically returned an average of \$30 million each year to the general fund, using the remainder to grow the states' equity in the bank and thus BND's capacity to lend.</li> </ul> </li> <li>• A Montana Partnership Bank would be a subset of the states' total assets under management.</li> <li>• The early years of a Montana Partnership Bank would see an institution much smaller than the Bank of North Dakota, perhaps an early-stage target of \$100 million in equity and total deposits of \$1 billion.</li> <li>• Contact info: <ul style="list-style-type: none"> <li>◦ <a href="http://montanaorganizingproject.org">montanaorganizingproject.org</a></li> <li>◦ Sheena Rice <a href="mailto:sheena@montanaorganizingproject.org">sheena@montanaorganizingproject.org</a> 406-490-9777</li> <li>◦ Jason Collette <a href="mailto:jcollette@mainsstreetalliance.org">jcollette@mainsstreetalliance.org</a> 406-437-3311</li> </ul> </li> </ul>	Roberts, William, and Francois R. Velde. "Early Public Banks." Early Public Banks WP2014 (July 2014).	Rice, Sheena, and Jason Collette. "The Montana Partnership Bank." Montana Organizing Project, February 2013.

### C.2.1 Taxation

Table 4: Taxation

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
CA Taxation Guide	<p>Summary: Pamphlet outlining CA state tax rates and requirements.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• All licensed entities must register with the California Department of Tax and Fee Administration (CDTFA) for a seller's permit and to pay tax. Distributors must also register for a cannabis tax permit to report and pay cultivation and excise taxes.</li> <li>• Cultivation tax – tax on harvested cannabis entering the commercial market, paid by either the distributor or the manufacturer. <ul style="list-style-type: none"> <li>◦ \$9.25 per dry-weight ounce of cannabis flowers.</li> <li>◦ \$2.75 per dry-weight ounce of cannabis leaves.</li> <li>◦ \$1.29 per ounce of fresh cannabis plant.</li> </ul> </li> <li>• Cannabis excise tax – Imposed on all purchasers of cannabis, including MMJ, for 15% of the average market price of retail sale. Retailers must collect the Excise tax from the customer and pay it to their distributor. The purchaser must pay the tax at the time of sale and is subject to sales tax.</li> <li>• Cannabis distributors are required to: <ul style="list-style-type: none"> <li>◦ Register with CDFTA for cannabis tax and seller's permits.</li> <li>◦ Collect excise tax from retailers they supply.</li> <li>◦ Collect cultivation tax from cultivators they purchase or transfer from.</li> <li>◦ File both cannabis tax and sales and use tax returns.</li> </ul> </li> </ul>	CDTFA	2/18
CA Taxation on Inventory	<p>Summary: Guidance on how taxes apply to cannabis inventory.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Cannabis excise tax must be paid by cannabis distributors</li> <li>• Cannabis retailer must include notice that excise tax is included in the price, and pay the taxes by the 15<sup>th</sup> of the following month that they collected it.</li> <li>• Cannabis distributors – invoicing and recordkeeping: <ul style="list-style-type: none"> <li>◦ Invoice date.</li> <li>◦ Name and seller's permit number – distributor.</li> <li>◦ Name of the cannabis retailer and their seller's permit number.</li> </ul> </li> </ul>	CDFTA	1/18

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	o Amount of excise tax collected.		
Cannabis Taxes with Manufacturer	<p style="text-align: center;"><b>California Cannabis Taxes Flowchart With Manufacturer</b></p> <pre> graph TD     Retailer[Retailer] -- "Sales and Use Tax" --&gt; CDTFA[CDTFA]     Retailer -- "Cannabis Excise Tax" --&gt; Distributor[Distributor]     Distributor -- "Cannabis Excise Tax" --&gt; CDTFA     Distributor -- "Cultivation Tax" --&gt; CDTFA     Manufacturer[Manufacturer] -- "Cultivation Tax" --&gt; Distributor     Cultivator[Cultivator] -- "*Cultivation Tax" --&gt; Manufacturer   </pre> <p>The flowchart illustrates the tax collection process for cannabis. It starts with a Retailer who pays a Sales and Use Tax to the CDTFA. The Retailer also pays a Cannabis Excise Tax to a Distributor. The Distributor then pays both a Cannabis Excise Tax and a Cultivation Tax to the CDTFA. The Distributor also receives a Cultivation Tax from a Manufacturer. Finally, the Cultivator pays a *Cultivation Tax to the Manufacturer.</p>	CDFTA	1/18

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
Cultivation Tax with Multiple Manufacturers	<p style="text-align: center;"><b>California Cannabis Taxes Flowchart</b>  <b>Cultivation Tax With Multiple Manufacturers</b></p> <pre> graph TD     Cultivator["Cultivator Sells 1,440 oz. cannabis leaves and pays \$3,960 (1,440 x \$2.75) cultivation tax."] --&gt; CultivationTax["Cultivation Tax"]     CultivationTax --&gt; M1["Manufacturer 1 Collects \$3,960 cultivation tax and provides receipt. Manufactures cannabis oil from 1,440 oz. and sells one third of the oil to three different manufacturers*."]     M1 --&gt; M2["Manufacturer 2 Collects \$1,320 (\$3,960/3) in cultivation tax and provides receipt. Manufactures edibles to sell to a distributor*."]     M1 --&gt; M3["Manufacturer 3 Collects \$1,320 (\$3,960/3) in cultivation tax and provides receipt. Manufactures edibles to sell to a distributor*."]     M1 --&gt; M4["Manufacturer 4 Collects \$1,320 (\$3,960/3) in cultivation tax and provides receipt. Manufactures vape pen cartridges to sell to a distributor*."]     M2 --&gt; D1["Distributor 1 Collects \$1,320 cultivation tax from Manufacturer 2 and \$1,320 cultivation tax from Manufacturer 3 and provides receipts. Conducts quality assurance review and has products tested. Reports and pays \$2,640 in cultivation tax to the CDTFA."]     M3 --&gt; D1     M4 --&gt; D2["Distributor 2 Collects \$1,320 cultivation tax from Manufacturer 4 and provides receipt. Conducts quality assurance review and has products tested. Reports and pays \$1,320 in cultivation tax to the CDTFA."]     D1 --&gt; CDTFA["CDTFA"]     D2 --&gt; CDTFA   </pre>	CDFTA	1/18

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
Cannabis Taxes with No Manufacturer	<p style="text-align: center;"><b>California Cannabis Taxes Flowchart (With No Manufacturer)</b></p> <pre> graph TD     Retailer[Retailer] -- "Sales and Use Tax" --&gt; CDTFA1[CDTFA]     Distributor[Distributor] -- "Cannabis Excise Tax" --&gt; CDTFA2[CDTFA]     Distributor -- "Cultivation Tax" --&gt; CDTFA3[CDTFA]     Cultivator[Cultivator] -- "Cultivation Tax" --&gt; Distributor   </pre> <p>The flowchart illustrates the tax collection process for cannabis. It starts with a <b>Retailer</b> who pays a <b>Sales and Use Tax</b> to the <b>CDTFA</b>. The <b>Retailer</b> then sells to a <b>Distributor</b>, who in turn pays a <b>Cannabis Excise Tax</b> and a <b>Cultivation Tax</b> to the <b>CDTFA</b>. Finally, the <b>Distributor</b> sells to a <b>Cultivator</b>, who pays a <b>Cultivation Tax</b> back to the <b>Distributor</b>.</p>	CDFTA	1/18
Important Notice re Cannabis Taxes for Distributors	<p>Summary: Special notice regarding taxation for cannabis distributors.</p> <p>Key Points:</p> <p>As a cannabis distributor, you are required to electronically report and pay both the cultivation tax and cannabis excise tax on your cannabis tax return.</p> <p><b>Reporting the cultivation tax</b></p> <p>The cultivation tax must be reported:</p> <ul style="list-style-type: none"> <li>• For the reporting period and in ounces.</li> </ul> <p><b>Reporting the cannabis excise tax</b></p>	CDFTA	2-18

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE												
	<p>The cannabis excise tax must be reported:</p> <ul style="list-style-type: none"> <li>For the reporting period in which you sell or transfer the cannabis and based on the average market price of the cannabis.</li> </ul> <p>For specific invoice requirements related to these types of transactions, please see “Tax Guide for Cannabis Businesses” at <a href="http://www.cdtfa.ca.gov/industry/cannabis.htm">www.cdtfa.ca.gov/industry/cannabis.htm</a>.</p>														
July2018-City-Rates	<p>Summary: A list of all city tax rates, by city.</p> <p>Key Points:</p> <table border="1"> <tbody> <tr> <td>Max</td><td>10.250%</td><td>LA County Cities (Hawthorne, East Lynwood, Compton, Long Beach, Lynwood, Pico Rivera, Santa Monica, Southgate)</td></tr> <tr> <td>Min</td><td>7.250%</td><td>467 Cities</td></tr> <tr> <td>Average</td><td>8.048%</td><td></td></tr> <tr> <td>Most Frequent</td><td>7.750%</td><td></td></tr> </tbody> </table>	Max	10.250%	LA County Cities (Hawthorne, East Lynwood, Compton, Long Beach, Lynwood, Pico Rivera, Santa Monica, Southgate)	Min	7.250%	467 Cities	Average	8.048%		Most Frequent	7.750%		California State Treasurer's Office	7/18
Max	10.250%	LA County Cities (Hawthorne, East Lynwood, Compton, Long Beach, Lynwood, Pico Rivera, Santa Monica, Southgate)													
Min	7.250%	467 Cities													
Average	8.048%														
Most Frequent	7.750%														
MGO_California_Cannabis_Tax_Collection_2017_v11	<p>Summary: A study proposing a tax collection solution for CA.</p> <p>Key Points: Listed impacts of the current banking model on cannabis businesses and government agencies:</p> <p><b>Cannabis Businesses</b></p> <ul style="list-style-type: none"> <li>Safety concerns for employees and community.</li> <li>Risk of lost or missed tax/fee payments.</li> <li>Operational difficulties, e.g. payroll.</li> <li>Need for audit-ready documentation/processes.</li> </ul> <p><b>Government Agencies</b></p> <ul style="list-style-type: none"> <li>Safety concerns for employees and community.</li> <li>Difficulty tracking and receiving tax/fee payments.</li> <li>Lack audit trail data to track tax/fee requirements.</li> </ul>	MGO (consulting firm)	9/17												

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<p><b>Monthly sales \$200,000</b></p> <p>Board Of Equalization 15% Excise Tax \$30,000</p> <p>State Sales Tax 9% \$18,000</p> <p>Local 5% Tax \$10,000 Estimated total cash to be delivered to government agencies: <b>\$58,000</b></p> <p><b>Benefits of solution include:</b></p> <ul style="list-style-type: none"> <li>• Pathway to Audit-Ready business operations.</li> <li>• Provides security, transparency, and efficiency for the cannabis industry.</li> </ul> <p>Components to California Cash Tax Collection (CCTC) solution:</p> <p><b>Transfer of Physical Assets (TPA)</b></p> <ul style="list-style-type: none"> <li>• Master contracts with state agencies and local governments.</li> <li>• Master service contracts with armored carrier providers.</li> <li>• Master lease agreements with smart safe providers.</li> <li>• Sub-lease agreements with licensed operators for armored carrier providers and smart safes.</li> <li>• Online portal for transparency and accountability.</li> <li>• Monthly reporting and filing.</li> </ul>		

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
Publication 116, Sales and Use Tax Records	<p>Summary: Detail on record requirements for sales and tax.</p> <p>Key Points:</p> <ul style="list-style-type: none"> <li>• Reasons for record retention requirements: <ul style="list-style-type: none"> <li>◦ Verify the accuracy of your sales and use tax returns</li> <li>◦ Determine if you have correctly paid tax due on your sales and purchases</li> </ul> </li> <li>• Types of records: <ul style="list-style-type: none"> <li>◦ Accounting logs</li> <li>◦ Documents of original entry, such as invoices, receipts, job orders, purchase orders, contacts, or other documents used as the basis for your books of account</li> <li>◦ All schedules or working papers used in preparing your sales and use tax returns</li> </ul> </li> <li>• What the records should show: <ul style="list-style-type: none"> <li>◦ The gross receipts from all of your business income, including sales, leases, service charges, and labor income;</li> <li>◦ All of the deductions claimed on your sales and use tax returns along with support documents for those deductions</li> <li>◦ The total purchase prices, including receipts, for all items you purchase for resale, lease, or your own use.</li> </ul> </li> <li>• Detail of records must demonstrate what you sold, all taxable and nontaxable charges, and how much tax was applied to the sale.</li> <li>• Individual sales invoices should include date, customers name and address, shipping address, type of product, quantity sold, sales price, shipping charges, and the amount of tax.</li> <li>• Records should be retained for a minimum of 4 years, unless explicitly directed otherwise by the state.</li> </ul>		
Special Notice - Taxation Rates and Registration	<p>Summary: Special notice regarding taxation rates and registration.</p> <p>Key Points:</p> <p>What are the cultivation tax rates and who pays the tax?</p> <p>The current cultivation tax rates are:</p> <ul style="list-style-type: none"> <li>• \$2.75 per dry-weight ounce of cannabis leaves.</li> <li>• \$9.25 per dry-weight ounce of cannabis flowers</li> </ul> <p>What is the cannabis excise tax rate and who pays the tax?</p> <ul style="list-style-type: none"> <li>• 15% on average market price.</li> <li>• Retailers must collect cannabis excise tax from purchasers at time of retail sale.</li> </ul>		

DOCUMENT NAME	SUMMARY	SOURCE	SOURCE DATE
	<p>How is the average market price determined?</p> <ul style="list-style-type: none"> <li>• Fair market value between two parties under no requirement to participate in the transaction.</li> <li>• When the sale or transaction <b>is not</b> at arm's length, the average market price is the cannabis retailer's gross receipts from the retail sale of the cannabis or cannabis products.</li> </ul> <p>What is the mark-up rate on wholesale cost?</p> <ul style="list-style-type: none"> <li>• The current mark-up rate as set by the CDTFA is 60 percent for all cannabis and cannabis products.</li> </ul> <p>How does the distributor report and pay cultivation and cannabis excise taxes to the CDTFA?</p> <ul style="list-style-type: none"> <li>• Distributors must register with the CDTFA for a cannabis tax permit to report and pay the cultivation tax and cannabis excise tax to the CDTFA.</li> <li>• A microbusiness licensee is licensed to act as a distributor, among other things, and must comply with all the same requirements as a distributor.</li> </ul> <p>How does sales and use tax apply?</p> <ul style="list-style-type: none"> <li>• Sales and use tax applies to retail sales of cannabis and cannabis products, but does not apply to sales of medicinal cannabis and cannabis products where a purchaser provides his/her Medical Marijuana Identification Card issued by the California Department of Public Health and a valid government identification card.</li> <li>• Gross receipts from the sale of cannabis and cannabis products for purposes of sales and use tax include the excise tax.</li> <li>• Cannabis retailers, cultivators, manufacturers, and distributors making sales must register with the CDTFA for a seller's permit to report and pay any sales and use tax due to the CDTFA. If you already have a seller's permit that was issued by the Board of Equalization (BOE), it is not necessary to re-register for a seller's permit with the CDTFA.</li> <li>• It is important that you timely obtain a valid resale certificate that is accepted in good faith from the purchaser if you make sales for resale.</li> <li>• Current sales and use tax rates can be found on the website at <a href="http://www.cdtfa.ca.gov">www.cdtfa.ca.gov</a>.</li> </ul>		

## D. State Backed Financial Institution De Novo Analysis

### D.1 Public Cannabis Bank – A bank dedicated to serving the Cannabis Industry

We begin with a description of the standard requirements necessary to establish a de novo bank. We then discuss specific challenges related to establishing a public bank serving the cannabis industry.

#### D.1.1 Introduction

The definition of a bank pursuant to California State Law is found in the California Financial Code (Findlaw, 2018). A California state bank is a corporation incorporated under Division 1 (commencing with Section 100) of Title 1 of the Corporations Code that is, with the approval of the commissioner, incorporated for the purpose of engaging in, or that is authorized by the commissioner to engage in, the commercial or industrial banking business.

A public bank, also known as a state-backed bank, is a financial institution in which a state, municipality, or the public are the material owners. It is a financial enterprise of banking services under government control. Public

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So long as a public bank accepts deposits it will be regulated as a bank pursuant to current California State Law.

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bank proponents argue that public-sector banks reduce the costs of government services and infrastructure, protect and aid local banks, offer banking services to people and entities underserved by private-sector banking, and promote socio-economic development (Marois, 2013). There is no California law or statute specifically authorizing the establishment of a public bank pursuant to the anticipated public bank charter<sup>1</sup>. There are no unique requirements for a public bank unless established as such by the legislative body with oversight; they need only meet the same requirements as the private banks operating in the same geographic regions offering the same services (Money-zine.com, n.d.). While a privately-owned bank has an obligation to shareholders to maximize profits, a public bank's likely objective is to provide services to the community it serves. In California, so long as a public bank accepts deposits it will be regulated as a bank pursuant to current California state law. Prominent current public banking models are the Bank of North Dakota, the Territorial Bank of American Samoa (newly formed in 2018), the German public bank system, and a number of national postal bank systems elsewhere in the world.

A public bank, established to facilitate banking by the cannabis industry, may be either a state-chartered bank or a credit union. While each of the structures presents advantages and disadvantages, the recommended structure would be a state-chartered bank (the Public Cannabis Bank, or “PCB”). Federal regulators will require that the bank be structured so that the bank is fully owned by a bank holding company, established as a “C” corporation (the “holding

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<sup>1</sup> It may be possible for the California Department of Business Oversight, the sole current authority for chartering a state private sector banking business in California, to issue a commercial charter for a public bank. However, fitting the public bank business model into a private/commercial bank charter would be a challenge.

company”). The holding company will receive an initial capital infusion from state general funds, and provide an initial stock offering to the state, so the state will own 100 percent of the outstanding stock. The holding company will need to capitalize the PCB as part of the pre-opening process. If the state wishes to use debt as part of the bank capitalization, the holding company can raise money through a general obligation bond issue approved by the Legislature and approved by California’s voters. However, the investment from the holding company to the PCB will be required to be an at-risk equity investment. The holding company may raise money through bonds, but the bank cannot do so directly. We believe that the federal regulators will not approve an arrangement where the public bank operates directly as a state agency, because they will require a separation of authority to mitigate the risk of political influence on the bank<sup>2</sup>. The holding company structure may also offer some insulation of the state general funds and general operations from legal liabilities associated with the illegal proceeds and activities of the bank.

When the PCB becomes profitable, it will begin paying 50% of the profits back to the holding company in the form of dividends (this is the same approach used by the Bank of North Dakota). Our analysis looks at two financial milestones for the PCB performance:

1. The point where the PCB dividends will provide a market rate return on the invested capital.
2. The point where the PCB dividends will have fully paid off the initial investment and the PCB will be able to begin paying actual net dividends back to the state.

The holding company itself requires an application for approval to the Federal Reserve which must then be reviewed and approved by the Board of Governors. Based on the Territorial Bank of American Samoa (“TBAS”), which was structured in this manner, the time frame for this review would be two to three years.

As shown in Figure 1, the process of establishing a public bank will likely require six years before the bank can begin to offer services. Our estimate is that the possible range of time is four to nine years. In the figure, Phase A consists of legal, regulatory, and legislative work necessary to allow the banking application to move forward. Phase B consists of obtaining the necessary state and federal approvals, raising the necessary capital, and preparing the bank itself for operation. In Phase C the bank is opened, initially in Sacramento and then with branches incrementally opening statewide<sup>3</sup>.

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The process of establishing a public bank will likely require six years before the bank can begin to offer services.

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<sup>2</sup> The Bank of North Dakota does operate today as a state agency, however this structure was put in place prior to the existence of the Federal Reserve and virtually all of today’s banking regulations.

<sup>3</sup> Federal regulators will require that branches open incrementally rather than all at once, to minimize operational risk.

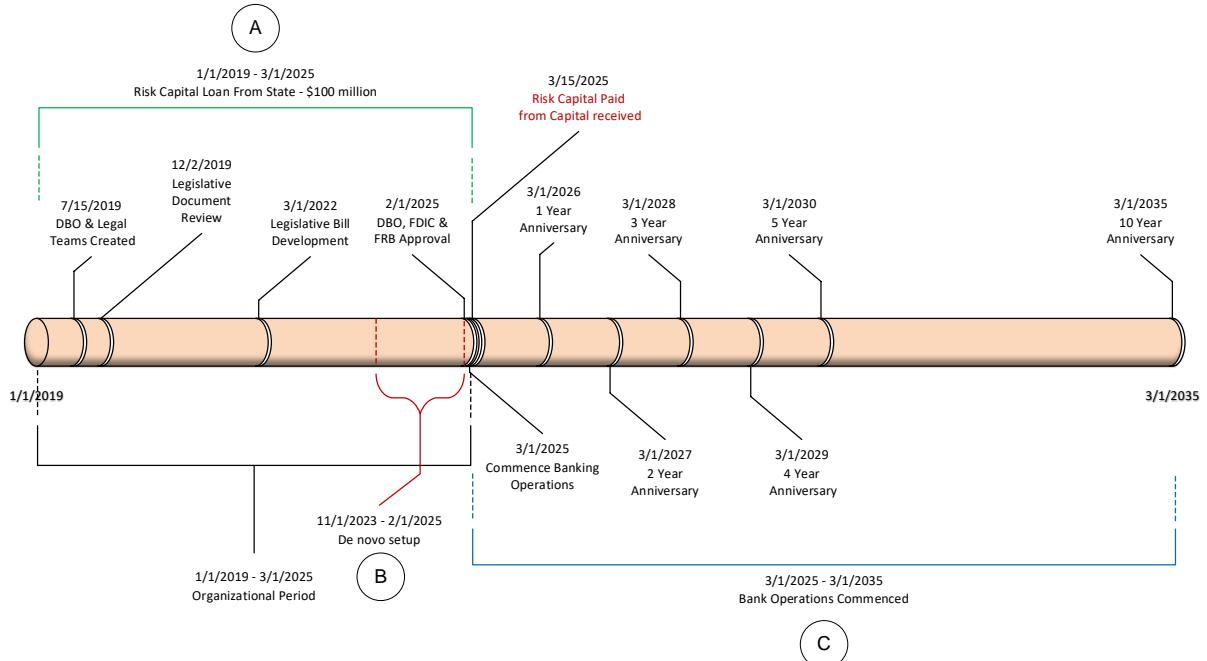


Figure 1: Anticipated Timeline to Establish a Public Bank

### D.1.2 Market Analysis

#### D.1.2.1 Market Segment

The proposed market segment will be all tiers of Marijuana Related Businesses (MRBs), both plant touching and non-plant touching. MRBs that are currently receiving banking services are likely doing so in a clandestine manner, so a focus on the security of the banking relationship and ease of paying state/city taxes/fees would be a critical differentiator. Pricing, product availability, and added convenience in paying vendors will also be critical selling points, especially for those not receiving banking services today. The need will include cultivators that need access to financial products to help them manage their challenging cashflow cycles; retailers needing a more efficient process for handling their steady inflow of cash; and ancillary businesses that do not touch the plant in any way but provide services that generate revenue from the cannabis industry.

The California cannabis market is expected to be \$1.9 billion for 2018, and grow to \$4.7 billion by 2025 (New Frontier, 2018) with over 6,000 license holders by Quarter 2 2018 (New Cannabis Ventures, 2018), resulting in a potential licensee market between 14,000 – 18,000 licensees by 2025. The licensees are spread out throughout the state, however there are some notable areas of concentration. Santa Barbara County is the county with the highest concentration as of Quarter 2, 2018 at 33 percent of licensees, but other areas of concentration include the Emerald Triangle (consisting of Humboldt, Mendocino, and Trinity counties) (37

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The California cannabis market is expected to be \$1.9 billion for 2018, and grow to \$4.7 billion by 2025.

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– 18,000 licensees by 2025. The licensees are spread out throughout the state, however there are some notable areas of concentration. Santa Barbara County is the county with the highest concentration as of Quarter 2, 2018 at 33 percent of licensees, but other areas of concentration include the Emerald Triangle (consisting of Humboldt, Mendocino, and Trinity counties) (37

percent for the three combined counties), Monterey (8 percent), and Los Angeles/Riverside Counties (6 percent) (New Frontier, 2018). This has an impact both on the number and location of branches, as well as the marketing approach to reaching the highest percentage of industry participants, where the higher concentration areas allow for more efficient marketing efforts.

#### **D.1.2.2 Competitive Analysis**

As cannabis remains a federally illegal substance under the Controlled Substances Act, there are a limited number of financial institutions that have chosen to provide services to this business segment. Despite the potential for high volume deposits and lending, banks have chosen to exclude this as a product line of service due to the federal law associated risks related to the Controlled Substances Act and individual, personal, and corporate criminal and civil risks under US law relating to aiding such activities. As a result, in spite of exponential business growth in this area there are inadequate banking services (Arcview, 2017). A California State Treasurer's report states that the lack of access to banking today, "forces cannabis businesses to deal in large amounts of cash, which makes them targets for assaults and puts the general public in danger" (Group, 2018).

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The lack of access to banking today forces cannabis businesses to deal in large amounts of cash, which makes them targets for assaults and puts the general public in danger.

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There is an expectation that the competitive situation will change over time. Looking at the history of banking services in other states (e.g., Washington, Colorado), there is a lag between the time that marijuana becomes legal and the availability of banking services to that sector. California is still in the very early stages of this process, so it is likely that even with no action on the part of the state, the availability of banking services to the industry will improve over time. Further, federal regulatory policy changes have the potential to change the competitive landscape virtually overnight. Existing, large commercial banks would have significant advantages over a public bank in that situation because:

- They would have lower concentration in a single industry.
- Their cost of capital would be lower.
- Their cost of operations would likely be lower.

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It is likely that even with no action on the part of the state, the availability of banking services to the industry will improve over time.

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Figure 2 shows a Strengths-Weaknesses-Opportunities-Threats analysis of the public bank.

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• State can leverage significant economies of scale to manage components of the bank.</li> <li>• The State has a variety of options related to access to capital.</li> <li>• State may have better access to data being reported to the Bureau of Cannabis Control for monitoring customers in the cannabis industry.</li> <li>• State bank can more easily coordinate with other agencies in the state for management of the relationships.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential lack of direct banking experience in the existing workforce.</li> <li>• No existing infrastructure; will have to develop the full physical and technological infrastructure to establish the bank.</li> <li>• The bank is targeted for being specific to the cannabis industry, so it limits the access to other industries that could support the growth of the bank.</li> <li>• Capital options will be governed by applicable statute and will likely require legislative and/or voter approval.</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>• Current market is largely unbanked or underbanked.</li> <li>• Very large existing market size within the industry.</li> <li>• Material growth rates expected for the next 10-15 years.</li> <li>• Successful integration in the industry should result in a positive economic impact for the State.</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of prosecution by the federal government.</li> <li>• Risk of asset seizure as a result of action by the federal government.</li> <li>• Risk of deterioration in the relation between the federal government and the State.</li> <li>• Removal of banking barriers by the federal government would remove the competitive advantage of the bank.</li> <li>• Difficulty raising the needed capital, and risk to the capital.</li> </ul>

Figure 2: Public Bank SWOT Analysis

#### D.1.2.3 Product Offering

This section lists anticipated product offerings by category for a typical de novo bank, and provides a brief pricing analysis<sup>4</sup>. The current federal standing of cannabis will restrict what products are available and product availability will be contingent on regulatory approval. As outlined above, there are material legal and financial risks related to lending cannabis deposits to MRBs, so the availability of the lending products may be significantly restricted.

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<sup>4</sup> The services, structure and requirements for a de novo correspondent bank are significantly different.

#### **D.1.2.3.1 Available Products**

##### **D.1.2.3.1.1 *Deposit Services***

Direct deposit services that may be available to the industry would include:

- Personal and Business Checking Accounts.
- Negotiable Order of Withdrawal and Money Market Accounts.
- Savings Accounts.
- Certificates of Deposit.
- IRA Accounts.
- Trust Accounts (Escrow, Attorney-Client Trust).

##### **D.1.2.3.1.2 *Other Services***

Other fee based services that may be available to the industry would include:

- Wire Transfers/Funds Transfers.
- Direct Deposit Payroll.
- Night Depository.
- Armored Car Service (cash deposit transactions).
- Third Party Courier Service (limited cash and non-cash deposits).
- Safe Deposit Boxes.
- Automated Clearing House (ACH) Debit/Credit.
- International Services (i.e., letters of credit through correspondent bank).
- Merchant Services.
- Cash Management.
- On-Line Banking.
- Check Imaging.

##### **D.1.2.3.1.3 *Commercial Loans***

Commercial loans may be available in the following categories:

- Short-term loans to businesses (e.g., accounts receivable, inventory purchase to cover seasonal increase, operating expenses, etc.). The loan tenure is typically between 90 days to 180 days.
- Term loans to businesses (e.g., expansion financing, acquiring capital equipment, etc.) The loan will generally be repayable between 5 to 7 years.
- Revolving lines of credit to businesses or individuals. The lines will be for business purposes and typically annually renewable.
- Segregate owner-user real estate loans in this category. These may include 504 (a) or other types of primary acquisition or refinanced owner properties.

#### **D.1.2.3.1.4 *Real Estate Loans***

Real estate loans may be available as follows:

- Construction loans for residential and commercial real properties.
- Mini-perm loans for general purpose income producing real estate.

#### **D.1.2.3.1.5 *SBA/Other Loan Guaranty Programs***

Small Business Administration and other loan guarantee programs may be offered for:

- Business expansion.
- Industrial warehouse financing.

#### **D.1.2.3.1.6 *Secondary Market Transactions***

Secondary market transactions might be handled, including:

- Long-term commercial real properties with fixed rates.

#### **D.1.2.3.1.7 *Consumer Loans (as an accommodation to business owners only)***

Consumer loans for business owners may be available for:

- Auto and truck loans.
- Home equity loans.

### **D.1.2.3.2 *Pricing***

Pricing will clearly be one of the largest drivers of customer acquisition, and ongoing analysis of the current pricing environment for like products in the geographical regions will be critical to maintaining competitiveness. Even if other banks are not granted protection from federal enforcement for supporting the state legal cannabis operations, the availability of clandestine banking, however fleeting it may be, would still offer competition to the bank and would require that the pricing be relatively in line with pricing for standard business banking products and services.

### **D.1.3 *Organizational and Governance Requirements***

#### **D.1.3.1 *Application Process***

A California bank charter application involves completing the following documents, at a minimum:

- Specific application forms for the primary and deposit insurance regulators.
- The business plan, which will include:
  - Competitive analysis.
  - Management plan.
  - Records, systems and controls.
  - Community reinvestment.
  - Technology plan and use.
  - Policies and procedures.
  - Vendors and professional services.
  - Marketing plan.
  - Capital Plan that shows the ability to meet minimum ratios set by the regulators for a period no less than seven years.
  - Primary sources of business.
  - Financial management plan.
  - Financial projections and assumptions.
  - Monitoring of the plan.
  - Alternative business strategy.
- Resumes of management and board members.
- Financial statements on regulatory forms for management and directors.
- Background checks (done by either the sponsor, management or a designee of the organizers). This includes credit, business, legal, and criminal.
- Fingerprint forms for each agency.
- Other documents in the application appendix which may include:
  - Draft of the stock offering – prospectus.
  - Third-party agreements.
  - Consulting agreements.
  - Proposed location lease.
  - Map of the service area.
  - Economic reports or data to support the business plan.
  - Bank data reports (deposit, loans by branch, bank in service area).
  - Historical analysis of the banking market in the proposed area.
  - Proposed employment agreements for management.
  - Job descriptions.
  - Organization chart.
  - Stock option plan.
  - Sensitivity analysis on projections.
  - Disclosures for all proposed directors and management.

Following receipt of the complete documentation package, regulators will require management team and director interviews. Upon completion of the interviews and any documents required that may arise during this process, the regulators will deem the application “complete.” If approved, the state and federal regulators will provide a tentative approval to the organizers. This approval has a time limit. Further, it may condition the approval of the bank on:

- Successful attainment of minimum or maximum capital.
- Certain financial ratios.

- Adherence to the submitted plan.
- Staying within the financial projections.
- No changes to the management team or board unless prior approval from the regulator is obtained.

#### ***D.1.3.2 Staffing***

During the pre-operation period, activities will be accomplished by state employees with contractor support. After the bank opens, we anticipate that some of these individuals will remain on as state employees to handle the state government administration side of the work; others may move to the bank and become employees of the bank; and others will be reassigned to other unrelated duties.

At this point we do not know if the employees of the proposed bank would be considered to be state employees, private employees, or a hybrid. We also do not know the extent to which state employee union regulations would, or would not, apply to those employees. The specific employment status of bank employees will be determined as part of the pre-operation analysis.

Initially, the bank would require 25 – 35 experienced employees for administration and the main branch facility. With the expectation that a second branch office will open during the first year of operation, an additional thirteen branch employees will also be hired. This staffing will permit employees to effectively and efficiently provide high quality banking services to customers. Each branch is forecasted to require 13 additional staff members.

#### ***D.1.3.3 Governance***

During the pre-operational period staff will be state full-time equivalents (FTEs) and consultants with a mixture of expertise in banking, acquisition/contracting, facility build-out and stand-up (for headquarters and branches), supporting new legislation, and regulatory approval.

##### ***D.1.3.3.1 Directors***

The responsibility for all aspects of a bank rests ultimately with the board of directors. The regulators will require a board that is experienced in business, provides extensive leadership capabilities, has strong ties with the bank's proposed market and possesses a high degree of integrity. Directors should fully understand, and willing accept the responsibilities of their office. The board should include expertise in compliance, credit, risk management, finance and the business of banking. The proposed Board functional chart is shown in Figure 3.

- While not always available, it is preferable to have some board members with previous bank board experience or bank management experience. This should be the case in the event the proposed Chief Executive Officer (CEO) does not have previous chief executive experience.
- State/federal laws require a certain minimum level of relevant experience, which is generally more than five years.

- Board members should be willing to commit numerous hours to the bank with at least monthly meetings and strong communication with the management team. In addition, board members should be able to commit to providing a steady stream of referrals to the bank to ensure its growth.
- Board members, along with the management team, are thoroughly investigated by the regulators. This includes: past financial dealings; credit history; financial capacity; financial and entrepreneurial management; governance experience; and, reputation (criminal background check). All of this is reviewed and verified by the regulators once the application is submitted. It is helpful to use a consultant or experienced party to conduct these background checks before submission of the application to remove any possible embarrassing moments or cause delay of the application. Full and open disclosure is always the best policy. Board members must be thoroughly familiar with the business plan and its elements. The business plan must be carefully tested to withstand problems the bank may face in deposit origination and asset composition. The board should carefully participate in the development and subsequent monitoring of the plan. Directors should spend time with management to ensure the business plan remains viable for at least seven years without the need for additional capital. This covers a considerable time and a broad spectrum of economic activity.
- Board members placed by the State should be free from political influence.
- The board should have representation from the cannabis industry.

To adequately perform the duties of a board of directors, it is essential that the board include members with specific experience. The board should include individuals who possess the following experience:

- An outside director who is an accounting expert with a Certified Public Accountant (CPA) designation and at least 15 years of experience as an accounting manager or firm partner.
- An outside director with bank credit management experience.
- An outside director who is a retired bank executive.
- One or more directors with previous bank director experience.
- An outside director with knowledge of the industries that will be targeted by the bank's strategic plan.
- An outside director familiar with regulatory and compliance issues facing banks.
- One or more directors with ties to the communities the bank will serve.

**State Backed Cannabis-Only Bank**  
 Proposed Organization Chart  
 2018

**Board of Director Committee Assignment**

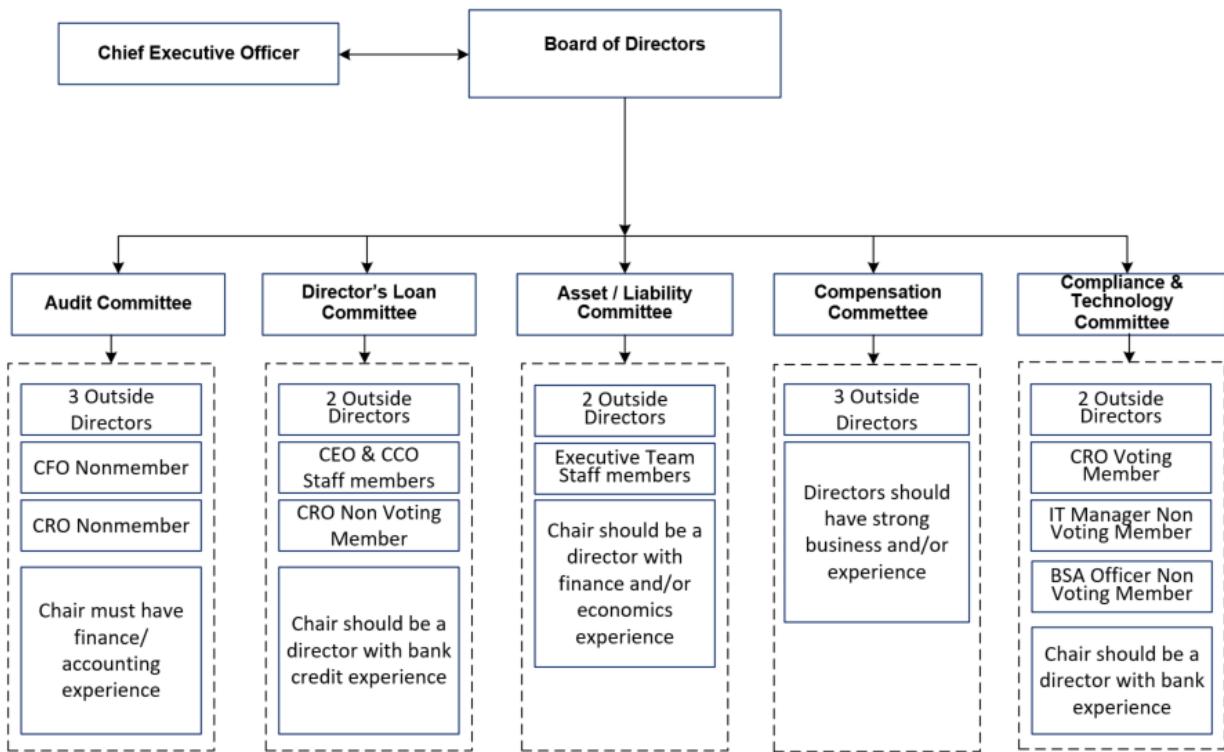


Figure 3 Board Functional Chart

#### **D.1.3.3.2 Board Committees**

While some board organization can be deferred until opening, certain committees that have significant risk-management duties for operating the bank should be organized during the initial start-up period. Listed below are the more important committees. Charters and membership should be determined during this stage as these candidates will likely be asked questions during the one-on-one interviews with the regulators.

#### **D.1.3.3.3 Audit Committee**

The chair of this committee should have a strong financial background and evidence of independence as an accounting professional. If a CPA is proposed as a board member, this individual would be the ideal candidate for the chair. Should the bank be subject to Sarbanes-Oxley Act (SOX) rules, then the chair must be well qualified for the position. The audit committee should meet no less than quarterly. By regulation, the Audit Committee is responsible for the engagement and setting of the scope for the financial and other independent audits of the bank.

The Audit Committee will consist of 3 outside directors (currently, regulators do not permit insiders). The Committee will meet monthly for the first two years and then quarterly thereafter and its functions will include:

- Fulfill the duties delineated in the bank's Audit Policy.
- Evaluate procedures and controls of the bank's operations.
- Hire the bank's external auditor and monitor external auditor activities:
  - The auditor will have direct reporting responsibility to the Chair of the committee.
  - The expense and performance evaluation of the internal auditor is to be approved by the committee.
  - The external auditor can only be terminated with the approval of the committee.
- Review annual CPA audits, state and federal examinations and report findings to the Board of Directors.
- Review all regulatory reports, monthly certifications, operating policies and procedures, conflicts of interest, insurance, data processing and management information system audit reports.

The audit committee will be chaired by a California licensed CPA.

#### **D.1.3.3.4 Asset/Liability Management Committee (ALCO)**

The Asset/Liability Management Committee will oversee the balance sheet, rates and risk management status with meetings monthly. The Asset/Liability Management Committee will consist of 3 outside directors plus the CEO, Chief Compliance officer (CCO), and Chief Financial Officer (CFO). The Asset/Liability Management Committee (ALCO) will meet monthly and its duties will include:

- Fulfill duties required by the bank's Asset/Liability Management Policy.
- Review and recommend changes to ALCO Policies.
- Oversee actions relating to interest rate risk and liquidity risk.
- Approve management strategies regarding investment securities, deposit programs and lending activities.

The Asset/Liability committee chair will be a board member with significant investment experience in California based financial institutions.

#### **D.1.3.3.5 Loan Committee**

The Loan Committee will consist of at least 3 outside directors plus the CEO and the Chief Credit Officer (CCO). The Loan Committee will meet no less than semi-monthly and its duties will include:

- Fulfill duties required by the bank's loan policy.
- Review and recommend changes to loan policies and procedures.
- Ensure that Management's handling of credit risk complies with board decisions regarding acceptable levels of risk.

- Monitor loan officer compliance with lending policies.
- Verify that management follows proper procedures to recognize adverse trends, identify problems in the loan portfolio and maintains an adequate allowance for loan loss reserves.
- Determine whether the risk controls are in place governing compliance with loan related or other applicable laws and regulations.

One of the Committee members shall be designated by the Board to serve as Chairman of the Committee.

#### **D.1.3.3.6 Executive Compensation/Personnel Committee**

If bank personnel are exempt from civil service rules, then an executive compensation/personnel committee would typically be required. This committee would consist of 3 outside directors plus the CEO, CFO and Human Resources Manager as non-voting members. The Personnel Committee then meet monthly and its duties would include:

- Fulfill the responsibilities and goals required by the bank's Business Plan.
- Monitor compliance with the bank's Business Plan and review deviations.
- Evaluate new proposed bank strategies including potential risks and rewards, consistency with overall business plan and make recommendations to full Board of Directors.
- Evaluate marketing strategies prior to implementation.
- Fulfill duties required by the Personnel Policy.
- Review and recommend changes to Personnel Policy.
- Oversee actions relating to hiring, termination, salary and promotions.
- Review and approve the personnel budget, benefit program, incentive programs including stock options and bonuses.
- Verify that management follows proper procedures to recognize adverse trends in turnover and maintain adequate staffing levels.

The chair of this committee should be an independent director with significant executive-level experience in the private business community.

#### **D.1.3.3.7 Compliance/CRA Committee/Information Systems**

The Compliance/Community Reinvestment Act<sup>5</sup> (CRA) Committee will consist of 2 outside directors, the CEO, Operations and Loan Compliance Officers. The Compliance/CRA Committee will meet monthly and its duties will include:

- Fulfill duties required by the bank's Compliance and CRA Policies.
- Review and recommend changes to related policies and procedures.
- Periodically review the bank's CRA performance as required under the Small Bank Performance Test.

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<sup>5</sup> CRA requirements are defined in the code of federal regulations, 12 CFR 25 and 12 CFR 195.

- Review all regulatory reports, compliance policies and procedures, compliance and CRA audit reports. Ensure follow up and resolution of all deficiencies.
- Coordinate, monitor and report to the Board of Directors the status of the bank's compliance with federal and state banking laws and agency regulations.

The chair of this committee would most likely be a banker or other industry leader with financial compliance experience.

#### **D.1.3.3.8 Bank Secrecy Act (BSA) Committee**

This committee is unique to the governance of a financial institution that will provide banking services to the cannabis industry. Most financial institutions incorporate Bank Secrecy Act (BSA) oversight with the Compliance Committee above. However, since several specific compliance issues will require enhanced procedures, it is recommended that this committee be organized with at least three directors, the BSA Officer and representatives from each bank department. The duties of this committee will include:

- Provide board level oversight of the bank's BSA Program.
- Receive and review monthly activity reports that identify activity that keep the bank in compliance with BSA, anti-money laundering, the Customer Identification Program, "Know Your Customer" (KYC), Financial Crimes Enforcement Network (FinCEN) and other pertinent laws and regulations.
- Provide leadership in the response to findings contained in third party audits and regulatory examinations.
- Report the status of the bank's compliance with the components of the BSA Program and other BSA related issues to the Board of Directors at least monthly.

The chair of this committee should be a director or bank executive that has, or could acquire, a strong knowledge in BSA compliance.

#### **D.1.3.4 Compliance Policies and Procedures**

The following is a minimum list of policies and procedures that must be developed and in place prior to bank opening:

- Loan Concentration policy.
- Investment Policy.
- Asset/Liability Management Policy.
- Liquidity Policy.
- Capital Policy (parameters for growth, liquidity and risk spread over a seven-year period).
- Interest Rate Risk Policy.
- Audit Policy.
- Compliance Management Policy.
- Information Technology and Personal Devices Policies.

- Community Reinvestment Policy.
- BSA, United States of America (USA) Patriot Act, and Customer Identification Program (CIP) Policies.
- Human Resources Policy.
- Bank Security Policy.
- Monthly Income Scheme Policy.
- Management Succession Plan and Policy.
- Vendor Management Policy.
- IT Security Policy.
- Premises Security Policy.
- Branch Closing Policy.
- California Financial Abuse Reporting Act Policy.
- Code of Ethics.
- Privacy and Information Security Policy.
- Federal Reserve Regulation CC Policy.
- Federal Reserve Regulation D Policy.
- Federal Reserve Regulation DD Policy.
- Federal Reserve Regulation E Policy.
- Federal Reserve Regulation O Policy.

#### **D.1.4 Physical and technological needs**

##### **D.1.4.1 Physical Locations**

We recommend that the bank headquarters be located in Sacramento or the surrounding area. We recommend a phased opening of statewide branches as follows (phases show the total available branches):

- Phase I (Years 2025-2030):
  - Santa Barbara.
  - Humboldt.
  - Mendocino (also serving Trinity).
  - Monterey.
  - LA/Riverside.
  - Sacramento (also serving Yolo).
  - Alameda/Sonoma/SF.
- Phase II (Years 2030-2035):
  - Santa Barbara (x2).
  - Humboldt (x2).
  - Mendocino.
  - Trinity.
  - Monterey.
  - LA.
  - Riverside.
  - Sacramento/Yolo.

- Alameda/Sonoma/SF.
- San Diego.
- Phase III (Beyond 2035):
  - Santa Barbara (x2).
  - Humboldt (x2).
  - Mendocino (x2).
  - Trinity.
  - Monterey.
  - LA.
  - Riverside.
  - Sacramento.
  - Yolo.
  - Alameda.
  - Sonoma.
  - SF.
  - San Diego.

The locations selected are based on license concentration and subsequent revenue concentration by county, as shown in Table 1 (New Frontier, 2018). The branch locations were established by creating locations in areas that are projected to meet the industry average for community banks average deposits per branch of \$63 million, though the nationwide average is over \$100 million in deposits per branch (Jeff Marsico, 2016).

*Table 1: Deposit Forecasts by Region*

2025	Total Revenue	Expected Deposits	Total Licenses
Santa Barbara	1,406,961,236	369,327,324	4,535
Humboldt	806,911,235	211,814,199	2,606
Mendocino	665,162,441	174,605,141	2,020
Monterey	380,092,823	99,774,366	1,154
Trinity	190,046,412	49,887,183	577
Los Angeles	269,986,559	70,871,472	611
Riverside	212,279,818	55,723,452	531
Sonoma	95,023,206	24,943,592	289
Yolo	95,023,206	24,943,592	289
Alameda	95,023,206	24,943,592	289
Sacramento	121,215,655	31,819,109	325
San Diego	95,023,206	24,943,592	289
Other	285,069,618	74,830,775	866
Total, 2025	4,717,704,221	1,238,397,358	14,378

<b>2030</b>	<b>Total Revenue</b>	<b>Expected Deposits</b>	<b>Licenses</b>
Santa Barbara	2,377,036,645	732,127,287	2,486
Humboldt	1,363,262,559	419,884,868	1,425
Mendocino	1,123,780,426	346,124,371	1,196
Monterey	642,160,243	197,785,355	683
Trinity	321,080,122	98,892,677	342
Los Angeles	456,137,616	140,490,386	520
Riverside	358,643,076	110,462,067	401
Sonoma	160,540,061	49,446,339	171
Yolo	160,540,061	49,446,339	171
Alameda	160,540,061	49,446,339	171
Sacramento	204,791,749	63,075,859	225
San Diego	160,540,061	49,446,339	171
Other	481,620,182	148,339,016	513
Total, 2030	7,970,479,589	2,454,907,713	8,474

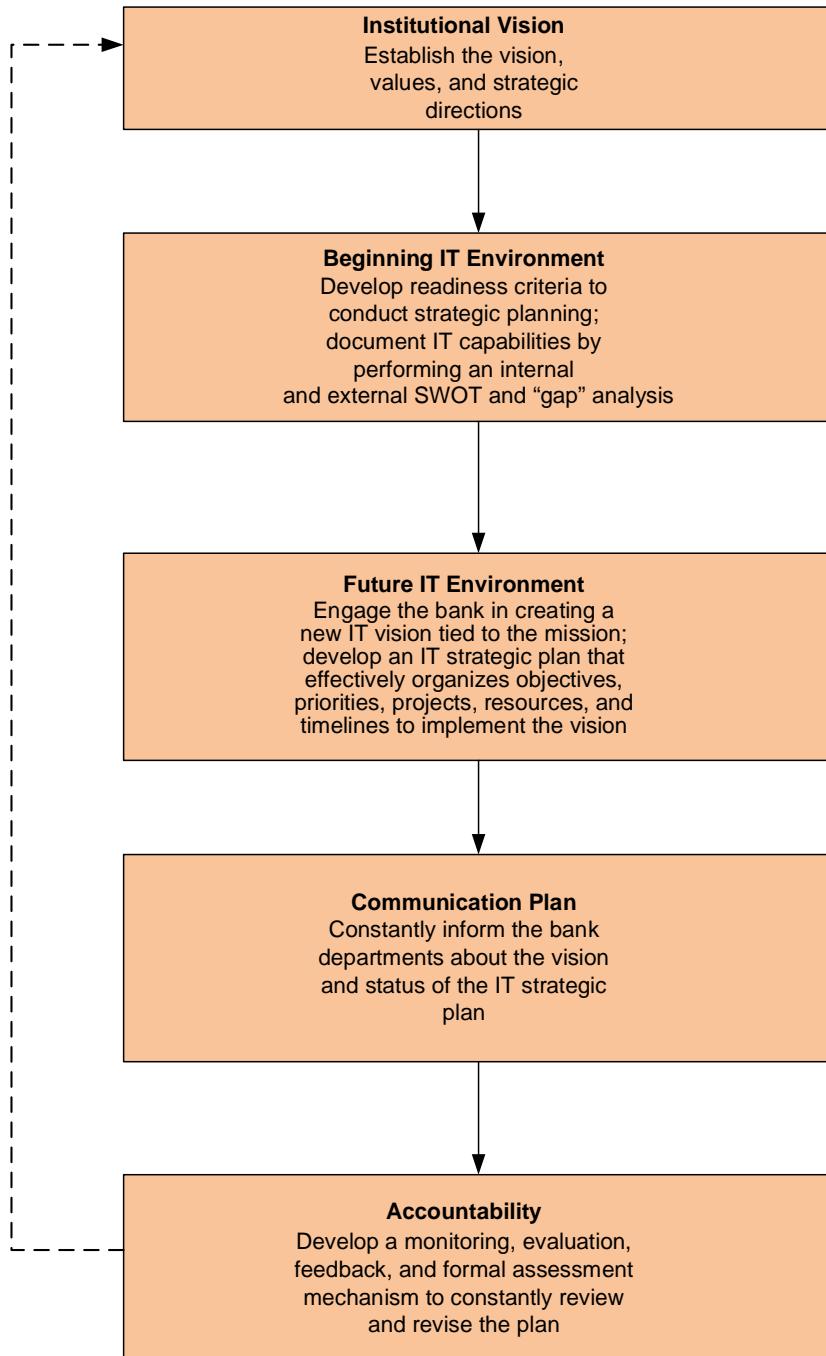
#### **D.1.4.2 Technical Requirements**

The Board of Directors and Executive Management of the PCB will work together to develop, implement and oversee the PCB's Technology Plan. The primary purpose of this plan is to ensure that the systems implemented support the business goals and objectives of the bank in a quality and cost-effective manner. Compliance and audit issues will be included in the planning process to ensure regulatory requirements are addressed and that prevention, detection, and response measures are in place for the management of risk.

The proposed bank will begin with a bank headquarters, then incrementally during the first five years of operation open 7 offices spread across most of California. This increases the need to enhance the data security aspect of the bank during its de novo period. To accomplish this, a dynamic planning model will be used that includes input from each functional unit. The plan will be reviewed annually, looking forward at least two years.

The bank's approach to its technology initiatives will be on a return-on-investment basis. Because of the variety of products the bank will provide, Information Technology (IT)-related initiatives must be efficient, reduce costs, and simplify the process of managing customer's relationships in order to be valuable. The bank will use a host provider's software to empower their customers to go online and handle many of the routine transactions traditionally conducted via telephone calls or office visits. The bank's internet solution will be a comprehensive on-line product and will offer end-to-end processing allowing electronic transactions without requiring a manual process behind the scenes. The recommended model asserts that customers who bank online ultimately will cost the bank less per transaction, carry higher balances, and are less likely to move their accounts to their competitors. Thus, using online strategies to reduce communication costs while improving the quality of customer service would provide the greatest benefit. The bank IT planning model is shown in Figure 4.

## Information Technology Strategic Planning Model



*Figure 4: Bank IT Planning Model*

#### ***D.1.4.2.1 Internal Issues***

During the planning process, the Technology Committee will consider the impact of technology on the internal concerns of the bank, including, but not limited to, the following:

- Profitability.
- Delivery of new products and services.
- Efficient and consistent operations.
- Security/cyber security/risk management.
- Ease or difficulty of training.
- Growth and complexity of staff.
- Monitoring/reports.

#### ***D.1.4.2.2 External Issues***

During the planning process, the Technology Committee will consider the impact of technology on the external concerns of the bank, including, but not limited to, the following:

- Customer impact.
- Technological advancements by competitors.
- Regulatory requirements.
- Changing economic environments.
- Availability and consistency of third parties/vendors.

#### ***D.1.4.2.3 Risk Management***

As each of the steps are built, the essential risk of each operation, product, service and system will be assessed with attention given to:

- Dependability—especially vendor evaluation.
- Backup—is there redundancy, recoverability, duality?
- Essential Need—importance to the client, security.

This process is ongoing and will be reviewed at the enterprise level before opening the bank, several months after, and then no less than annually or as often as new products/systems are integrated into the bank's processes. Figure 5 shows a representative IT system control report. All systems, services, products, outsourced vendors, hardware and software are assessed using this report.

Item #	Systems, Vendors and Hardcopy Customer Data	Vendor or Product Name	Customer Data	Supports Transfer of Funds or Data	Sensitivity Level Based on Data Type	Assessment of Risk By Type of Incident									
						Unauth Access		Passwd Misuse	Virus or Spyware	Social Enginerg	Employee Error	Natural Disasters			
						External	Internal								
<b>Accounting &amp; Finance</b>															
1	Accounts Payable		No	Yes	Med	Low	High	Med	Med	Med	Med	Med	Med		
2	Call Report Preparation		No	Yes	Med	Low	Low	Low	Low	Low	Med	Med	Med		
3	Fixed Assets		No	No	Med	Low	Med	Med	Low	Low	Med	Med	Med		
4	General Ledger		No	No	High	Med	Med	Med	Low	Low	Low	Med	Med		
5	Asset/Liability Mgmt		No	Yes	Med	Low	Low	Low	Low	Low	Med	Med	Med		
6	Investment Portfolio Acctg		No	No	High	Low	Med	Low	Med	Low	Med	Med	Med		
7	Budgeting & Planning		No	No	Med	Low	Low	Low	Low	N/A	Med	Med	Med		
8	Hardcopy Information		No	No	High	Low	Med	N/A	N/A	N/A	Low	Med	Med		
9	Interest Rate Risk Modeling		No	No	Low	Low	Low	N/A	Med	N/A	Med	Low	Low		
<b>Human Resources (3)</b>															
10	Personnel Records		No	No	High	Low	Med	N/A	N/A	Low	Low	Med	Med		
11	HR Information System		No	No	High	Low	High	Med	Low	Low	Med	Med	Med		
12	Payroll		No	Yes	High	Low	High	Med	Med	Low	Med	Med	Med		
13	401 K Administration		No	Yes	High	Low	High	Med	Med	Low	Med	Med	Med		
14	401 K Administration		No	Yes	High	Low	High	Med	Med	Low	Med	Med	Med		
15	Health Records		No	Yes	High	Low	High	Med	Med	Low	Med	Med	Med		
16	Hardcopy Information		No	No	High	Low	Med	N/A	N/A	N/A	Low	Med	Med		
Item #	Systems, Vendors and Hardcopy Customer Data	Level of Inherent Risk	Response Priority Level	Assessment of Controls								Level of Residual Risk	Action Plan Needed?		
				Access Controls	Physical Security	Disposal	Backups & DR	Encryption	Written Proc's	Dual Control	Sep of Duties	Int/Ext Audit Review	Daily Rev of Sec Rpts		
				E	E	E	E	N/A	E	E	E	E	N/A	Low	No
<b>Accounting &amp; Finance</b>															
1	Accounts Payable	Med	Med	E	E	E	E	N/A	E	E	E	E	N/A	Low	No
2	Call Report Preparation	Med	Med	E	N/A	E	E	N/A	E	N/A	N/A	E	N/A	Low	No
3	Fixed Assets	Med	Med	E	E	E	E	N/A	E	N/A	N/A	E	N/A	Low	No
4	General Ledger	High	High	E	E	E	E	N/A	E	N/A	E	E	E	Low	No
5	Asset/Liability Mgmt	Med	Med	E	E	E	E	N/A	E	N/A	N/A	N/A	N/A	Low	No
6	Investment Portfolio Acctg	High	High	E	E	E	E	N/A	N/A	N/A	N/A	E	N/A	Low	No
7	Budgeting & Planning	Low	Low	E	E	E	E	N/A	N/A	N/A	N/A	N/A	N/A	Low	No
8	Hardcopy Information	Med	Med	N/A	E	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	No
9	Interest Rate Risk Modeling	Low	Low	E	E	N/A	N/A	N/A	N/A	N/A	N/A	E	N/A	Low	No
<b>Human Resources (3)</b>															
10	Personnel Records	Med	Med	N/A	E	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	No
11	HR Information System	Med	Med	E	E	E	E	N/A	N/A	N/A	N/A	N/A	N/A	Low	No
12	Payroll	High	High	E	E	E	E	N/A	N/A	N/A	E	E	N/A	Low	No
13	401 K Administration	High	High	E	E	E	E	N/A	N/A	N/A	E	E	N/A	Low	No
14	401 K Administration	High	High	E	E	E	E	N/A	N/A	N/A	E	E	N/A	Low	No
15	Health Records	High	High	E	E	E	E	N/A	N/A	N/A	E	E	N/A	Low	No
16	Hardcopy Information	Med	Med	N/A	E	E	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	No

Figure 5: Representative IT Control Report

#### **D.1.4.2.4 Systems Architecture**

The bank will outsource the majority of its core banking data processing systems. This will enable its customers to take advantage of the most up to date products and services without investing in the large hardware and software systems necessary to support those applications. The bank will also benefit from the experienced and professional management and technology staff. It is expected that the topology will follow a typical bank topology, as shown in Figure 6.

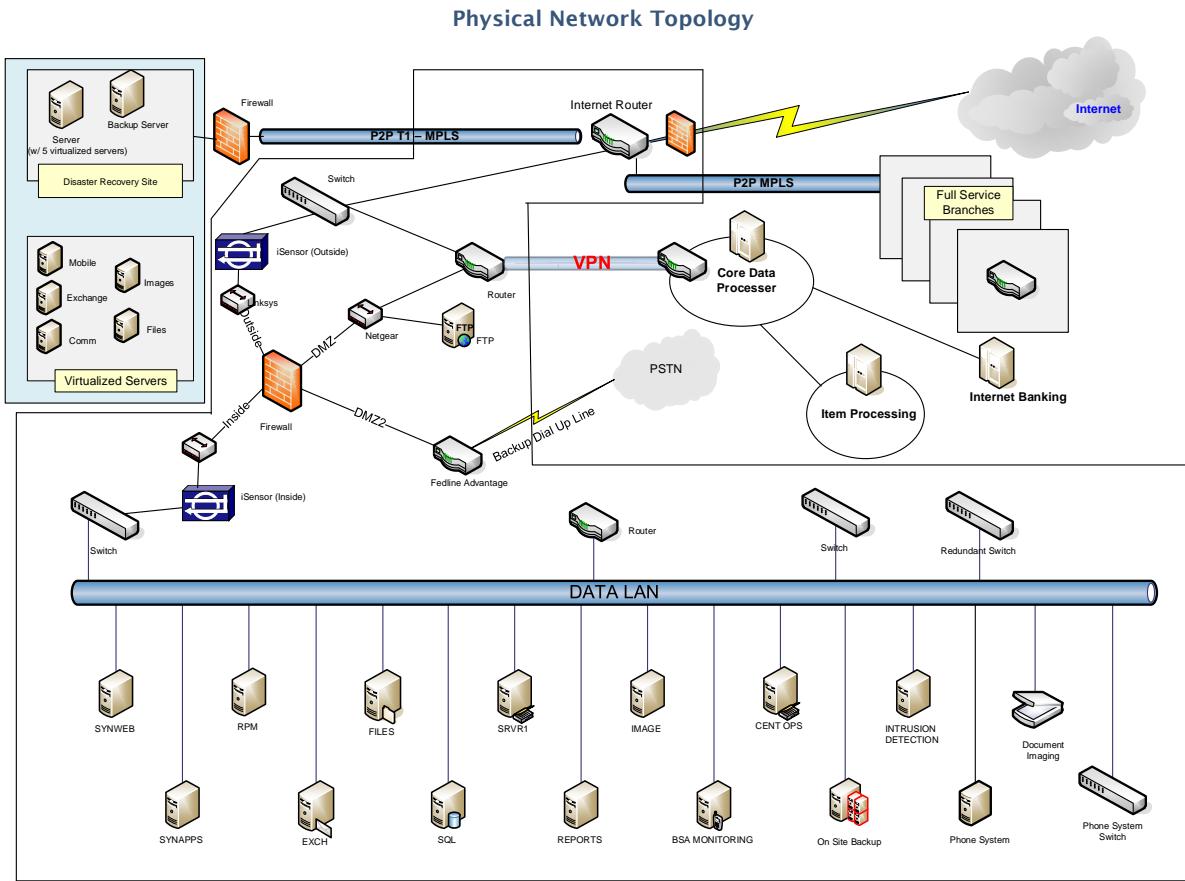


Figure 6: Typical Bank Topology

The selected core host system will drive the basic components of the bank's internal technology system. Power, memory, bandwidth, data links, backup and access are all primarily connected to the requirements of the host system. The core bank host system should provide the following applications<sup>6</sup>:

- Deposit Systems:
  - New accounts workstations.
  - Teller systems.
  - Automatic Teller Machine – ATM Network.
  - Debit/credit card production.
  - Exception and balancing reports.
  - Branch/Merchant capture.
  - Automated Clearing House Services.
  - On-line banking products and cash management.
  - Imaging of account opening documents.
- Lending Systems:
  - Business analysis.

<sup>6</sup> We are not aware of any host systems that have said they would not provide services to banks engaged in cannabis banking. If that becomes an issue, the bank could license the software for in-house use and establish its own hosting center. This might be one offering of the correspondent bank for that option.

- Legal documentation issuance.
  - File imaging.
- Financial Systems:
  - Integration with the deposit and loan applications.
  - Accounts payable.
  - Fixed Assets.
  - Call reporting.
  - Daily monitoring and reconciliation reports.
  - General Ledger build out.
- Additional Applications:
  - Document imaging.
  - Balance sheet analysis (business banking).
  - Front-end tools:
  - Mortgage lending.
  - Business/commercial real estate lending.
  - Loan documentation.
  - Customer Relationship Management (CRM).
  - Server configuration.
- Data Management Tools:
  - Independent tools allowing access to raw data.
  - Daily/monthly reports for tracking trends and profitability.
  - Management and board reports.
- Audit:
  - Independent accuracy verification.
  - Usage reports.
  - User authentication.
  - Access by independent accounting.
- Security/Privacy:
  - Administration.
  - Functionality limitation.
  - New employee setup.
  - Termination procedures.
  - Client information privacy.
  - Hacker protection.
- Monitoring:
  - Intrusion:
    - External.
    - Internal.
  - 24/7 support:
    - Support available to bank staff.
    - Outsourced solution.

## **D.1.5 Compliance Requirements**

### **D.1.5.1 BSA/AML Compliance Program**

The Bank Secrecy Act (BSA), Anti-Money Laundering (AML), Office of Foreign Assets Control (OFAC), and Customer Identification Program (CIP) Compliance Policy and Program (herein referred to as “Program,” “BSA Program,” or “Policy,”) is intended to assure that the bank complies with obligations under the Bank Secrecy Act (BSA), the Money Laundering Control Act of 1986, the Money Laundering Suppression Act of 1994, the applicable sections of the USA PATRIOT Act (including Section 326 pertaining to Customer Identification Programs), and other applicable United States federal government regulations pertaining to AML, and OFAC issued regulations, which are collectively designed to prevent banks and other financial service providers from being used as intermediaries or conduits for, or to hide the transfer or deposit of money derived from, criminal/illicit activity.

The proposed bank must adhere to the procedures required under the BSA and its relevant amendments. To meet this objective, the Board of Directors (the Board) must direct bank management to implement and maintain an at least adequate, if not leading, BSA Compliance Program. The BSA Program must include and adhere to the four pillars (note: the program also incorporates requirements of the ‘fifth pillar’ related to FinCEN’s Customer Due Diligence (CDD) Rule effective May 2018) of BSA compliance consisting of policies, procedures, and internal controls; independent testing and review; training; and the appointment and designation of a person responsible for compliance, in order to protect the bank and its employees from exploitation and related risks; and to assure the program’s compliance with the acts.

The Program must include, but not be limited to the following:

- The appointment of a qualified BSA Compliance Officer. This person will have day to day responsibility for managing all aspects of the program and compliance with all BSA regulations. The BSA Officer may delegate certain BSA compliance duties to other employees but not the compliance responsibility. The Board of Directors and Senior Management must assure that the BSA Officer has sufficient authority and resources to administer effectively a comprehensive BSA compliance program.
- The establishment of a comprehensive enterprise wide BSA training program to communicate the requirements of the BSA and the requirements of the Program. Such Program will require all staff including the Board of Directors, Senior Management, and the BSA Officer to attend training at least annually.
- The completion or update of a risk assessment of the bank’s BSA related risks and controls not less frequently than annually.
- The ongoing and continuous monitoring of all company activities for unusual, potentially suspicious or illegal activities related to the BSA.
- The reporting of cash transactions, monetary instrument activity, and all suspected criminal violations of the BSA and related laws and regulations to the appropriate government authorities.

- The implementation and maintenance of a system of controls and procedures approved by senior management in all areas of the bank that reasonably assures compliance with the BSA and related laws and regulations.
- The independent review of the program by qualified independent auditors at least annually.

#### **D.1.5.2 Know Your Customer (KYC)**

Customer Due Diligence (CDD) includes collecting data beyond the Customer Identification Program requirements, both at account onboarding and thereafter. This additional data collection is referred to as Know Your Customer (KYC). Additionally, CDD information comprises facts about a customer that enable the bank to assess the extent to which the customer exposes the bank to a range of risks. Utilizing CDD and CIP information helps the bank understand the normal and expected activity of its customers and is the basis of strong KYC controls. Organizations need to ‘know their customers’ for a number of reasons:

- To comply with the requirements of relevant legislation and regulation.
- Help the bank, at the time the due diligence is carried out, to be reasonably certain that the customers are who they say they are, and that it is appropriate.
- Provide them with the products or services requested.
- Guard against fraud, including impersonation and identity fraud.
- Help the organization to identify, during the course of a continuing relationship, what is unusual and to enable the unusual to be examined.
- Detect unusual events without a commercial or otherwise straightforward rationale that may indicate money laundering, fraud, or handling criminal or terrorist property.
- Enable the organization to assist law enforcement, by providing available information on customers being investigated following the submission of a suspicious activity report to BSA.

Elements of the bank’s CDD Program also leverage FinCEN Customer Due Diligence Requirements for Financial Institutions (effective May 2018): Final Guidance (**31 CFR Parts, 1010, 1020, 1023, et al.**) for CDD requirements, which include:

- Identification and verification of customers.
- Identification and verification of beneficial owners.
- Understanding the nature and purpose of customer relationship(s).
- Conducting ongoing monitoring to maintain and update customer information and to identify and report suspicious activity when identified.

#### **D.1.5.3 Suspicious Activity Reporting (SAR)**

The bank monitors activity based on various risk factors and reports all types of activity when it knows, suspects, or has the reason to suspect:

- Funds are derived from illegal activity.
- An intent to hide, or disguise funds generated from illegal activity.

- Evasion of federal reporting requirements.
- Transactions with no apparent business or lawful purpose.

#### **D.1.5.3.1 Investigations Policy**

The bank should have adequate processes and procedures to identify, evaluate and report potentially suspicious activity, taking into account the bank's overall risk profile and the volume of transactions. Regardless of the source of the case, investigations are handled similarly. Research is performed, an informed decision is made whether to file a Suspicious Activity Report (SAR), a detailed explanation is written, and supporting documentation is stored and saved.

#### **D.1.5.3.2 Possible Terrorism**

If the bank has reason to believe that the potentially suspicious activity may be related to terrorism, the investigator will notify the BSA Officer or designee and the BSA Officer will notify the Federal Bureau of Investigations (FBI) and FinCEN's Financial Institutions Hotline at (866) 556-3974 as soon as possible, then follow-up with the filing of a SAR. In addition, the investigations analyst must immediately make the investigations supervisor and BSA Officer aware of the results of the investigation.

#### **D.1.5.3.3 Law Enforcement/National Security Letters /Legal Process/Subpoenas**

Law enforcement inquiries and requests may include grand jury subpoenas, National Security Letters (NSL), and section 314(a), or 314(b) positive matches. Although receipt of any law enforcement inquiry, legal process, or NSL does not by itself, require the filing of a SAR by the bank, it may be relevant to a bank's overall risk assessment of its customers and accounts. For example, the receipt of a grand jury subpoena should cause the bank to review account activity for the relevant customer. It is incumbent upon a bank to assess all of the information it knows about its customer, including the receipt of a law enforcement inquiry, in accordance with its risk-based BSA/AML compliance program.

The bank should determine whether a SAR should be filed based on all customer/account information available. Due to the confidentiality of grand jury proceedings, if a bank files a SAR after receiving a grand jury subpoena, law enforcement discourages banks from including any reference to the receipt or existence of the grand jury subpoena in the SAR. Rather, the SAR should reference only those facts and activities that support a finding of suspicious transactions identified by the bank.

NSLs are written investigative demands that may be issued by the local FBI and other federal governmental authorities in counterintelligence and counterterrorism investigations to obtain the following:

- Telephone and electronic communications records from telephone companies and Internet service providers.
- Information from credit bureaus.

- Financial records from financial institutions.

NSLs are highly confidential documents; as such, examiners will not review or sample specific NSLs. Pursuant to 12 United States Code 3414(a)(3) and (5)(D), no bank, or officer, employee or agent of the institution, may disclose to any person that a government authority or the FBI has sought or obtained access to records through a Right to Financial Privacy Act NSL. Banks that receive NSLs must take appropriate measures to ensure the confidentiality of the letters and should have procedures in place for processing and maintaining the confidentiality of NSLs.

If a bank files a SAR after receiving an NSL, the SAR should not contain any reference to the receipt or existence of the NSL. The SAR should reference only those facts and activities that support a finding of unusual or suspicious transactions identified by the bank. Note: the bank must notify the submitting office if closure will be pursued prior to closing the account(s). The bank will keep these documents confidential and will not share with global parent.

Questions regarding NSLs should be directed to the bank's local FBI field office. Contact information for the FBI field offices can be found at [www.fbi.gov](http://www.fbi.gov).

#### **D.1.5.3.4 SAR reporting on Marijuana Related Businesses (“MRBs”)**

- “Marijuana Limited” SAR Filings
  - A financial institution providing financial services to a marijuana-related business that it reasonably believes, based on its customer due diligence, does not implicate one of the FinCEN priorities or violate state law should file a “Marijuana Limited” SAR. The content of this SAR should be limited to the following information:
    - identifying information of the subject and related parties;
    - addresses of the subject and related parties;
    - the fact that the filing institution is filing the SAR solely because the subject is engaged in a marijuana-related business; and
    - the fact that no additional suspicious activity has been identified. Financial institutions should use the term “MARIJUANA LIMITED” in the narrative section.
  - A financial institution should follow FinCEN’s existing guidance on the timing of filing continuing activity reports for the same activity initially reported on a “Marijuana Limited” SAR. The continuing activity report may contain the same limited content as the initial SAR, plus details about the amount of deposits, withdrawals, and transfers in the account since the last SAR. However, if, in the course of conducting customer due diligence (including ongoing monitoring for red flags), the financial institution detects changes in activity that potentially implicate one of the FinCEN priorities or violate state law, the financial institution should file a “Marijuana Priority” SAR.
- “Marijuana Priority” SAR Filings
  - A financial institution filing a SAR on a marijuana-related business that it reasonably believes, based on its customer due diligence, implicates one of the FinCEN priorities or violates state law should file a “Marijuana Priority” SAR. The content of this SAR should include comprehensive detail in accordance with existing regulations and guidance. Details particularly relevant to law enforcement in this context include:

- identifying information of the subject and related parties;
- addresses of the subject and related parties;
- details regarding the enforcement priorities the financial institution believed to have been implicated;
- dates, amounts, and other relevant details of financial transactions involved in the suspicious activity. Financial institutions should use the term “MARIJUANA PRIORITY” in the narrative section to help law enforcement distinguish these SARs.
- “Marijuana Termination” SAR Filings
  - If a financial institution deems it necessary to terminate a relationship with a marijuana-related business in order to maintain an effective anti-money laundering compliance program, it should file a SAR and note in the narrative the basis for the termination. Financial institutions should use the term “MARIJUANA TERMINATION” in the narrative section.

To the extent the financial institution becomes aware that the marijuana-related business seeks to move to a second financial institution, FinCEN urges the first institution to use Section 314(b) voluntary information sharing (if it qualifies) to alert the second financial institution of potential illegal activity.

#### **D.1.6 Engaging with Regulators and the Federal Payment System**

##### **D.1.6.1 Regulatory Outline**

###### **D.1.6.1.1 Department of Business Oversight**

The Department of Business Oversight (DBO) has a variety of functions for the State of California that will be critical to a public bank, including the Banking Program, the Enforcement Division, the Information Technology Division, the Legal Division, and the Legislation Division. The DBO would function as the primary in-state regulator for the bank, but would also play a critical role in the legislative changes that would be required as outlined below, have oversight in the role information technology will play in establishing and overseeing a bank that is servicing the cannabis industry, and ensure compliance with the rules and regulations that are established to oversee the cannabis banking industry.

###### **D.1.6.1.2 Federal Deposit Insurance Corporation**

The Federal Deposit Insurance Corporation (FDIC) functions as the primary federal supervisory authority for state-chartered financial institutions that use FDIC insurance, providing deposit insurance and related oversight functions, and receivership management of Insured Deposit Institutions (IDIs). The FDIC has four strategic goals outlined to accomplish these primary functions:

1. Insuring deposits.
2. Examining and supervising financial institutions for safety and soundness and consumer protection.

3. Making large and complex financial institutions resolvable, and
4. Managing receiverships.

As the primary federal regulatory body for FDIC insured institutions the FDIC oversees all components of the bank's operations, including safety & soundness, Bank Secrecy Act/Anti-Money Laundering, and information technology examinations and oversight. The FDIC utilizes onsite examinations and off-site monitoring tools to ensure all member banks and non-member IDIs maintain a level of stability sufficient to manage various economic environments, as well as having the capability to ensure a smooth transition in the event the bank goes into receivership (FDIC, 2018).

#### ***D.1.6.1.3 The Office of the Comptroller of the Currency (OCC)***

The OCC charters, regulates, and supervises all national banks and federal savings associations as well as federal branches and agencies of foreign banks. The OCC is an independent bureau of the US Department of the Treasury.

#### ***D.1.6.1.4 Federal Reserve System***

The Federal Reserve duties and related banking services are the foundation of all interbank and investing activities. The Federal Reserve has four primary functions in the United States:

1. conducting monetary policy;
2. promoting financial system stability;
3. supervising and regulating financial institutions and activities; and
4. fostering payment and settlement efficiency and safety.

All four of these functions interact with any bank accessing the federal payment system in one capacity or another. The Federal Reserve issues US Treasury securities for sale to the banks to monetize the nation's debt, offering member banks an opportunity to earn interest income on their cash by holding the Treasuries credited by the Federal Reserve Bank as a function of conducting monetary policy. The Federal Reserve promotes the financial system stability by monitoring the activity of financial institutions and investment markets both domestically and internationally. The Federal Reserve also has oversight of all bank holding companies (such as will be required for a state bank), and may also function as a secondary regulatory option to the FDIC for State-Chartered financial institutions. Finally, the Federal Reserve is the central clearinghouse for all member banks for interbank transfers through Automated Clearinghouse Services (ACH) and Fedwire Funds Services (wire), as well as providing banking services to the US Government. The three most critical components to the establishment of a public bank are access to the payment system, access to Treasury Securities, and the regulatory oversight of the bank holding company. In addition, the Federal Reserve would likely be the primary federal regulator for a public bank. Table 2 shows the number of institutions monitored by the three primary federal regulators.

Table 2: Primary Federal Regulators

Total U.S. Banks (as of 6/30/2018)			California Banks (as of 9/30/2018)	
Primary Federal Regulator	Number of Institutions	Total Assets (000)	Commercial and de novo Banks	Total Assets (000)
FDIC	3,219	\$2,526	117	\$503
OCC	851	\$11,100		
FRB	763	\$2,720		
Total	4,833	\$16,367		

### D.1.7 Insurance

We have identified four options for the coverage of deposits by cannabis industry businesses and individuals:

1. Standard banking industry insurance of accounts provided to member financial institutions of the Federal Deposit Insurance Corporation.
2. Private issued insurance of accounts through national and international insurance companies, brokers, agents and/or syndicates. Potential sources for insurance of accounts would be brokers and markets that specialize in coverage for higher risk industries and activities. Those would include international brokers Lloyds of London, the Hickocks Group, American Insurance Group as well as brokers in specialty markets and the catastrophe bond market. Additionally, we have identified American Shares Insurance who provides private deposit insurance to credit unions.
3. Public bank insurance of accounts, similar in the construction to FDIC coverage, except that the insurance is backed by the full faith and credit of the State of California.
4. State legislative changes that would allow the public bank to operate without insurance of accounts.

Each of these options would have an impact on regulatory and non-regulatory oversight, deposit growth and lending products, underwriting and credit terms.

#### D.1.7.1 Option 1: FDIC Insurance of Accounts

As a federal agency, the FDIC would likely not approve membership for a financial institution with a business plan specifically designed to bank the cannabis industry exclusively, citing the federal illegality of the industry and the resultant risk profile. Currently, no examples of FDIC membership of a public bank exist, but it does not appear that the FDIC would treat a public bank's membership application any differently than it would a private bank application for membership. However, should the FDIC approve membership, it would base its premium assessment on a risk model that evaluates the bank's asset quality.

The three main components of the risk-based model are:

- Capital adequacy – the amount of unimpaired capital available to meet the bank's current and future obligations. This includes the bank's profitability expectations in the future.

Banks are typically considered adequately capitalized when the capital to assets ratio exceeds 8-12 percent, based on the bank's risk profile.

- Asset quality – the expected future value of loans and other assets. Cannabis industry loans would most likely be classified as high-risk loans due to the possibility that the assets securing the loans could be seized by federal law enforcement as part of an illegal enterprise.
- Management capability – the human capital's ability to manage the risks associated with the bank's business plan.

The FDIC has determined a risk rated value for each loan type. We believe that the FDIC would classify all cannabis related loans as high risk. Based on this, the bank would (1) be required to maintain capital equal to 100 percent of all cannabis industry loans, both commercial and personal, and (2) the bank would therefore need to limit lending activity to the cannabis industry and instead focus its credit extension activity on non-cannabis industries.

#### **D.1.7.2 Option 2: Private Insurance of Accounts:**

We interviewed private insurance underwriters and brokers for this study. Both US based and international insurance providers indicated they would have no interest in providing insurance of accounts in any form to a cannabis focused financial institution, either public or private. If this situation changes and private insurance becomes available, the underwriters would base their decision for any application for coverage, either primary or excess, using approximately the same asset quality considerations as discussed with respect to the FDIC above.

#### **D.1.7.3 Option 3: Public Bank Insurance of Accounts:**

This option is not currently allowed by state banking regulations, so this option would require significant legislation, including

potentially a state-wide ballot measure requiring voter approval. This would also create a liability for the State that cannot be measured for risk, since the highest unknown factor is the negative impact on asset quality that would occur if loan collateral were to be seized by federal agencies. Regardless,

if the State were to provide its own insurance of the accounts, it would likely model it after the FDIC coverage and assessment regulations. This would place the same asset quality pressures on lending as discussed above in the FDIC option.

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No option has the capability of delivering insurance of accounts to customers of a cannabis industry focused financial institution.

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#### **D.1.7.4 Option 4: Operate Without Insurance of Accounts:**

Current state banking statutes do not allow a bank charter to be issued unless insurance of accounts is in place. Changes in the statute would require significant legislation. Also, the bank would be required to adequately disclose the lack of insurance of accounts to all depositors, which would negatively impact market share and deposits. Attempting to operate without

insurance would be an additional and significant risk factor in the decision by the Federal Reserve as to whether or not to grant the bank a master account.

#### ***D.1.7.5 Summary***

The four options discussed here represent the total of all possible methods that can be deployed by a financial institution with respect to insurance of accounts. No option has the capability of delivering insurance of accounts to customers of a cannabis industry focused financial institution. Additionally, each option has significant negative financial and liability impact on the bank and the State of California.

We therefore conclude that there is currently no alternative available for insurance of deposit accounts.

### ***D.1.8 Legal, Regulatory, and Financial Risks***

#### ***D.1.8.1 Legal Risks***

##### ***D.1.8.1.1 Legal Support Resources***

Legal information used in this analysis was obtained through written materials, publications, and personal interviews with a variety of legal counsels. It is our observation that all of the cited legal opinions are consistent on the topics addressed in this section. The specific references used were:

- Office of the Attorney General, Deputy Attorney General Michael Sapozinkow.
- Davis Polk & Wardwell LLP, with citations from Bank Regulatory Considerations Related to Establishing a Public Bank in the State of California.
- Mr. Mark Belongia Esq., Partner at Thompson Coburn LLP, specialty in practice, Cannabis and Banking Regulation, <https://www.thompsoncoburn.com/offices/los-angeles>.
- Mr. Alan Thompson Esq., Mr. Arthur Coren., Partners at Duane Morris LLP, specialty in practice Cannabis and Banking, <https://www.duanemorris.com/offices/losangeles.html>.
- Mr. Richard P. Ormond Esq., Shareholder, Buchalter, A Professional Corporation, scope of practice in Cannabis and Banking, <https://www.buchalter.com/>.
- Offices of General Counsel, Visa, MasterCard, Discover, American Express.

##### ***D.1.8.1.2 Federal Laws Effecting Banking Cannabis***

The concept of a public cannabis bank is based on a fundamental concept of cannabis financial transactions as a core deposit and lending product. The following areas have been reviewed as material areas of concern in this concept:

- The Controlled substances act in alignment with the Supremacy Clause<sup>7</sup> of the US Constitution makes it illegal for banks to aid and abet a cannabis business (21 U.S.C. 841, 2012).
- Pursuant to US Law actions surrounding providing aid, abetting, counselling, inducing, causing, or soliciting is punishable as the principal in the act. In summary, all employees, managers, directors, officers, agents who aid in the sale, manufacture, distribution, or dispensing of cannabis are equally liable to the principal in the business and can be prosecuted as such under the federal law (18 U.S.C. 2 - Principals, 2012).
- FinCEN has material authority to seek substantial civil money penalties against banks who violate the law indicated in item one above. As an example, the Suspicious Activity Reporting (SAR) is complex in bank servicing of cannabis (Wack, 2017). Various experts have testified at the State Treasurer's Cannabis Banking Working Group stating that it is impossible to meet all standards of the FinCEN guidance published for cannabis. In the example cited, the financial risk from the federal government to any bank is very high regarding even unintended banking errors (Hill, 2015).
- During the Obama administration the US Department of Justice (DOJ) published a memorandum that provided some guidance to DOJ prosecutors regarding the prosecution of federal marijuana cases. While not a change to the legality of cannabis, some viewed this as a softening of federal legal stance. However, former Attorney General Jeff Sessions rescinded this memorandum in January 2018, leaving no doubts or questions on the position of the DOJ (Sessions, 2018).
- Although FinCEN guidance exists regarding the BSA standards in banking, as previously stated these have been publicly acknowledged as unachievable in two of the seven elements (FinCEN, 2014). Further, it has been cited by US Senators Diane Feinstein and Charles Grassley in formal correspondence with FinCEN that a bank reporting SAR's pursuant to this statute is admitting knowing violation of the federal laws previously addressed, and such documents can be used against them in any court proceeding.

#### **D.1.8.1.3 Potential State Employees or Agents Liability**

California and its employees are not immune from prosecution under federal criminal statutes. The Tenth Amendment provides no immunity. The Tenth Amendment states that “the powers not delegated to the United States by the Constitution, nor

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California and its employees are not immune from prosecution under federal criminal statutes.

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prohibited by it to the States, are reserved to the States respectively, or to the people.”<sup>8</sup> But courts have held that the Constitution authorizes the federal government to enact both the federal criminal and banking statutes discussed in this preliminary legal analysis (Gonzales, Attorney General, et al. v. Raich et al., 2005). Therefore, the Constitution’s Supremacy Clause applies: “This Constitution, and the Laws of the United States which shall be made in Pursuance thereof..., shall be the supreme Law of the Land; and the Judges in every State shall be bound

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<sup>7</sup> US Constitution art. VI, 2.

<sup>8</sup> US Const., 10th Amend.

thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding”<sup>9</sup> (Davis Polk & Wardwell LLP, 2017).

The Eleventh Amendment, which preserves the sovereign immunity of states from suits in federal court filed by citizens of other states or citizens or subjects of foreign states, does not provide any protection to states against prosecution or litigation initiated by the federal government (West Virginia v. United States, 479 U.S. 305, 1987). State legislators have no privilege in federal courts equivalent to the Speech or Debate Clause of the US Constitution (United States v. Gillock, 445 U.S. 360, 1980) (Wattson, 2016). The most relevant protection for California policymakers may come from the First Amendment, which protects the right of all Americans “to petition the Government for a redress of grievances.”<sup>10</sup> That provision protects state officials and employees from being prosecuted for their efforts to seek guidance and approval from the federal government. There should therefore be no criminal liability for the state or any state employee for preparing for review a bank business plan and presenting it to the federal government for review.

#### **D.1.8.1.4 Criminal Forfeiture, Civil Forfeiture, and Civil Monetary Penalties**

Several statutes authorize the federal government to seize and forfeit property associated with federal criminal acts. Criminal forfeiture statutes authorize the government to forfeit the proceeds of crime and other property owned by the defendant in a criminal action. Civil forfeiture is in

the nature of an *in rem* proceeding: the federal government identifies property as proceeds of, or otherwise associated with, federal criminal acts, and subject to confiscation.

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Several statutes authorize the federal government to seize and forfeit property associated with federal criminal acts.

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There are provisions that cover federal crimes generally, and specific forfeiture provisions associated with the Controlled Substances Act and anti-money laundering laws (18 U.S.C. 981 - Civil forfeiture, 2017) (18 U.S.C. 982 - Criminal forfeiture, 2017) (21 U.S.C. 853 - Criminal forfeitures, 2017) (21 U.S.C. 881 - Forfeitures, 2017). In addition, banking laws that authorize civil monetary penalties equaling the amount of pecuniary gain to a criminal or pecuniary loss to a victim operate in some ways like forfeiture statutes (12 U.S.C. 1833a - Civil penalties, 2017). The nuances of all of these laws, and the prosecutorial pros and cons of using one versus another, are beyond the scope of this analysis. In sum, the forfeiture laws give the federal government the power to forfeit from any bank that is violating the Controlled Substances Act and anti-money laundering statutes, (a) all funds in accounts that contain proceeds of criminal conduct, ***including commingled funds that are not derived from the criminal conduct***, and (b) all property used in the commission of drug crimes, including real property, computer equipment, etc. (U.S. v. McGauley , 2002).

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<sup>9</sup> US Const., art. IV, cl. 2.

<sup>10</sup> US Const., 1st Amend.

#### **D.1.8.1.5 The Racketeer Influenced and Corrupt Organizations (RICO) Act**

The Racketeer Influenced & Corrupt Organizations Act (RICO) prohibits the operation of “criminal enterprises” (18 U.S.C. – Crimes and Criminal Procedure, 2017). RICO establishes criminal and civil penalties, all of which require the government to establish that there has been some underlying criminal conduct. RICO is therefore often redundant of the statutes that make that conduct a crime in the first place, when coupled with the broad federal definitions of “aiding and abetting” and “conspiracy.” RICO provides an independent and alternative ground for prosecution or for civil monetary penalties or forfeiture, but specifically as it relates to a public banking financial institution, the analysis of potential federal government enforcement under RICO is largely duplicative of the analysis in the preceding portions of this section.

Unlike the Controlled Substances Act or anti-money laundering statutes, however, RICO authorizes a private cause of action: any individual or non-government entity who is harmed by conduct that could be prosecuted under RICO can sue for treble damages.

State and local governments are generally immune from RICO civil liability because they cannot form the necessary criminal intent, but individual government employees can be liable under RICO for acts done in their individual capacity, for example when they misuse their public office for personal gain (United States v. Warner, 2007) (Lancaster Com. Hosp. v. Antelope Valley Hosp, 1991). While public employees have more protection against civil RICO liability than private individuals, the public cannabis bank could be especially vulnerable to potential conflicts of interest among its employees, or of any other possible basis for alleging that public employees operated in an “individual” rather than an “official” capacity, or misused their office for personal gain.

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Any individual or non-government entity who is harmed by conduct that could be prosecuted under RICO can sue for treble damages.

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#### **D.1.8.1.6 California State Laws Impacting a Public Cannabis Bank**

Under California law, a bank charter is required to take deposits. There is no California law or statute authorizing the establishment of a public bank pursuant to the anticipated public bank charter. It may be possible for the California Department of Business Oversight, the sole current authority for chartering a state private sector banking business in California, to issue a Commercial Charter for a public bank (Cal. Fin. Code § 1043, 2012). However, fitting the public bank business model into a Private/Commercial Bank Charter would be a challenge. The commercial bank would then require approval from the FDIC in order to be compliant with California law. A formal written opinion should be obtained from the commissioner of the California Department of Business Oversight on the feasibility of using a Private/Commercial Bank Charter for a public bank before beginning the application process. Each application must meet a variety of stringent evaluation tests, of which one is, “the proposed bank will have a reasonable promise of successful operation”. The financial performance projections of the PCB as documented in this study make demonstration of successful operation a challenge. Further

the applicant is required to have depository insurance, and our analysis indicates that this will be difficult or impossible to achieve (Cal. Fin. Code § 1023, 2012).

#### **D.1.8.1.7 Legal Issues on “Covered Transactions”**

Section 23A of the Federal Reserve Act and its implementing regulation, Regulation W, apply to transactions between an insured bank and its affiliates. The term “affiliate” includes companies that control the bank, as well as companies controlled by such companies. Strict limitations on and collateral requirements for transactions with affiliates have been referred to as the “Magna Carta” of banking law (Omarova, 2011). However, if FDIC insurance were to become available, the FDIC might define the public shareholders and potentially any other California governmental entities as affiliates of the public bank. Transactions covered by 23A and Regulation W include loans and extensions of credit by a bank to its non-bank affiliate (Michael S. Barr, 2016). Public banks without federal deposit insurance and created under a special statute, are not subject to this limitation. By avoiding federal deposit insurance, any limitations on transactions with affiliated entities would likely be governed by the California Department of Business Oversight. While there is no definitive regulation or federal statute that applies directly, we do not believe Regulation W would extend to California taxpayers.

#### **D.1.8.1.8 Legal Collateralization Requirements under California Law**

California state law requires that deposits of state funds into a private commercial bank or credit union must have collateral from that bank over the FDIC-insured amount (FDIC, 2013). If an existing charter statute were used, this requirement would apply. Amending this requirement would require a modification of a California statute.

#### **D.1.8.1.9 Additional Legal Risks**

This legal risk review focuses on the risks of federal criminal enforcement, but other risks include:

- California being instructed by federal authorities to cease and desist early in the process. The risk would then be any funds expended to that point plus the wind-down costs would be sunk costs and unrecoverable.
- The federal government filing suit for injunctive or declaratory relief.
- California might spend a substantial amount of money to create a public cannabis bank, only to have the institution shut down or never start up (either due to federal intervention or because it becomes unnecessary following a change in federal law).

#### **D.1.8.1.10 *Treasurer Chiang's Cannabis Banking Working Group Questions***

In addition to calling for a general legal analysis, the November 7, 2017 report “Banking Access Strategies for Cannabis-Related Businesses” raised three specific questions:

- 1) Could a state-backed financial institution be created without violating federal law?

No. As long as cannabis remains a Schedule 1 drug, providing financial services to cannabis-related businesses would be a crime under the Controlled Substances Act, anti-money laundering statutes, and the Racketeer Influenced and Corrupt Organizations Act (RICO), regardless of whether the bank’s customers comply with California law.

Some federal legal risks and compliance costs would be reduced or eliminated through the creation of a state-backed financial institution. But creating a state-backed financial institution would not eliminate the federal criminal liability.

- 2) Would a state-backed financial institution be subject to federal oversight and regulation?

The Federal Reserve Bank would likely exert its authority for oversight based on two areas:

1. In order to provide essential services such as check processing, wire transfers and ACH transactions, the bank would apply to the Federal Reserve Bank for an account by which transactions could be processed. This application approval would include oversight necessary to ensure the transactions would be properly initiated, completed and properly posted to the customer account. This oversight would include adherence to all federal banking regulations.
2. Using the proposed bank holding company business model, the Federal Reserve, in its capacity as regulator for bank holding companies, would have the authority to exert oversight indirectly to the subsidiary bank.

As long as cannabis remains a Schedule 1 drug, providing financial services to cannabis-related businesses would be a crime.

- 3) Would tax revenues deposited in the state-backed financial institution be at risk of seizure by the federal government?

Yes. The deposits held by the state-backed financial institution would be subject to seizure under federal criminal forfeiture, civil forfeiture, and RICO forfeiture laws. It would therefore be prudent for all

tax revenues to be removed from the state-backed financial institution as soon as they are identified as money due to the state. The state's forfeiture risk will be reduced by limiting deposits to private entities, refraining from commingling public funds like tax revenues with state-backed financial institution deposits, and ensuring that the state-backed financial institution does not loan money to the state. This limitation of course impacts the financial viability of the PCB as indicated in the financial projections.

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The deposits held by the state-backed financial institution would be subject to seizure.

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#### **D.1.8.2 Regulatory Risks**

##### **D.1.8.2.1 Concentration Risk**

Concentration risk is a term describing the level of risk in a bank's portfolio arising from concentration in a single source or product within a given geography, sector, or counterparty. Concentration risk arises from the observation that more concentrated product or service portfolios are less diverse and therefore (21 U.S.C. 841, 2012) the returns on the underlying assets are more correlated (Spacey, 2017).

Concentration risk can be calculated for a single bank loan or whole portfolio using a concentration ratio. For a single loan, the concentration ratio is simply the proportion of the portfolio the loan represents (e.g. a \$100 loan in a \$1000 portfolio would have a ratio of 0.1 or 10 percent). For an entire portfolio, the concentration ratio for each loan product type is first calculated, followed by the ratio of each loan in each product type. The results of each calculation are combined to determine concentration by loan product type and by loan ownership. Separate concentration ratios must be calculated for each type of concentration (Saxena, 2011). To illustrate, a portfolio with 10 equally sized loans would have a concentration ratio of 0.1 or 10 percent, whereas a portfolio of 10 loans - 9 equally sized and 1 equal to half the value of the portfolio would have a concentration ratio of 0.27 or 27 percent. The concentration ratio is useful for bankers or investors to identify when a portfolio may be excessively exposed to the risk that a recession, market pricing compression, or downturn in one or more vertical markets may cause a significant proportion of the bank's assets to fail. Concentration risk is usually avoided within commercial banks as a risk-mitigation tool. It

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Servicing cannabis, either as a single focus product or as a material core product of the potential PCB model presented in this feasibility study, represents a concentration risk of 0.80 to 1.0, well above acceptable federal standards of 0.24 for concentration risk.

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is also monitored by banking regulators and generally attracts a higher requirement of capital for the bank.

Concentration risk ratio numbers greater than 0.24 in banking are considered high concentration risk and indicate a need for additional capital and liquidity levels with high monitoring, and documented risk mitigation steps including contingency plans if problems are noted (Malta Financial Services Authority, 2013). These would include, but are not limited to regulator orders to cease service growth, or to shed or move levels of the concentration. As noted in Treasurer Chiang's CBWG report, concentration is a material financial safety concern to banking regulatory agencies. The proposed PCB would be completely reliant on cannabis as a product and service stream, and it could be argued that concentration risk would be at a maximum 100 percent level of risk.

The high levels of concentration risk result in a moderate to high probability that regulators will not approve formation of the bank; a very high probability that insurance for deposits will not be available; a high to very high probability of extended schedule delays in obtaining approval to operate; and a very high probability that bond holders will demand a concentration risk related premium.

#### **D.1.8.2.2 Auditing and Oversight Risk**

One concern with the PCB proposal is the clear conflict of interest for the State of California. The PCB would be run by the State of California with a clear interest in the PCB success. However, regulation and oversight would also fall under the

State of California DBO. While the State may waive the conflict, the Federal Reserve would be unlikely to do so. One obvious option would be to have the Federal Reserve oversee the PCB as the regulator, however since cannabis is still illegal on a federal level, there is a significant risk that the Federal Reserve would be unable to provide this service.

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One concern with the PCB proposal is the clear conflict of interest for the State of California. While the State may waive the conflict, the Federal Reserve would be unlikely to do so.

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#### **D.1.8.2.3 Access to the Federal Payment Systems**

A Federal Reserve master account is necessary to support any type of inter-bank financial transaction. This includes check clearing, electronic payments, and wire transfers. A bank without a master account would not be able to effectively operate.

The Cole Memo<sup>11</sup> and the resultant FinCEN guidance allowed private/commercial banks to feel more secure offering accounts to cannabis businesses. Nonetheless, only a few banks and credit unions are willing to do so, and these are generally small banks and credit unions that already have their own direct (via a master account with the local Federal Reserve Bank) or indirect (via a correspondent banking account with a larger bank) access to the payments system (Salal Credit Union, n.d.). Attempts by de novo depository institutions to have both a cannabis-dominant

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<sup>11</sup> The Cole Memorandum was a United States Department of Justice memorandum, now withdrawn, governing priorities for federal prosecution of offenses related to marijuana.

business model and to get direct access to the Federal Reserve's payment system have not been successful, although there are some takeaways with respect to the proposed public bank in California.

Colorado began by changing its law to permit the creation of a state-chartered cooperative for state legal cannabis businesses that could take deposits, but which would not be required to have FDIC insurance. The Colorado cooperative statute required that the cooperative have direct access to a master account at a Federal Reserve Bank (Colo. Rev. Stat. Ann. § 11-33, 2016). No cooperatives have been chartered in Colorado under this model.

In November 2014, the Colorado Division of Financial Services granted a credit union charter to Fourth Corner, whose members envisioned a business plan that would serve Colorado state legal cannabis businesses by providing banking services to licensed cannabis businesses and cannabis legalization supporters. Immediately after its state charter became final, Fourth Corner applied to the Federal Reserve Bank of Kansas City for a master account. For most banks and credit unions, opening a master account at a Federal Reserve Bank is a routine matter that happens quickly (Hill, 2015). Fourth Corner, which operated under the Traditional Plus Cannabis Business Model, was unable to obtain such a correspondent account (Fourth Corner Credit Union v. Federal Reserve Bank of Kansas , 2017). After a 40 month application and court battle the Fourth Corner Credit Union was forced to modify its de novo application to only service those companies in the cannabis industry who were not plant touching. This excluded service to cannabis cultivators, retail sales and manufacturers. This conditional approval was also conditional on specific insurances for deposits. The Fourth Corner Credit Union now will cater to advocacy groups, charities and ancillary companies such as accountants or lawyers who service the cannabis industry (Fourth Corner Credit Union v. Federal Reserve Bank of Kansas , 2017).

When denying the Fourth Corner application, the Federal Reserve Bank of Kansas City cited eight reasons for the denial:

1. As a de novo bank, there was no historical record for the Federal Reserve Bank to review.
2. Insufficient information to assess Fourth Corner's ability to safely and soundly operate.
3. Insufficient information to assess Fourth Corner's ability to comply with applicable laws and regulations, including the BSA and anti-money laundering responsibilities.
4. Fourth Corner's focus on serving cannabis businesses.
5. The illegality under the Controlled Substances Act to manufacture, distribute and dispense cannabis.
6. Fourth Corner had not demonstrated its ability to conduct appropriate enhanced monitoring requirements and manage its risk appropriately with respect to its customers with cannabis businesses.
7. Fourth Corner's business model focused on a newly licensed industry with relatively immature businesses operating in an environment of evolving laws and regulations.
8. Fourth Corner's lack of capital at inception would make it unable to absorb losses it may initially incur (Federal Reserve Bank , 2015).

Fourth Corner, citing the Cole Memo and FinCEN Guidance, sued the Federal Reserve Bank of Kansas City. Noting the continued nature of cannabis as a Schedule 1 drug under the Controlled Substances Act, the district court dismissed Fourth Corner's lawsuit on the grounds that, "Courts cannot use equitable powers to issue an order that would facilitate criminal activity" (Fourth Corner Credit Union v. Federal Reserve Bank of Kansas , 2017).

It is possible, that a well-capitalized public bank using the commercial bank charter and following the traditional public bank

business model (*i.e.*, without any cannabis activities), should, over time, be able to open a master account at its local Federal Reserve Bank. It is estimated that time frame for review, based on the Territorial Bank of American Samoa example, to be approximately two years following application. A public bank

with a public bank charter should qualify as a "depository institution," and to the extent it follows the prior accepted public bank business model (Federal Reserve Bank, 2013). However, it is highly unlikely that under the current federal laws regarding cannabis, a public bank with a concentration of cannabis as its primary product would be permitted to open a master account with the San Francisco Federal Reserve Bank for many, if not all, of the reasons that resulted in the Fourth Corner Credit Union denial.

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It is highly unlikely that a public bank with a concentration of cannabis as its primary product would be permitted to open a master account with the San Francisco Federal Reserve Bank.

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Even if the Federal Reserve were to permit a master account, full retail service could not be obtained without the networks that are the settlement processing engine of the payment systems. If granted a Federal Reserve account, the PCB would theoretically be able to ACH and wire funds between the PCB and other banks. But they would only be able to do this to the extent that the receiving bank agreed to accept such transfers from the PCB. If the receiving private/commercial bank knows that the transferred funds are cannabis, they may decline or reject such transmissions. It is also unclear at this time if international wires or remittances entering or exiting the country would be permitted through the international laws governing wire transmissions and related liabilities.

#### **D.1.8.2.4 Summary with Respect to Federal Regulatory Agencies**

In preparing this report, we spoke with many federal and state bank regulators. The interviews and contacts spanned three state banking entities, three federal entities and nineteen bank regulatory managers. While individuals often insisted on speaking only off-the-record, a summary of relevant responses and findings is as follows:

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The general position, without exception, was for any meaningful change to occur it must occur within the structure of federal legislation through the US Congress and the office of the President of the United States.

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- Banking regulators, both on a state and federal level are critically aware of, sensitive to, and in favor of a safe and sound practice in the area of cannabis banking. Each of the regulators interviewed believe a vested interest exists for a proper financial solution to be introduced.
- The general position, without exception, was for any meaningful change to occur it must occur within the structure of federal legislation through the US Congress and the office of the President of the United States. All other aspects of banking or financial services have flaws which, based on the current federal law, are illegal (21 U.S.C. 841, 2012). There is no ambiguity in the federal law at this time that would suggest an alternative position. Due to the Supremacy Clause<sup>12</sup> of the US Constitution, state's rights do not have a position of superiority.
- Pursuant to US federal law, any actions surrounding providing aid, abetting, counselling, inducing, causing, or soliciting are punishable as the principal in the act. As a result, all employees, managers, directors, officers, agents who aid in the sale, manufacture, distribution, or dispense of cannabis are equally liable to the principal in the business and can be prosecuted as such under the federal law (18 U.S.C. 2 - Principals, 2012).
- Interview responses indicated support for the proposed Safe Banking Acts pending in the US Congress (S1152 and HR 2215), which would act to assure banking of cannabis funds was exempted from the existing laws, provided such banking was in alignment with existing regulations. Simply put, this resolves the issues surrounding availability of banking in cannabis through use of private commercial banks that are already established.
- The responses indicated a high probability that federal deposit insurance through the FDIC would not be available. This response was based partially on the fact that the bank was a public bank, but primarily because of concentration in a single industry. Regulators were clear that no official decision could be made until an actual application was pending, but the general response indicated that the likelihood of insurance from the FDIC on deposits would be less than 5 percent.
- **Public banks are perceived by the Federal Reserve to be a higher risk than private commercial banks due to the influence of elected and career officials who see a public bank as a road to funding economic and social development goals without regard to the financial consequences.** One only needs to review the recent history of the issues surrounding the near failure of Freddie Mac and Fannie Mae to see how this perception has come about. Most recently, the Boston Federal Reserve Bank reviewed the Bank of North Dakota and did not recommend this model for new public bank establishments (Elmatad, 2011). Whereas most applications to the Federal Reserve are processed locally in the region of application, due to the federally illegal nature of the proposed bank, an application for the PCB would most likely be processed in Washington D.C. with the

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Interview responses indicated support for the proposed Safe Banking Acts pending in the US Congress, which would act to assure banking of cannabis funds were exempted from the existing laws.

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<sup>12</sup> US Constitution Article VI, (2).

Federal Reserve Board of Governors. Assuming approval, which is unlikely, processing time alone for applications with the Federal Reserve Board of Governors is an extensive process.

#### **D.1.8.3 Financial Risks**

The history of bank failures for public banks is high, with twenty-nine failures of public banks in the last 100 years, and only one bank with an operational history existing today (Bank of North Dakota)<sup>13</sup>.

The financial risks related to the PCB are prevalent in two primary areas, capital and operating margin. Capital risk ties directly to the risk weighting of the loans and the deposits in the bank, and capital adequacy is the direct result of establishing the risk

weighting of the deposits and loans to identify the minimal capitalization requirements for the bank. While cash is typically zero-risk weighted in a depository institution, the federal illegality of the activity and proceeds deposited into the bank increases the risk immeasurably. The deposits are at risk of seizure by the US DOJ pursuant to the Controlled substances act (21 US Code § 881), so the risk weighting of those deposits would increase from 0 percent potentially up to 100 percent. This will place a burden on the State due to the significant amount of capital required to maintain the necessary adequacy, as well as have a material impact on the bottom line as it relates to the Net Interest Margin (NIM) and overall financial performance of the bank, due to the significant interest expense incurred funding the capital requirements.

The capital risk and impact from the cost of capital is challenged further by the lack of access to standard interest generating activities that typical retail/commercial banks would have access to. Net interest margin – the spread between the return on loans and the cost of the funds used – is a critical measure of asset performance and efficiency. The significant cost of capital for the proposed bank applies downward pressure to NIM, while the lack of access to traditional loan product offerings and standard investment instruments limits the interest income opportunities. The loan to deposit ratio starts at 4 percent in 2025 and growing to 18 percent, compared to the statewide average of 86 percent for California banks as of June 30, 2018 (Department of Business Oversight, 2018). The reason for the disparity is the inability to offer loans directly to the Tier 1 cannabis industry as a result of the controlled substances act. Not being able to fully leverage the deposits with standard lending products limits the bank's ability to generate critical interest income from performing loans and

The history of bank failures for public banks is high, with twenty-nine failures of public banks in the last 100 years.

Traditional interbank investment instruments and treasury bills and notes are also likely to be restricted, as the cannabis deposits would be prohibited from comingling with other non-cannabis deposits. We recommend that all funds derived from the cannabis industry remain segregated from all other state funds.

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<sup>13</sup> A second public bank, the Territorial Bank of American Samoa, opened in April 2018.

has a material impact on the bottom line performance of the bank. The loans that are projected for the bank would have to be in situations that would not be considered loans to the cannabis industry, ostensibly to non-plant touching Marijuana Related Businesses (MRBs) or individuals working for the MRBs themselves. The limited ability to lend directly to the Tier 1 cannabis industry impacts the bottom line directly through NIM, as well as in an indirect manner as adoption of the banking services by MRBs is likely to decrease if they are not able to access traditional banking products to support their businesses.

Traditional interbank investment instruments and treasury bills and notes are also likely to be restricted, as the cannabis deposits would be prohibited from comingling with other non-cannabis deposits, and federal regulations would preclude using cannabis deposits for the purchase of those instruments. Even looking at the California Pooled Money Investment Account for low-risk, short-term investing, mingling of the funds from a public cannabis bank with this fund puts the fund itself at risk of forfeiture. We recommend that all funds derived from the cannabis industry remain segregated from all other state funds.

#### ***D.1.8.3.1 Operating Margin***

Another primary factor that negatively impacts the bottom line is the cost of branches necessary to ensure appropriate coverage throughout the state. The overhead and salary costs to service branches throughout the state are projected to outpace the non-interest income generated until at least 2030, so the bank will also deal with negative operating margins in addition to the cost of capital. The efficiency and success of the individual branch locations, and in turn success of the bank itself, will be reliant on maximizing the fee generating products to help offset some of the limitations the bank has related to lending and investing. However, generating fee income in more traditional products could also be limited by federal or network restrictions related to movement of cannabis related deposits, including merchant services, international services, and direct deposit payroll.

#### ***D.1.9 Capitalization and Capital Analysis***

Bank capital is generally defined as representing the difference between a bank's assets and liabilities; however, in this specific model the calculation of capital must encompass the economic impact of applicable federal law and regulations. In effect, bank capital can be conceptualized as the funds available to compensate the last in line creditors if the bank were to liquidate its assets. Capital injected into the PCB would need to be equity in order to qualify as regulatory capital.

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All cannabis related loans would be classified as 100 percent risk weighted loans (that is, the highest risk value).

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#### ***D.1.9.1 Capital Risk Weighting***

In the establishment of a California PCB, the criteria utilized for a private bank risk capital are not applicable. These criteria include, but are not limited to:

- Loans in a standard commercial bank are risk weighted based on established standards tied to the nature of the loan (e.g. private real estate, commercial real estate, personal loan, auto loan etc.). For the PCB, there is no current risk weighting standard, but there can be a reasonable assumption of greater risk given the potential seizure of loans, proceeds and underlying assets by the Department of Justice (DOJ). It should therefore be assumed that all cannabis related loans would be classified as 100 percent risk weighted loans (that is, the highest risk value).<sup>14</sup>
  - Cash on hand is generally zero risk weighted (lowest risk), but in this specific context it is potentially subject to seizure by the DOJ. This potentially could change the risk weighting from zero risk weighted to a risk weighting of up to 100 percent on each dollar of cash.
  - Startup capital in a de novo private bank is considered an asset but in the PCB model may be considered a potential liability and at risk of seizure if the US DOJ were to determine that the funding of capital to start and support the cannabis public bank is conspiratorial. If the DOJ were to assert, pursuant to federal law, that the capital was designed to support financial services to be provided in violation of federal law, a case could be envisioned where federal seizure actions may be taken against State of California funds used to capitalize the PCB. Based on the bond issue terms, the state may be required to repay the bonds even if the bank's assets are seized and the bank is closed. This is not to suggest that such a case has been made, nor suggesting its probability of success, however any financial institution currently engaged in service to the cannabis industry incurs the conceptual risk of asset seizure and civil and criminal conspiratorial charges.
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Any financial institution currently engaged in service to the cannabis industry incurs the conceptual risk of asset seizure and civil and criminal conspiratorial charges.

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#### **D.1.9.2 Capital Calculation and Capital Raised**

Capital adequacy is determined by state and federal regulators through the charter application process. Regulators do not prescribe a minimum dollar capital level but instead consider the unique factors of each application when determining the minimum capital level based on an evaluation of size, complexity, activities, concentrations and business model.

*Table 3: Analysis of the factors for capital adequacy*

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<sup>14</sup> It should also be noted that under current federal law, those engaged in cannabis related lending could be considered conspirators and subject to criminal or civil actions by various law enforcement authorities.

<b>Factor</b>	<b>Issues</b>	<b>Conclusion</b>	<b>Impact</b>
Size	Rapid growth is projected due to the need for cannabis banking. Growth is driven by cannabis deposits based on industry sales estimates.	Growth will be faster than normal and could be explosive.	High Risk—increased need for capital.
Complexity	The model as projected provides basic banking products that are not complex. However, state wide banking for a cash intensive, federally illegal product increases the complexity.	Above average complexity, should be monitored closely.	Above Average Risk—elevated need for capital.
Activities	Banking a federally illegal product that is potentially subject to seizure and may be subject to federal criminal penalties is extremely high risk.	Extremely High Risk.	Extremely High Risk—substantial need for increased capital.
Concentration	Concentration in a high risk, immature industry, with potential changes looming at the Federal level is extremely high risk.	Extremely High Risk.	Extremely High Risk—substantial need for increased capital.
Business model	The PCB will require twenty-two years (six years for start-up and sixteen years of operation) to become profitable, and thirty-two years to recoup initial operating losses; has a severe concentration in a product that is federally illegal and may be subject to seizure of both assets and liabilities; is likely uninsurable and has the risk of criminal charges, however small, against its employees. The offsetting good is to take cash out of the system which helps reduce public safety issues and help promote a growing industry in the state until federal legislation is eventually passed for safe banking or cannabis is decriminalized. Once federal legislation providing legal banking activities to cannabis industry businesses occurs, the need for PCB diminishes and likely would be wound down.	Extremely High Risk.	Extremely High Risk—substantial need for increased capital.

The unique factors for PCB point to a need for substantially higher capital levels than normal in order to get regulatory approval. Normal de novo institutions are required to maintain minimum

capital levels above well capitalized guidance of 8 percent Tier 1 Risk-Based Capital and 10 percent Tier 2 Risk-Based Capital for a minimum of three to five years. The Bank of North Dakota, which is the only existing public bank in America with a successful operating history, has capital ratios of 20 percent (Tier 1) and 22 percent (Tier 2) respectively and has a risk profile much lower than the proposed PCB.

The Capital Percentage Calculation in the model below uses a 20 percent Equity Capital Ratio plus an additional 20 percent risk factor on cannabis deposits to offset the substantially higher risk profile for PCB.

As shown in Table 4 the bank is expected to require approximately \$950 million dollars in bank risk capital by year five. The Federal Reserve will require evidence of adequate capitalization as part of the review and approval process. This is normally accomplished by the holding company placing the funds in escrow during the regulatory approval process. In this case, the state will need to hold discussions with the Federal Reserve about a suitable approach to satisfy Federal Reserve concerns about fund availability.

*Table 4: Capital Requirements*

Capital Requirements					
	Year 1	Year 2	Year 3	Year 4	Year 5
Industry Sales \$ (millions)	4,720.00	5,267.51	5,883.55	6,538.39	7,235.57
Percentage of Sales deposited	80%	85%	88%	91%	94%
Percentage of deposits static	35%	35%	35%	35%	35%
Projected deposit base \$(M)	1,321.60	1,567.08	1,812.13	2,082.48	2,380.50
Assets in addition to cash \$(M)	8.00	8.00	9.00	9.00	10.00
Accumulated losses \$(M)	48.00*	41.00	32.00	18.00	0.60
Base Capital Percentage	20.00%	20.00%	20.00%	20.00%	20.00%
Factor increase due to business risk	20.00%	20.00%	20.00%	20.00%	20.00%
Total Capital Percentage	40.00%	40.00%	40.00%	40.00%	40.00%
Minimum Capital needed \$(M)	531.24	629.83	728.05	835.79	<b>954.60</b>

- Includes repayment of \$39M in pre-opening expenses

## ***D.1.10 Financials and Pro formas***

### ***D.1.10.1 Financial Analysis***

#### ***D.1.10.1.1 Key Assumptions***

The financial projections for a PCB reflect legal and regulatory opinions, industry interviews and analysis cited above. The key assumptions include:

- A lengthy process to obtain bank charter approval including three years to enact necessary state legislative changes, three years to obtain regulatory approval, and with the bank fully operational at the start of year seven.
- Access to the Federal Reserve Payments System will eventually be granted by the Federal Reserve Bank of San Francisco (the bank cannot operate without this access).
- Unlikely FDIC or private deposit insurance will be obtained. Assume this liability is picked up by the state through legislation.
- The bank cannot escape federal criminal liability as long as cannabis remains a Schedule 1 drug.
- Assumes a very strong demand for services from cannabis-related-businesses as only sporadic banking is being provided today.
- \$1 billion in capital is required in order to obtain federal and state regulatory approval.
- PCB would have a concentration in an immature industry going through rapid change with ultimate winners and losers yet to be determined.
- The risk profile of the bank would be considered very high risk by State and Federal regulators and require a very liquid, conservative balance sheet. The projections start with high levels of cash, high quality liquid investments, virtually no loans and slowly build higher earning assets as the bank proves itself.
- A branch network is required in order to collect cash. Seven branches are incrementally deployed in key markets around the state during the first five years of operation, in addition to the main Sacramento office. Five more branches are added after five years for a total of twelve branches.

#### ***D.1.10.1.2 Income***

Fed Funds rate increases annually (low projection)	1.0000%
Prime Rate = Fed funds rate +	3.0000%
Fed Funds rate =	2.2500%
Interest and Fees on Loans to SCBC	4.8000%
Interest on Interest-Bearing Deposits in Other Banks	2.0250%
Interest on Securities	3.6000%

#### ***D.1.10.1.3 Expense***

FDIC & DBO Expenses	0.0300%
Interest on DDA	0.0000%
Interest on Savings	0.5000%

TOTAL TCD UNDER 100M	1.7500%
TOTAL TCD OVER 100M	2.0000%
TOTAL TCD OVER 250M	2.0000%
TOTAL NOW & MONEY MARKET	1.0000%

#### **D.1.10.1.4    Pre-Bank Operations**

Expenses are primarily for salaries, occupancy, and legal/professional fees. This organizational effort requires people very familiar with banking, regulators, legislation, and the cannabis industry. It starts with 10 people and ramps up to 30 by year 5. Pre-bank staffing includes a combination of state employees, banking professionals and consultants/contractors.

#### **D.1.10.1.5    Balance Sheet**

In the first 5 years of operation, the bank is expected to increase the deposit base by 76 percent. Due to the capital requirements on the high-risk deposits, that translates into 31 percent increase in total assets over the same period. 85 percent - 92 percent of those assets are reinvested in short term securities, while a smaller percentage (2 percent - 5 percent) remain in cash, and the other primary asset held on the sheet is held in loans and would be expected to increase incrementally as the years progress (2 percent in 2025 and 12 percent in 2030). The other most notable element to the balance sheet is the accumulating negative retained earnings, and that will be covered in the income statement.

#### **D.1.10.1.6    Income Statement**

The primary areas for income generation are identified in non-interest income, from banking services, including account fees, BSA fees, and other transactional fees, and interest income from loans and securities. The standout issue with the income statement rests with the expenses for the operations and, more notably, the capital. Operating margin for the bank averaged 71 percent over the 5 year period. Operating expenses are largely comprised of salaries and benefits and depreciation expenses. The salary expense is broken out into two employee bases: headquarters and branches. The headquarters costs remain fairly static throughout the projections, and the staffing metrics are based on number of branches. The standard branch employee base includes 13 staff members, comprised of a Branch Manager, Operations Specialist, BSA Specialist, Support Specialists, Tellers (5), a Vault Teller, and security personnel (3).

- **Interest Income:** Interest income is calculated using the above rates and yields table based on current economic conditions. Interest income makes up the highest percentage of the revenue earned over the projected time period, though as noted above the nature of cannabis deposits will limit the potential investing alternatives due to its current federal standing. These limitations have an impact on the projection of the growth of the bank until the deposits can be loaned and reinvested consistent with standard retail and commercial banks.
- **Noninterest Income:** Noninterest income has been calculated as deposits (1 percent to 30 percent of deposits) to provide a blended revenue based on volume. Without having the

final products identified and calculated, this provides the general picture of the non-interest income generating capabilities, with an opportunity to expand those revenues by adding addition, non-interest income product lines. The current benchmark for all retail and commercial banks of percent non-interest revenue to assets is 1.55 percent nationally and 1.66 percent in the San Francisco FDIC Region (FDIC, 2018). The lower rate is attributed to the potential limit of products that can be offered with the deposit base being from cannabis dollars and therefore will restrict many interbank and nationally supported products. The bank is expected have higher than normal requirements for cash handling and BSA compliance and will charge its customers for these activities. These charges will be recorded as noninterest income.

**D.1.10.2**      **Proformas**

Organizational Costs - Pre-Opening	2019	2020	2021	2022	2023	2024	Subtotal Pre-Open
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	
Staff Costs	\$ 2,458,560	\$ 3,263,520	\$ 3,904,160	\$ 4,856,800	\$ 5,973,760	\$ 6,926,400	\$ 27,383,200
Occupancy (rent )	\$ 66,825	\$ 91,125	\$ 109,350	\$ 133,650	\$ 164,025	\$ 188,325	\$ 753,300
FF&E Depreciation & Amort							\$ -
Operating Expenses	\$ 26,400	\$ 36,000	\$ 43,200	\$ 52,800	\$ 64,800	\$ 74,400	\$ 297,600
Professional Fees & Auditing							
Legal	\$ 60,000	\$ 60,000	\$ 90,000	\$ 90,000	\$ 120,000	\$ 120,000	
Operations Consulting					\$ 60,000	\$ 175,000	
IT Consulting					\$ 50,000	\$ 160,000	
Applications Consulting							
Testing, Const. Mgmt. and Other Misc.					\$ 60,000	\$ 90,000	
Total	\$ 60,000	\$ 60,000	\$ 90,000	\$ 90,000	\$ 290,000	\$ 545,000	\$ 1,135,000
Capital Raise Expenses						\$ 5,000,000	\$ 5,000,000
Marketing Plan for Pre Opening						\$ 300,000	\$ 300,000
	\$ 2,611,785	\$ 3,450,645	\$ 4,146,710	\$ 5,133,250	\$ 6,492,585	\$ 13,034,125	\$ 34,869,100

**Consolidated Balance Sheet - California State Controlled Public Bank for the Cannabis Industry**

Bank Operating Year 3	Cannabis Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>ASSETS</b>												
Total Cash and due from Banks	1,098,059,084		1,098,059,084			-			-	1,098,059,084		1,098,059,084
Fed Funds Sold	13,160,570		13,160,570			-			-	13,160,570		13,160,570
Total U.S. Government Securities	740,859,141		740,859,141			-			-	740,859,141		740,859,141
Other Securities	608,562,866		608,562,866	966,515,541		966,515,541			1,000,000,000		2,575,078,407	1,966,515,541
Total Loans Receivable, Net of Loan Loss Provision	174,272,192		174,272,192			-			1,000,000,000		174,272,192	174,272,192
Accumulated Depreciation & Other Assets	20,179,188		20,179,188			-			-	20,179,188		20,179,188
<b>TOTAL ASSETS</b>	<b>2,655,093,041</b>		<b>2,655,093,041</b>	<b>966,515,541</b>		<b>966,515,541</b>				<b>3,621,608,582</b>	<b>966,515,541</b>	<b>2,655,093,041</b>
<b>LIABILITIES</b>												
Total Deposits	1,688,577,501		1,688,577,501			-			-	1,688,577,501		1,688,577,501
Borrowings and FHLB Advances	-		-	1,000,000,000		1,000,000,000			1,000,000,000		2,000,000,000	2,000,000,000
Other Liabilities	-		-	268,350,000		268,350,000			-	268,350,000		268,350,000
<b>TOTAL LIABILITIES</b>	<b>1,688,577,501</b>		<b>1,688,577,501</b>	<b>1,268,350,000</b>		<b>1,268,350,000</b>				<b>2,956,927,501</b>		<b>2,956,927,501</b>
<b>SHAREHOLDERS EQUITY</b>												
Capital Stock	1,000,000,000		1,000,000,000			-			-	1,000,000,000		1,000,000,000
Undivided Profits (Losses) from Previous Year	(42,651,996)		(42,651,996)			-			-	(42,651,996)		(42,651,996)
Current Net Income (Loss)	9,167,537		9,167,537	(301,834,459)		(301,834,459)			-	(292,666,922)		(292,666,922)
Total Retained Earnings	(33,484,459)		(33,484,459)			-			-	(33,484,459)		(33,484,459)
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>966,515,541</b>		<b>966,515,541</b>	<b>(301,834,459)</b>		<b>(301,834,459)</b>				<b>664,681,081</b>		<b>664,681,081</b>
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>2,655,093,041</b>		<b>2,655,093,041</b>	<b>966,515,541</b>		<b>966,515,541</b>				<b>3,621,608,582</b>	<b>966,515,541</b>	<b>2,655,093,041</b>

**Consolidated Income Statement - California State Backed Public Bank for the Cannabis Industry**

Bank Operating Year 3	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>INCOME</b>												
Total Interest and Dividend Income (Note 1)	58,699,582		58,699,582			-			-	58,699,582		58,699,582
Total Interest Expense (Note 3)	24,121,543		24,121,543			-			-	24,121,543		24,121,543
Total Non-Interest Income (Note 4)	7,300,058		7,300,058			-			-	7,300,058		7,300,058
Total Income	38,271,436		38,271,436			-			-	38,271,436		38,271,436
<b>NON-INTEREST EXPENSE:</b>												
Salaries and Employee Benefits (Note 5)	19,558,910	1,938,560	17,620,350			-			(1,938,560)	1,938,560	19,558,910	19,558,910
Occupancy	1,682,419		1,682,419			-			-	1,682,419		1,682,419
Other Operating Expenses	7,862,569		7,862,569			-			(1,992,840)	1,992,840	7,862,569	7,862,569
Total Non-Interest Expense	29,103,899		29,103,899			-			(1,992,840)	1,992,840	31,096,738	31,096,738
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>9,167,537</b>		<b>9,167,537</b>						<b>1,992,840</b>	<b>(1,992,840)</b>	<b>7,174,697</b>	<b>7,174,697</b>
Provision for Income Taxes	-		-							-		-
<b>NET INCOME (Loss)</b>	<b>9,167,537</b>		<b>9,167,537</b>						<b>1,992,840</b>	<b>(1,992,840)</b>	<b>7,174,697</b>	<b>7,174,697</b>
Accumulated Net Income (Loss)	(33,484,459)		(33,484,459)							-	(33,484,459)	

**Consolidated Cash Flow Statement - California State Backed Public Bank for the Cannabis Industry**

Bank Operating Year 3	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>OPERATING ACTIVITIES</b>												
Net Income	9,167,537		9,167,537			-			-	9,167,537		9,167,537
Net Cash From/(Used By) Operating	16,181,601		16,181,601			-			-	16,181,601		16,181,601
Net Cash From/(Used By) Investing	(241,922,362)		(241,922,362)			-			-	(241,922,362)		(241,922,362)
Net Cash From/(Used By) Financing	213,674,008		213,674,008			-			-	213,674,008		213,674,008
Net Cash Flow	(15,474,155)		(15,474,155)			-			-	(15,474,155)		(15,474,155)
Cash Beginning of Period	121,311,175		121,311,175			-			-	121,311,175		121,311,175
Cash End of Period	105,837,020		105,837,020			-			-	105,837,020		105,837,020
Cash Balance	105,837,020		105,837,020			-			-	105,837,020		105,837,020

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

**Consolidated Balance Sheet - California State Controlled Public Bank for the Cannabis Industry**

Bank Operating Year 5	Cannabis Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>ASSETS</b>												
Total Cash and due from Banks	1,279,036,102		1,279,036,102			-			-	1,279,036,102		1,279,036,102
Fed Funds Sold	35,333,966		35,333,966			-			-	35,333,966		35,333,966
Total U.S. Government Securities	821,109,596		821,109,596			-			-	821,109,596		821,109,596
Other Securities	663,203,905		663,203,905	998,059,033		998,059,033			1,000,000,000		1,000,000,000	2,661,262,937
Total Loans Receivable, Net of Loan Loss Provision	351,276,018		351,276,018			-			-	351,276,018		351,276,018
Accumulated Depreciation & Other Assets	26,004,954		26,004,954			-			-	26,004,954		26,004,954
<b>TOTAL ASSETS</b>	<b>3,175,964,540</b>		<b>3,175,964,540</b>	<b>998,059,033</b>		<b>998,059,033</b>				<b>4,174,023,573</b>	<b>998,059,033</b>	<b>3,175,964,540</b>
<b>LIABILITIES</b>												
Total Deposits	2,177,905,507		2,177,905,507			-			-	2,177,905,507		2,177,905,507
Borrowings and FHLB Advances	-		-	1,000,000,000		1,000,000,000			1,000,000,000		2,000,000,000	2,000,000,000
Other Liabilities	-		-	447,250,000		447,250,000			-	447,250,000		447,250,000
<b>TOTAL LIABILITIES</b>	<b>2,177,905,507</b>		<b>2,177,905,507</b>	<b>1,447,250,000</b>		<b>1,447,250,000</b>				<b>3,625,155,507</b>		<b>3,625,155,507</b>
<b>SHAREHOLDERS EQUITY</b>												
Capital Stock	1,000,000,000		1,000,000,000			-			-	1,000,000,000		1,000,000,000
Undivided Profits (Losses) from Previous Year	(19,791,675)		(19,791,675)			-			-	(19,791,675)		(19,791,675)
Current Net Income (Loss)	17,850,708		17,850,708	(449,190,967)		(449,190,967)			-	(431,340,259)		(431,340,259)
Total Retained Earnings	(1,940,967)					-			-	(1,940,967)		(1,940,967)
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>998,059,033</b>		<b>998,059,033</b>	<b>(449,190,967)</b>		<b>(449,190,967)</b>				<b>548,868,065</b>		<b>548,868,065</b>
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>3,175,964,540</b>		<b>3,175,964,540</b>	<b>998,059,033</b>		<b>998,059,033</b>				<b>4,174,023,573</b>	<b>998,059,033</b>	<b>3,175,964,540</b>

**Consolidated Income Statement - California State Backed Public Bank for the Cannabis Industry**

Bank Operating Year 5	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>INCOME</b>												
Total Interest and Dividend Income (Note 1)	75,762,219		75,762,219			-			-	75,762,219		75,762,219
Total Interest Expense (Note 3)	31,263,963		31,263,963			-			-	31,263,963		31,263,963
Provision for Credit Losses	5,044,202		5,044,202			-			-	5,044,202		5,044,202
<b>NET INTEREST INCOME AFTER PROVISION</b>	<b>39,454,054</b>		<b>39,454,054</b>			-			-	<b>39,454,054</b>		<b>39,454,054</b>
Total Non-Interest Income (Note 4)	9,415,521		9,415,521			-			-	9,415,521		9,415,521
Total Income	48,869,575		48,869,575			-			-	48,869,575		48,869,575
<b>NON-INTEREST EXPENSE:</b>												
Salaries and Employee Benefits (Note 5)	21,702,450	1,938,560	19,763,890			-			(1,938,560)	1,938,560	21,702,450	21,702,450
Occupancy	1,682,419		1,682,419			-			-	1,682,419		1,682,419
Other Operating Expenses	7,633,997		7,633,997			-			-	7,633,997		7,633,997
Total Non-Interest Expense	31,018,867		31,018,867			-			(1,992,840)	1,992,840	33,011,706	33,011,706
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>17,850,708</b>		<b>17,850,708</b>			-			1,992,840	(1,992,840)	<b>15,857,868</b>	<b>15,857,868</b>
Provision for Income Taxes	-		-			-			1,992,840	(1,992,840)	<b>15,857,868</b>	<b>15,857,868</b>
<b>NET INCOME (Loss)</b>	<b>17,850,708</b>		<b>17,850,708</b>			-				<b>(1,940,967)</b>		<b>(1,940,967)</b>
Accumulated Net Income (Loss)	(1,940,967)					-						

**Consolidated Cash Flow Statement - California State Backed Public Bank for the Cannabis Industry**

Bank Operating Year 5	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>OPERATING ACTIVITIES</b>												
Net Income	17,850,708		17,850,708			-			-	17,850,708		17,850,708
Net Cash From/(Used By) Operating	25,807,793		25,807,793			-			-	25,807,793		25,807,793
Net Cash From/(Used By) Investing	(302,015,802)		(302,015,802)			-			-	(302,015,802)		(302,015,802)
Net Cash From/(Used By) Financing	255,619,111		255,619,111			-			-	255,619,111		255,619,111
Net Cash Flow	(23,501,781)		(23,501,781)			-			-	(23,501,781)		(23,501,781)
Cash Beginning of Period	86,664,058		86,664,058			-			-	86,664,058		86,664,058
Cash End of Period	63,162,277		63,162,277			-			-	63,162,277		63,162,277
Cash Balance	63,162,277		63,162,277			-			-	63,162,277		63,162,277

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

**Consolidated Balance Sheet - California State Controlled Public Bank for the Cannabis Industry**

Bank Operating Year 10	Cannabis Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>ASSETS</b>												
Total Cash and due from Banks	1,820,260,595		1,820,260,595			-			-	1,820,260,595		1,820,260,595
Fed Funds Sold	96,611,352		96,611,352			-			-	96,611,352		96,611,352
Total U.S. Government Securities	992,869,415		992,869,415			-			-	992,869,415		992,869,415
Other Securities	756,471,935		756,471,935	1,063,928,917		1,063,928,917	1,000,000,000		1,000,000,000	2,820,400,853	2,063,928,917	756,471,935
Total Loans Receivable, Net of Loan Loss Provision	1,057,680,269		1,057,680,269			-			-	1,057,680,269		1,057,680,269
Accumulated Depreciation & Other Assets	55,439,261		55,439,261			-			-	55,439,261		55,439,261
<b>TOTAL ASSETS</b>	<b>4,779,332,827</b>		<b>4,779,332,827</b>	<b>1,063,928,917</b>		<b>1,063,928,917</b>				<b>5,843,261,744</b>	<b>1,063,928,917</b>	<b>4,779,332,827</b>
<b>LIABILITIES</b>												
Total Deposits	3,651,474,992		3,651,474,992			-			-	3,651,474,992		3,651,474,992
Borrowings and FHLB Advances	-		-	1,000,000,000		1,000,000,000	1,000,000,000		1,000,000,000	2,000,000,000	2,000,000,000	-
Other Liabilities	-		-	890,450,000		890,450,000			-	890,450,000		890,450,000
<b>TOTAL LIABILITIES</b>	<b>3,651,474,992</b>		<b>3,651,474,992</b>	<b>1,890,450,000</b>		<b>1,890,450,000</b>				<b>5,541,924,992</b>		<b>5,541,924,992</b>
<b>SHAREHOLDERS EQUITY</b>												
Capital Stock	1,000,000,000		1,000,000,000			-			-	1,000,000,000		1,000,000,000
Undivided Profits (Losses) from Previous Year	76,474,604		76,474,604			-			-	76,474,604		76,474,604
Current Net Income (Loss)	51,383,230		51,383,230	(826,521,083)		(826,521,083)			-	(775,137,853)		(775,137,853)
Dividends Payable to Holding Company	(63,928,917)											
Total Retained Earnings	63,928,917		63,928,917			-			-	63,928,917		63,928,917
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>1,063,928,917</b>		<b>1,063,928,917</b>	<b>(826,521,083)</b>		<b>(826,521,083)</b>				<b>237,407,834</b>		<b>237,407,834</b>
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>4,779,332,827</b>		<b>4,779,332,827</b>	<b>1,063,928,917</b>		<b>1,063,928,917</b>				<b>5,843,261,744</b>	<b>1,063,928,917</b>	<b>4,779,332,827</b>

**Consolidated Income Statement - California State Backed Public Bank for the Cannabis Industry**

Bank Operating Year 10	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>INCOME</b>												
Total Interest and Dividend Income (Note 1)	135,617,906		135,617,906			-			-	135,617,906		135,617,906
Total Interest Expense (Note 3)	53,192,996		53,192,996			-			-	53,192,996		53,192,996
Provision for Credit Losses	8,739,295		8,739,295			-			-	8,739,295		8,739,295
<b>NET INTEREST INCOME AFTER PROVISION</b>	<b>73,685,616</b>		<b>73,685,616</b>			-			-	<b>73,685,616</b>		<b>73,685,616</b>
<b>NON-INTEREST INCOME:</b>												
Total Non-Interest Income (Note 4)	15,786,057		15,786,057	63,928,917		63,928,917	63,928,917		63,928,917	143,643,891	63,928,917	79,714,974
Total Income	89,471,673		89,471,673			-			-	89,471,673		89,471,673
<b>NON-INTEREST EXPENSE:</b>												
Salaries and Employee Benefits (Note 5)	23,142,000		21,203,440			-			-	23,142,000		23,142,000
Other Operating Expenses	12,292,958		12,292,958	(63,928,917)		(63,928,917)			-	(51,635,960)		(51,635,960)
Total Non-Interest Expense	38,088,442		38,088,442			-			-	40,081,282		40,081,282
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>51,383,230</b>		<b>51,383,230</b>			-			-	<b>49,390,391</b>		<b>49,390,391</b>
Provision for Income Taxes	-		-			-			-	-		-
<b>NET INCOME (Loss)</b>	<b>51,383,230</b>		<b>51,383,230</b>			-			-	<b>49,390,391</b>		<b>49,390,391</b>
Accumulated Net Income (Loss)	127,857,834		127,857,834			-			-	127,857,834		127,857,834

**Consolidated Cash Flow Statement - California State Backed Public Bank for the Cannabis Industry**

Bank Operating Year 10	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>OPERATING ATIVITIES</b>												
Net Income	51,383,230		51,383,230			-			-	51,383,230		51,383,230
Net Cash From/(Used By) Operating	64,814,461		64,814,461			-			-	64,814,461		64,814,461
Net Cash From/(Used By) Investing	(379,810,647)		(379,810,647)			-			-	(379,810,647)		(379,810,647)
Net Cash From/(Used By) Financing	326,819,402		326,819,402			-			-	326,819,402		326,819,402
Net Cash Flow	7,131,280		7,131,280			-			-	7,131,280		7,131,280
Cash Beginning of Period	87,427,712		87,427,712			-			-	87,427,712		87,427,712
Cash End of Period	94,558,992		94,558,992			-			-	94,558,992		94,558,992
Cash Balance	94,558,992		94,558,992			-			-	94,558,992		94,558,992

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

#### **D.1.11 Conclusion for Public Cannabis Bank Alternative**

The alternative of creating a public cannabis bank dedicated to serving the cannabis industry should be rejected based on unacceptable risk levels, non-profitable financial forecasts, and an overall inability to achieve the desired objectives.

***This option involves unacceptable degrees of legal, schedule, mission, and financial risks. Risk is internal and external, knowable and unknowable.***

The proposed bank would be operating in violation of current federal law. This violation represents a risk to the bank assets, to any assets used as collateral for loans, and to the bank officers and employees. For example, 18 USC. 2 (2015) states that, “whoever aids, abets, counsels, commands, or induces a federal crime, or causes a federal criminal act to be done, is punishable as a principal.” This would place the state in a situation where state employees were potentially facing federal convictions, jail time, and civil penalties based on the conduct of their state required job functions, and where elected officials that may hold positions in the organization (like the structure of the Bank of North Dakota) would similarly be potentially liable. This situation represents an unacceptable degree of legal risk.

The bank cannot be formed and operate under current California statutes, thus requiring multiple legislative changes to allow bank formation. By way of example, our research indicates that the bank would not be able to obtain deposit insurance either through a government agency nor from the private sector, so legislation would be needed to allow it to operate without insured deposits. Current financial laws do not provide for the necessary bank ownership structure, so the California Financial Code Sections 1004-1005 would need to be modified. A new government entity would most likely need to be formed, and appropriations for that entity approved during the bank start-up period. The Federal Reserve will not allow the Department of Business Oversight to oversee the bank under current regulations because of a conflict of interest, so a suitable arrangement for oversight by the Federal Reserve would be required. An exemption to the California Public Record Act must be put in place to protect customer privacy. In addition, after the necessary changes are implemented legislatively in California, the Federal Reserve must approve the bank, something that may take three years before a decision is rendered. All of these result in both a long expected schedule (we are forecasting six years) and a high degree of schedule uncertainty. In addition, we anticipate that during the bank formation additional areas will arise (e.g., additional legislative changes) that will have a potential schedule impact. Overall, the formation of the bank has an unacceptably large degree of schedule risk.

The mission of the bank is to provide access to banking services to the cannabis industry because existing banks and credits do not adequately serve the industry. The following unacceptably high mission related risks exist:

- Federal regulations may be modified to legalize the banking of cannabis related funds, thus changing the competitive landscape to the disadvantage of the state bank. We view this as a very high probability and high impact risk.

- Looking at the history of banking in other states where cannabis is legal, there is a high probability that commercial banks and credit unions will increasingly offer services to the cannabis industry, thus competing directly with the state bank. We view this as a very high probability, moderate impact risk.
- Federal regulators may crack down on states that have legalized cannabis use, confiscating assets and arresting individuals. We view this as a very low probability, very high impact risk.

The bank will have a prolonged start-up period (we're estimating six years) during which expenses will accrue. A normal de novo bank in the private sector may spend \$10 million dollars in preparing to open. The proposed bank is expected to cost 3.5 times this amount. Because there is no historic data from similar state operated bank start-ups to examine, and there is a high degree of schedule uncertainty associated with the start-up period, there is a large potential cost variance on the start-up costs. Similarly, the initial capitalization requirement of approximately \$1 billion has a high risk for the investors.

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There is a significant financial risk associated with the willingness of investors (public or private) to purchase the approximately \$1 billion dollars in bonds required for capitalization.

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The identified risks include risks internal to the project/bank; risks external to the project but under the control of the State of California; and risks external to the State, including federal law enforcement, federal regulators, existing banks and credit unions, and cannabis industry participants.

***Even in the best-case scenario across all dimensions of risk, the return on the financial investment would be measured in decades not years. In the worst-case scenarios the losses would be staggering.***

Because of the long start-up period that is anticipated and the complexity of work during that period, start-up costs are estimated to be \$35 million. The bank will need to raise approximately \$1 billion in capital, and we anticipate that a significant risk premium will be built into the cost of those funds. Primarily as a result of these two factors, even under the positive risk scenarios, the bank holding company (the investors in the bank, whether private or public) will lose money for 12 years before the bank is able to pay dividends sufficient to fully cover return on the invested capital and allow the bank holding company to begin repaying that capital. The state of California will not begin receiving net dividends (i.e., payments beyond repayment of funds provided to the holding company) until 25 to 30 years after the bank opens, or sometime between 2050 and 2055. In the worst-case scenarios (e.g., asset forfeiture and resultant legal battles), the losses are incalculable but staggering.

*Under all future scenarios, a public bank dedicated to serving the cannabis industry fails to achieve the desired objectives.*

The objective of a public cannabis bank is to provide banking services to the cannabis industry while that industry is underserved by private banks and credit unions. While the future federal actions related to cannabis banking cannot be predicted with certainty, they will certainly improve, stay the same, or get worse. If the federal government explicitly allows cannabis banking within the next several years (the situation improves), then the primary purpose of the public bank will go away prior to the bank getting fully started. If the federal government aggressively cracks down on the cannabis industry (the situation worsens), then the public bank will never open its doors. If the federal government remains in the current ambiguous situation of maintaining the illegality but not enforcing the law (the situation remains the same), then by the time the public cannabis bank opens its doors we anticipate that private banks and/or credit unions will be offering competing services within California.

## **D.2 Public Bank, Cannabis and Non-Cannabis Deposits**

The cannabis plus option assumes that the public bank primarily banks cannabis related customers, but also accepts other customers that are unrelated to the cannabis industry. We would anticipate that the public bank will have limited appeal to individuals unrelated to the cannabis industry, so we are assuming 10 percent deposits from individuals unrelated to cannabis. We are also assuming that the bank will make non-cannabis related loans as well. While this option decreases concentration in the cannabis industry, the cannabis concentration numbers are so large that the improvement is not a significant factor from a regulatory perspective. The non-cannabis deposits would need to increase to more in the 90 percent range before the impact of cannabis concentration would be mitigated.

Bank operations would be complicated somewhat because non-cannabis related deposits must be segregated from cannabis deposits to avoid the potential for forfeiture of the non-cannabis deposits.

The bank holding company (and therefore, the state) will lose money for ten years before the bank dividends cover the cost of investment by the holding company, and the state of California will not begin receiving net dividends (i.e., payments beyond repayment of funds provided to the holding company) until 18 to 23 years after the bank opens, or sometime between 2043 and 2048. Detailed pro formas for this option follow.

### D.2.1 Pro Formas

Organizational Costs - Pre-Opening	2019	2020	2021	2022	2023	2024	Subtotal Pre-Open
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	
Staff Costs	\$ 2,458,560	\$ 3,263,520	\$ 3,904,160	\$ 4,856,800	\$ 5,973,760	\$ 6,926,400	\$ 27,383,200
Occupancy (rent )	\$ 66,825	\$ 91,125	\$ 109,350	\$ 133,650	\$ 164,025	\$ 188,325	\$ 753,300
FF&E Depreciation & Amort							\$ -
Operating Expenses	\$ 26,400	\$ 36,000	\$ 43,200	\$ 52,800	\$ 64,800	\$ 74,400	\$ 297,600
Professional Fees & Auditing							
Legal	\$ 60,000	\$ 60,000	\$ 90,000	\$ 90,000	\$ 120,000	\$ 120,000	
Operations Consulting					\$ 60,000	\$ 175,000	
IT Consulting					\$ 50,000	\$ 160,000	
Applications Consulting							
Testing, Const. Mgmt. and Other Misc.					\$ 60,000	\$ 90,000	
Total	\$ 60,000	\$ 60,000	\$ 90,000	\$ 90,000	\$ 290,000	\$ 545,000	\$ 1,135,000
Capital Raise Expenses							\$ 5,000,000
Marketing Plan for Pre Opening							\$ 300,000
	\$ 2,611,785	\$ 3,450,645	\$ 4,146,710	\$ 5,133,250	\$ 6,492,585	\$ 13,034,125	\$ 34,869,100

**Consolidated Balance Sheet - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 3			Cannabis Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment
<b>ASSETS</b>														
Total Cash and due from Banks	1,463,295,211		1,463,295,211							1,463,295,211			1,463,295,211	
Fed Funds Sold	15,999,088		15,999,088							15,999,088			15,999,088	
Total U.S. Government Securities	987,283,516		987,283,516							987,283,516			987,283,516	
Other Securities	810,982,888		810,982,888	1,051,223,777		1,051,223,777	1,120,000,000		1,120,000,000	2,982,206,665		2,171,223,777	810,982,888	
Total Loans Receivable, Net of Loan Loss Provision	253,938,203		253,938,203							253,938,203			253,938,203	
Accumulated Depreciation & Other Assets	9,956,983		9,956,983							9,956,983			9,956,983	
<b>TOTAL ASSETS</b>	<b>3,541,455,889</b>		<b>3,541,455,889</b>	<b>1,051,223,777</b>		<b>1,051,223,777</b>				<b>4,592,679,666</b>		<b>1,051,223,777</b>	<b>3,541,455,889</b>	
<b>LIABILITIES</b>														
Total Deposits	2,490,232,112		2,490,232,112							2,490,232,112			2,490,232,112	
Borrowings and FHLB Advances	-		-	1,120,000,000		1,120,000,000	1,120,000,000		1,120,000,000	2,240,000,000		2,240,000,000	-	
Other Liabilities	-		-	268,350,000		268,350,000				268,350,000			268,350,000	
<b>TOTAL LIABILITIES</b>	<b>2,490,232,112</b>		<b>2,490,232,112</b>	<b>1,388,350,000</b>		<b>1,388,350,000</b>				<b>3,878,582,112</b>			<b>3,878,582,112</b>	
<b>SHAREHOLDERS EQUITY</b>														
Capital Stock	1,120,000,000		1,120,000,000							1,120,000,000			1,120,000,000	
Undivided Profits (Losses) from Previous Year	(84,219,555)		(84,219,555)							(84,219,555)			(84,219,555)	
Current Net Income (Loss)	15,443,332		15,443,332	(337,126,223)		(337,126,223)				(321,682,891)			(321,682,891)	
Total Retained Earnings	(68,776,223)		(68,776,223)	(337,126,223)		(337,126,223)				(405,902,446)			(405,902,446)	
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>1,051,223,777</b>		<b>1,051,223,777</b>	<b>(337,126,223)</b>		<b>(337,126,223)</b>				<b>714,097,554</b>			<b>714,097,554</b>	
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>3,541,455,889</b>		<b>3,541,455,889</b>	<b>1,051,223,777</b>		<b>1,051,223,777</b>				<b>4,592,679,666</b>		<b>1,051,223,777</b>	<b>3,541,455,889</b>	

**Consolidated Income Statement - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 3			Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment
<b>INCOME</b>														
Total Interest and Dividend Income	76,766,001		76,766,001							76,766,001			76,766,001	
Total Interest Expense	34,599,119		34,599,119							34,599,119			34,599,119	
Total Non-Interest Income	10,765,771		10,765,771							10,765,771			10,765,771	
Total Income	47,056,699		47,056,699							47,056,699			47,056,699	
<b>NON-INTEREST EXPENSE:</b>														
Salaries and Employee Benefits (Note 5)	22,343,796	1,938,560	20,405,236							(1,938,560)	1,938,560	22,343,796	22,343,796	
Occupancy	1,682,419		1,682,419							-	-	1,682,419	1,682,419	
Other Operating Expenses	8,319,721	54,280	8,265,442							-	-	8,265,442	8,265,442	
Total Non-Interest Expense	31,613,367	2,047,119	29,566,248							(1,992,840)	1,992,840	31,559,088	31,559,088	
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>15,443,332</b>	<b>(2,047,119)</b>	<b>17,490,451</b>							<b>1,992,840</b>	<b>(1,992,840)</b>	<b>15,497,612</b>	<b>15,497,612</b>	
Provision for Income Taxes	-		-							-	-	-	-	
<b>NET INCOME (Loss)</b>	<b>15,443,332</b>	<b>(2,047,119)</b>	<b>17,490,451</b>							<b>1,992,840</b>	<b>(1,992,840)</b>	<b>15,497,612</b>	<b>15,497,612</b>	
Accumulated Net Income (Loss)	(29,260,968)		(29,260,968)							-	-	(29,260,968)	(29,260,968)	

**Consolidated Cash Flow Statement - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 3			Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment
<b>OPERATING ACTIVITIES</b>														
Net Income	15,443,332		15,443,332							15,443,332			15,443,332	
Net Cash From/(Used By) Operating	24,726,688		24,726,688							24,726,688			24,726,688	
Net Cash From/(Used By) Investing	(548,154,626)		(548,154,626)							(548,154,626)			(548,154,626)	
Net Cash From/(Used By) Financing	514,294,487		514,294,487							514,294,487			514,294,487	
Net Cash Flow	(9,133,451)		(9,133,451)							(9,133,451)			(9,133,451)	
Cash Beginning of Period	150,173,953		150,173,953							150,173,953			150,173,953	
Cash End of Period	141,040,502		141,040,502							141,040,502			141,040,502	
Cash Balance	141,040,502		141,040,502							141,040,502			141,040,502	

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

**Consolidated Balance Sheet - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 5	Cannabis Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>ASSETS</b>												
Total Cash and due from Banks	1,885,112,406		1,885,112,406			-			-	1,885,112,406		1,885,112,406
Fed Funds Sold	16,783,726		16,783,726			-			-	16,783,726		16,783,726
Total U.S. Government Securities	1,210,195,619		1,210,195,619			-			-	1,210,195,619		1,210,195,619
Other Securities	977,465,692		977,465,692	1,104,249,854		1,104,249,854	1,120,000,000		1,120,000,000	3,201,715,546		977,465,692
Total Loans Receivable, Net of Loan Loss Provision	586,392,529		586,392,529			-			-	586,392,529		586,392,529
Accumulated Depreciation & Other Assets	9,956,983		9,956,983			-			-	9,956,983		9,956,983
<b>TOTAL ASSETS</b>	<b>4,685,906,955</b>		<b>4,685,906,955</b>	<b>1,104,249,854</b>		<b>1,104,249,854</b>				<b>5,790,156,808</b>	<b>1,104,249,854</b>	<b>4,685,906,955</b>
<b>LIABILITIES</b>												
Total Deposits	3,580,801,077		3,580,801,077			-			-	3,580,801,077		3,580,801,077
Borrowings and FHLB Advances	-		-	1,120,000,000		1,120,000,000	1,120,000,000		1,120,000,000	2,240,000,000		2,240,000,000
Other Liabilities	-		-	500,920,000		500,920,000			-	500,920,000		500,920,000
<b>TOTAL LIABILITIES</b>	<b>3,580,801,077</b>		<b>3,580,801,077</b>	<b>1,620,920,000</b>		<b>1,620,920,000</b>				<b>5,201,721,077</b>		<b>5,201,721,077</b>
<b>SHAREHOLDERS EQUITY</b>												
Capital Stock	1,120,000,000		1,120,000,000			-			-	1,120,000,000		1,120,000,000
Undivided Profits (Losses) from Previous Year	(46,202,543)		(46,202,543)			-			-	(46,202,543)		(46,202,543)
Current Net Income (Loss)	30,452,397		30,452,397	(516,670,146)		(516,670,146)			-	(486,217,750)		(486,217,750)
Total Retained Earnings	(15,750,146)		(15,750,146)	(516,670,146)		(516,670,146)			-	(532,420,292)		(532,420,292)
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>1,104,249,854</b>		<b>1,104,249,854</b>	<b>(516,670,146)</b>		<b>(516,670,146)</b>				<b>587,579,708</b>		<b>587,579,708</b>
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>4,685,050,930</b>		<b>4,685,050,930</b>	<b>1,104,249,854</b>		<b>1,104,249,854</b>				<b>5,789,300,784</b>	<b>1,104,249,854</b>	<b>4,685,050,930</b>

**Consolidated Income Statement - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 5	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>INCOME</b>												
Total Interest and Dividend Income	113,303,422		113,303,422			-			-	113,303,422		113,303,422
Total Interest Expense	51,212,312		51,212,312			-			-	51,212,312		51,212,312
Total Non-Interest Income	15,480,519		15,480,519			-			-	15,480,519		15,480,519
<b>Total Income</b>	<b>67,798,598</b>		<b>67,798,598</b>			-			-	<b>67,798,598</b>		<b>67,798,598</b>
<b>NON-INTEREST EXPENSE:</b>												
Salaries and Employee Benefits	27,183,545	1,938,560	25,244,985			-			-	27,183,545		27,183,545
Occupancy	1,682,419		1,682,419			-			-	1,682,419		1,682,419
Leasehold Expenses One Time Costs	-		-			-			-	-		-
Deposit Insurance Premiums and Regulatory Assessments	1,074,240		1,074,240			-			-	1,074,240		1,074,240
Data Processing	733,648		733,648			-			-	733,648		733,648
FF&E (Purchases & Deprec/Amort)	2,912,883		2,912,883			-			-	2,912,883		2,912,883
Other Real Estate Owned Expense	-		-			-			-	-		-
Professional Fees and Auditing (Note 6)	212,036		212,036			-			-	212,036		212,036
Directors and Officers Liability & Other Insurance	68,250		68,250			-			-	68,250		68,250
Supplies and Communications	751,808		751,808			-			-	751,808		751,808
Advertising and Promotion	300,000		300,000			-			-	300,000		300,000
Loan-Related Expense	-		-			-			-	-		-
Payment of Organizational Expenses (Note 7)	-		-			-			-	-		-
Amortization of Other Intangible Assets	-		-			-			-	-		-
Other Operating Expenses	1,571,347		1,571,347			-			-	1,571,347		1,571,347
Inflation-2.8%	856,024	54,280	801,745			-			-	856,024		856,024
Other Operating Expenses	8,480,237	54,280	8,425,957			-			-	8,480,237		8,480,237
<b>Total Non-Interest Expense</b>	<b>37,346,202</b>	<b>1,992,840</b>	<b>35,353,362</b>			-			-	<b>37,346,202</b>		<b>37,346,202</b>
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>30,452,397</b>	<b>(1,992,840)</b>	<b>32,445,236</b>			-			-	<b>30,452,397</b>		<b>30,452,397</b>
Provision for Income Taxes	-		-			-			-	-		-
<b>NET INCOME (Loss)</b>	<b>30,452,397</b>	<b>(1,992,840)</b>	<b>32,445,236</b>			-			-	<b>30,452,397</b>		<b>30,452,397</b>
Accumulated Net Income (Loss)	23,765,108		23,765,108			-			-	23,765,108		23,765,108

**Consolidated Cash Flow Statement - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 5	Cannabis Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>OPERATING ACTIVITIES</b>												
Net Income	30,452,397		30,452,397			-			-	30,452,397		30,452,397
Net Cash From/(Used By) Operating	43,138,310		43,138,310			-			-	43,138,310		43,138,310
Net Cash From/(Used By) Investing	(629,415,512)		(629,415,512)			-			-	(629,415,512)		(629,415,512)
Net Cash From/(Used By) Financing	556,239,590		556,239,590			-			-	556,239,590		556,239,590
Net Cash Flow	(30,037,611)		(30,037,611)			-			-	(30,037,611)		(30,037,611)
Cash Beginning of Period	122,273,558		122,273,558			-			-	122,273,558		122,273,558
Cash End of Period	92,235,946		92,235,946			-			-	92,235,946		92,235,946
Cash Balance	93,091,971		93,091,971			-			-	93,091,971		93,091,971

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

**Consolidated Balance Sheet - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 10			Cannabis Bank			Holding Company			State of California*			Consolidated			
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>ASSETS</b>															
Total Cash and due from Banks	2,880,520,576		2,880,520,576	(117,669,182)		(117,669,182)	-		-	2,880,520,576			2,880,520,576		
Fed Funds Sold													(117,669,182)		(117,669,182)
Total U.S. Government Securities	1,655,339,059		1,655,339,059				-		-	1,655,339,059			1,655,339,059		
Other Securities	1,261,210,711		1,261,210,711				-		-	1,261,210,711			1,261,210,711		
Total Loans Receivable, Net of Loan Loss Provision	2,136,446,097		2,136,446,097				-		-	2,136,446,097			2,136,446,097		
Accumulated Depreciation & Other Assets	15,931,607		15,931,607				-		-	15,931,607			15,931,607		
<b>TOTAL ASSETS</b>	<b>7,831,778,867</b>		<b>7,831,778,867</b>				<b>1,274,267,698</b>			<b>1,274,267,698</b>			<b>9,106,046,565</b>		<b>7,831,778,867</b>
<b>LIABILITIES</b>															
Total Deposits	6,557,472,957		6,557,472,957				-		-	6,557,472,957			6,557,472,957		
Borrowings and FHLB Advances	-		-	1,120,000,000		1,120,000,000				2,240,000,000			-		
Other Liabilities	-		-	1,001,840,000		1,001,840,000				1,001,840,000			1,001,840,000		
<b>TOTAL LIABILITIES</b>	<b>6,557,472,957</b>		<b>6,557,472,957</b>				<b>2,121,840,000</b>			<b>2,121,840,000</b>			<b>8,679,312,957</b>		<b>8,679,312,957</b>
<b>SHAREHOLDERS EQUITY</b>															
Capital Stock	1,120,000,000		1,120,000,000				-		-	1,120,000,000			1,120,000,000		
Undivided Profits (Losses) from Previous Year	205,093,989		205,093,989				-		-	205,093,989			205,093,989		
Current Net Income (Loss)	103,441,407		103,441,407	(847,572,302)		(847,572,302)				(744,130,894)			(744,130,894)		
Dividends Payable to Holding Company	(154,267,698)		(154,267,698)				-		-	(693,304,604)			(693,304,604)		
Total Retained Earnings	154,267,698		154,267,698	(847,572,302)		(847,572,302)				426,695,396			426,695,396		
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>1,274,267,698</b>		<b>1,274,267,698</b>				<b>(847,572,302)</b>								
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>7,831,740,655</b>		<b>7,831,740,655</b>				<b>1,274,267,698</b>						<b>9,106,008,353</b>		<b>7,831,740,655</b>

**Consolidated Income Statement - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 10			Cannabis Bank			Holding Company			State of California			Consolidated			
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>INCOME</b>															
Total Interest and Dividend Income	248,719,702		248,719,702				-		-	248,719,702			248,719,702		
Total Interest Expense	96,265,338		96,265,338	-		-	-		-	96,265,338			96,265,338		
Provision for Credit Losses	19,973,519		19,973,519				-		-	19,973,519			19,973,519		
NET INTEREST INCOME AFTER PROVISION	132,480,845		132,480,845				-		-	132,480,845			132,480,845		
Total Non-Interest Income	28,349,267		28,349,267	154,267,698		154,267,698				336,884,663			182,616,965		
Total Income	160,830,112		160,830,112				-		-	160,830,112			160,830,112		
<b>NON-INTEREST EXPENSE:</b>															
Salaries and Employee Benefits	43,392,199	1,938,560	41,453,639				-		-	43,392,199			43,392,199		
Occupancy	2,653,485		2,653,485				-		-	2,653,485			2,653,485		
Other Operating Expenses	12,790,239	54,280	12,735,959	(154,267,698)		(154,267,698)				(141,477,459)			(141,477,459)		
Total Non-Interest Expense	57,388,705	1,992,840	55,395,865				-		-	57,388,705			57,388,705		
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>103,441,407</b>	<b>(1,992,840)</b>	<b>105,434,247</b>										<b>103,441,407</b>		<b>103,441,407</b>
Provision for Income Taxes	-		-							-			-		
<b>NET INCOME (Loss)</b>	<b>103,441,407</b>	<b>(1,992,840)</b>	<b>105,434,247</b>										<b>103,441,407</b>		<b>103,441,407</b>
Accumulated Net Income (Loss)	348,050,651		348,050,651										348,050,651		

**Consolidated Cash Flow Statement - California State Controlled Public Commercial Bank With Emphasis on Cannabis Industry**

Bank Operating Year 10			Cannabis Bank			Holding Company			State of California			Consolidated			
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>OPERATING ACTIVITIES</b>															
Net Income	103,441,407		103,441,407				-		-	103,441,407			103,441,407		
Net Cash From/(Used By) Operating	128,106,863		128,106,863				-		-	128,106,863			128,106,863		
Net Cash From/(Used By) Investing	(741,400,465)		(741,400,465)				-		-	(741,400,465)			(741,400,465)		
Net Cash From/(Used By) Financing	627,439,881		627,439,881				-		-	627,439,881			627,439,881		
Net Cash Flow	14,146,280		14,146,280				-		-	14,146,280			14,146,280		
Cash Beginning of Period	143,466,847		143,466,847				-		-	143,466,847			143,466,847		
Cash End of Period	157,613,127		157,613,127				-		-	157,613,127			157,613,127		
Cash Balance	157,651,339		157,651,339				-		-	157,651,339			157,651,339		

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

### **D.2.2 Correspondent Bank**

A correspondent bank (sometimes called a bankers' bank) provides banking services to other banks. It can accept and hold deposits from those banks, facilitate wire transfers, conduct business transactions, and gather or prepare necessary documentation. Correspondent banks are often used by domestic banks to facilitate transactions to/from international markets. In this case, the public correspondent bank would not provide standard retail and commercial banking products to consumers or businesses, but rather would facilitate the handling of cannabis related deposits by other banks. The correspondent bank would not use the federal payment system to transfer funds interbank in the network but would function as the clearing bank for those transfers between banks in the network. Because a correspondent bank does not provide retail banking services, there would be no requirement for statewide branches.

Unlike the other two public banking options considered, the correspondent bank option requires that existing respondent banks agree to enter the cannabis banking market. It is unlikely that respondent banks would use the public correspondent bank for its non-cannabis services, so the likely opportunity would be to provide simplified services specific to the cannabis deposits and accounts by the respondent banks. Therefore, the correspondent bank would still be heavily weighted toward cannabis deposits. The correspondent bank would still face the same regulatory hurdles that were described earlier in this appendix, in that it must still obtain regulatory approval and be assigned a master account by the Federal Reserve. The start-up time and costs would be similar to those for the other two options, with less effort expended on bank geographic operations/locations (because there are no branches) but more effort expended on establishing the relationships and interfaces with respondent banks. Overall we see this option as representing even higher risk and uncertainty. However, if successful then the correspondent bank option will have fewer operational costs and therefore begin paying net dividends sooner. The bank holding company (and therefore, the state) will lose money for eight years before the bank is able to begin repaying capital, and the state of California will not begin receiving net dividends until 16 to 20 years after the bank opens, or sometime between 2041 and 2045.

### D.2.3 Proformas

Organizational Costs - Pre-Opening	2019	2020	2021	2022	2023	2024	Subtotal Pre-Open
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	
Staff Costs	\$ 2,458,560	\$ 3,263,520	\$ 3,904,160	\$ 4,856,800	\$ 5,973,760	\$ 6,926,400	\$ 27,383,200
Occupancy (rent )	\$ 66,825	\$ 91,125	\$ 109,350	\$ 133,650	\$ 164,025	\$ 188,325	\$ 753,300
FF&E Depreciation & Amort							\$ -
Operating Expenses	\$ 26,400	\$ 36,000	\$ 43,200	\$ 52,800	\$ 64,800	\$ 74,400	\$ 297,600
Professional Fees & Auditing							
Legal	\$ 60,000	\$ 60,000	\$ 90,000	\$ 90,000	\$ 120,000	\$ 120,000	
Operations Consulting					\$ 60,000	\$ 175,000	
IT Consulting					\$ 50,000	\$ 160,000	
Applications Consulting							
Testing, Const. Mgmt. and Other Misc.					\$ 60,000	\$ 90,000	
Total	\$ 60,000	\$ 60,000	\$ 90,000	\$ 90,000	\$ 290,000	\$ 545,000	\$ 1,135,000
Capital Raise Expenses						\$ 5,000,000	\$ 5,000,000
Marketing Plan for Pre Opening						\$ 300,000	\$ 300,000
	\$ 2,611,785	\$ 3,450,645	\$ 4,146,710	\$ 5,133,250	\$ 6,492,585	\$ 13,034,125	\$ 34,869,100

**Consolidated Balance Sheet - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

Bank Operating Year 3			Cannabis Banker's Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total		
<b>ASSETS</b>														
Total Cash and due from Banks	901,311,531		901,311,531			-			-	901,311,531		901,311,531		
Fed Funds Sold	87,374,045		87,374,045			-			-	87,374,045		87,374,045		
Total U.S. Government Securities	742,256,555		742,256,555			-			-	742,256,555		742,256,555		
Other Securities	609,710,742		609,710,742	1,001,439,895		1,001,439,895	1,000,000,000		1,000,000,000	2,611,150,637		2,609,710,742		
Total Loans Receivable, Net of Loan Loss Provision	349,255,568		349,255,568			-			-	349,255,568		349,255,568		
Accumulated Depreciation & Other Assets	108,954		108,954			-			-	108,954		108,954		
<b>TOTAL ASSETS</b>	<b>2,690,017,396</b>		<b>2,690,017,396</b>	<b>1,001,439,895</b>		<b>1,001,439,895</b>				<b>3,691,457,291</b>		<b>1,001,439,895</b>		<b>2,690,017,396</b>
<b>LIABILITIES</b>														
Total Deposits	1,688,577,501		1,688,577,501			-			-	1,688,577,501		1,688,577,501		
Borrowings and FHLB Advances	-		-	1,000,000,000		1,000,000,000	1,000,000,000		1,000,000,000	2,000,000,000		2,000,000,000		
Other Liabilities	-		-	268,350,000		268,350,000			-	268,350,000		268,350,000		
<b>TOTAL LIABILITIES</b>	<b>1,688,577,501</b>		<b>1,688,577,501</b>	<b>1,268,350,000</b>		<b>1,268,350,000</b>				<b>2,956,927,501</b>		<b>2,956,927,501</b>		
<b>SHAREHOLDERS EQUITY</b>														
Capital Stock	1,000,000,000		1,000,000,000			-			-	1,000,000,000		1,000,000,000		
Undivided Profits (Losses) from Previous Year	(37,661,232)		(37,661,232)			-			-	(37,661,232)		(37,661,232)		
Current Net Income (Loss)	39,101,127		39,101,127	(266,910,105)		(266,910,105)			-	(227,808,977)		(227,808,977)		
Total Retained Earnings	1,439,895		1,439,895	(266,910,105)		(266,910,105)			-	(265,470,209)		(265,470,209)		
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>1,001,439,895</b>		<b>1,001,439,895</b>	<b>(266,910,105)</b>		<b>(266,910,105)</b>				<b>734,529,791</b>		<b>734,529,791</b>		
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>2,690,017,396</b>		<b>2,690,017,396</b>	<b>1,001,439,895</b>		<b>1,001,439,895</b>				<b>3,691,457,291</b>		<b>1,001,439,895</b>		<b>2,690,017,396</b>

**Consolidated Income Statement - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

Bank Operating Year 3			Cannabis Banker's Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total		
<b>INCOME</b>														
Total Interest and Dividend Income	69,681,437		69,681,437			-			-	69,681,437		69,681,437		
Total Interest Expense	19,771,756		19,771,756			-			-	19,771,756		19,771,756		
Total Non-Interest Income	7,300,058		7,300,058			-			-	7,300,058		7,300,058		
<b>Total Income</b>	<b>51,049,385</b>		<b>51,049,385</b>			-			-	<b>51,049,385</b>		<b>51,049,385</b>		
<b>NON-INTEREST EXPENSE:</b>														
Salaries and Employee Benefits (Note 5)	8,561,000	1,938,560	6,622,440			-			(1,938,560)	1,938,560	8,561,000	1,938,560	6,622,440	
Occupancy	322,928		322,928			-			-	322,928		322,928		
Other Operating Expenses	3,064,330	54,280	3,010,050			-			-	3,010,050		3,010,050		
<b>Total Non-Interest Expense</b>	<b>11,948,257</b>	<b>1,992,840</b>	<b>9,955,418</b>			-			(1,992,840)	<b>1,992,840</b>	<b>11,948,257</b>	<b>1,992,840</b>	<b>9,955,418</b>	
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>39,101,127</b>	<b>(1,992,840)</b>	<b>41,093,967</b>			-			1,992,840	(1,992,840)	<b>39,101,127</b>	<b>(1,992,840)</b>	<b>41,093,967</b>	
Provision for Income Taxes														
<b>NET INCOME (Loss)</b>	<b>39,101,127</b>	<b>(1,992,840)</b>	<b>41,093,967</b>			-			1,992,840	(1,992,840)	<b>39,101,127</b>	<b>-</b>	<b>39,101,127</b>	
Accumulated Net Income (Loss)	40,180,025		40,180,025			-			-	40,180,025		40,180,025		

**Consolidated Cash Flow Statement - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

Bank Operating Year 3			Cannabis Banker's Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total		
<b>OPERATING ACTIVITIES</b>														
Net Income	39,101,127		39,101,127			-			-	39,101,127		39,101,127		
Net Cash From/(Used By) Operating	46,178,209		46,178,209			-			-	46,178,209		46,178,209		
Net Cash From/(Used By) Investing	(274,011,178)		(274,011,178)			-			-	(274,011,178)		(274,011,178)		
Net Cash From/(Used By) Financing	213,674,008		213,674,008			-			-	213,674,008		213,674,008		
Net Cash Flow	(14,158,961)		(14,158,961)			-			-	(14,158,961)		(14,158,961)		
Cash Beginning of Period	120,195,612		120,195,612			-			-	120,195,612		120,195,612		
Cash End of Period	106,036,651		106,036,651			-			-	106,036,651		106,036,651		
Cash Balance	106,036,651		106,036,651			-			-	106,036,651		106,036,651		

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

**Consolidated Balance Sheet - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

Bank Operating Year 5	Cannabis Banker's Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>ASSETS</b>												
Total Cash and due from Banks	1,043,964,452		1,043,964,452				-			1,043,964,452		1,043,964,452
Fed Funds Sold	115,709,545		115,709,545				-			115,709,545		115,709,545
Total U.S. Government Securities	839,584,885		839,584,885				-			839,584,885		839,584,885
Other Securities	678,126,253		678,126,253	1,053,954,244		1,053,954,244	1,000,000,000		1,000,000,000	2,732,080,497	2,053,954,244	678,126,253
Total Loans Receivable, Net of Loan Loss Provision	554,365,661		554,365,661				-			554,365,661		554,365,661
Accumulated Depreciation & Other Assets	108,954		108,954				-			108,954		108,954
<b>TOTAL ASSETS</b>	<b>3,231,859,751</b>		<b>3,231,859,751</b>	<b>1,053,954,244</b>		<b>1,053,954,244</b>				<b>4,285,813,994</b>	<b>1,053,954,244</b>	<b>3,231,859,751</b>
<b>LIABILITIES</b>												
Total Deposits	2,177,905,507		2,177,905,507				-			2,177,905,507		2,177,905,507
Borrowings and FHLB Advances	-		-	1,000,000,000		1,000,000,000	1,000,000,000		1,000,000,000	2,000,000,000	2,000,000,000	-
Other Liabilities	-		-	447,250,000		447,250,000				447,250,000		447,250,000
<b>TOTAL LIABILITIES</b>	<b>2,177,905,507</b>		<b>2,177,905,507</b>	<b>1,447,250,000</b>		<b>1,447,250,000</b>				<b>3,625,155,507</b>		<b>3,625,155,507</b>
<b>SHAREHOLDERS EQUITY</b>												
Capital Stock	1,000,000,000		1,000,000,000				-			1,000,000,000		1,000,000,000
Undivided Profits (Losses) from Previous Year	51,267,128		51,267,128				-			51,267,128		51,267,128
Current Net Income (Loss)	56,641,360		56,641,360	(393,295,756)		(393,295,756)				(336,654,397)		(336,654,397)
Dividends Payable to Holding Company	(53,954,244)		(53,954,244)				-			(53,954,244)		(53,954,244)
Total Retained Earnings	53,954,244		53,954,244	(393,295,756)		(393,295,756)				(339,341,513)		(339,341,513)
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>1,053,954,244</b>		<b>1,053,954,244</b>	<b>(393,295,756)</b>		<b>(393,295,756)</b>				<b>660,658,487</b>		<b>660,658,487</b>
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>3,231,859,751</b>		<b>3,231,859,751</b>	<b>1,053,954,244</b>		<b>1,053,954,244</b>				<b>4,285,813,995</b>	<b>1,053,954,244</b>	<b>3,231,859,751</b>

**Consolidated Income Statement - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

Bank Operating Year 5	Cannabis Banker's Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>INCOME</b>												
Total Interest and Dividend Income	91,437,148		91,437,148				-			91,437,148		91,437,148
Total Interest Expense	25,626,199		25,626,199				-			25,626,199		25,626,199
Total Non-Interest Income	9,415,521		9,415,521	53,954,244		53,954,244				63,369,765		63,369,765
Total Income	69,401,003		69,401,003	53,954,244		53,954,244				123,355,247		123,355,247
<b>NON-INTEREST EXPENSE:</b>												
Salaries and Employee Benefits (Note 5)	9,527,000	1,938,560	7,588,440				(1,938,560)		1,938,560	9,527,000	1,938,560	7,588,440
Occupancy	322,928		322,928				-			322,928	-	322,928
Other Operating Expenses	2,909,716	54,280	2,855,436	53,954,244		53,954,244				56,809,680		56,809,680
Total Non-Interest Expense	12,759,643	1,992,840	10,766,804	53,954,244		53,954,244				12,759,643	1,992,840	10,766,804
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>56,641,360</b>	<b>(1,992,840)</b>	<b>58,634,199</b>							<b>56,641,360</b>	<b>(1,992,840)</b>	<b>58,634,199</b>
Provision for Income Taxes	-		-							-	-	-
<b>NET INCOME (Loss)</b>	<b>56,641,360</b>	<b>(1,992,840)</b>	<b>58,634,199</b>							<b>56,641,360</b>	<b>(1,992,840)</b>	<b>58,634,199</b>
Accumulated Net Income (Loss)	146,648,617		146,648,617							146,648,617		146,648,617

**Consolidated Cash Flow Statement - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

Bank Operating Year 5	Cannabis Banker's Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>OPERATING ACTIVITIES</b>												
Net Income	56,641,360		56,641,360				-			56,641,360		56,641,360
Net Cash From/(Used By) Operating	62,889,034		62,889,034				-			62,889,034		62,889,034
Net Cash From/(Used By) Investing	(341,636,481)		(341,636,481)				-			(341,636,481)		(341,636,481)
Net Cash From/(Used By) Financing	255,619,111		255,619,111				-			255,619,111		255,619,111
Net Cash Flow	(23,128,336)		(23,128,336)				-			(23,128,336)		(23,128,336)
Cash Beginning of Period	87,711,789		87,711,789				-			87,711,789		87,711,789
Cash End of Period	64,583,453		64,583,453				-			64,583,453		64,583,453
Cash Balance	64,583,453		64,583,453				-			64,583,453		64,583,453

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.

**Consolidated Balance Sheet - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

**Bank Operating Year 10**

	Cannabis Banker's Bank			Holding Company			State of California*			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>ASSETS</b>												
Total Cash and due from Banks	1,302,069,265		1,302,069,265			-			-	1,302,069,265		1,302,069,265
Fed Funds Sold	248,662,731		248,662,731			-			-	248,662,731		248,662,731
Total U.S. Government Securities	1,070,754,262		1,070,754,262			-			-	1,070,754,262		1,070,754,262
Other Securities	815,812,771		815,812,771	1,278,567,978		1,278,567,978	1,000,000,000		1,000,000,000	3,094,380,749		3,094,380,749
Total Loans Receivable, Net of Loan Loss Provision	1,493,044,264		1,493,044,264			-			-	1,493,044,264		1,493,044,264
Accumulated Depreciation & Other Assets	108,954		108,954			-			-	108,954		108,954
<b>TOTAL ASSETS</b>	<b>4,930,452,247</b>		<b>4,930,452,247</b>	<b>1,278,567,978</b>		<b>1,278,567,978</b>				<b>6,209,020,225</b>		<b>4,930,452,247</b>
<b>LIABILITIES</b>												
Total Deposits	3,651,474,992		3,651,474,992			-			-	3,651,474,992		3,651,474,992
Borrowings and FHLB Advances	-		-	1,000,000,000		1,000,000,000	1,000,000,000		1,000,000,000	2,000,000,000		2,000,000,000
Other Liabilities	-		-	894,500,000		894,500,000			-	894,500,000		894,500,000
<b>TOTAL LIABILITIES</b>	<b>3,651,474,992</b>		<b>3,651,474,992</b>	<b>1,894,500,000</b>		<b>1,894,500,000</b>				<b>5,545,974,992</b>		<b>5,545,974,992</b>
<b>SHAREHOLDERS EQUITY</b>												
Capital Stock	1,000,000,000		1,000,000,000			-			-	1,000,000,000		1,000,000,000
Undivided Profits (Losses) from Previous Year	447,354,825		447,354,825			-			-	447,354,825		447,354,825
Current Net Income (Loss)	109,781,131		109,781,131	(615,932,022)		(615,932,022)			-	(506,150,891)		(506,150,891)
Dividends Payable to Holding Company	(278,567,978)		(278,567,978)			-			-	(278,567,978)		(278,567,978)
Total Retained Earnings	278,567,978		278,567,978	(615,932,022)		(615,932,022)			-	(337,364,044)		(337,364,044)
<b>TOTAL SHAREHOLDERS EQUITY</b>	<b>1,278,567,978</b>		<b>1,278,567,978</b>	<b>(615,932,022)</b>		<b>(615,932,022)</b>				<b>662,635,956</b>		<b>662,635,956</b>
<b>TOTAL LIABILITIES &amp; CAPITAL</b>	<b>4,930,042,970</b>		<b>4,930,042,970</b>	<b>1,278,567,978</b>		<b>1,278,567,978</b>				<b>6,208,610,948</b>		<b>4,930,042,970</b>

**Consolidated Income Statement - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

**Bank Operating Year 10**

	Cannabis Banker's Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>INCOME</b>												
Total Interest and Dividend Income	169,006,119		169,006,119			-			-	169,006,119		169,006,119
Total Interest Expense	43,600,816		43,600,816			-			-	43,600,816		43,600,816
Total Non-Interest Income	15,786,057		15,786,057	278,567,978		278,567,978			-	294,354,035		294,354,035
<b>Total Income</b>	<b>125,442,291</b>		<b>125,442,291</b>			-			-	<b>125,442,291</b>		<b>125,442,291</b>
<b>NON-INTEREST EXPENSE:</b>												
Salaries and Employee Benefits	11,347,000	1,938,560	9,408,440			-			-	11,347,000	1,938,560	9,408,440
Occupancy	322,928		322,928			-			-	322,928		322,928
Other Operating Expenses	3,991,232	54,280	3,936,952	(278,567,978)		(278,567,978)			-	(274,631,026)		(274,631,026)
<b>Total Non-Interest Expense</b>	<b>15,661,160</b>	<b>1,992,840</b>	<b>13,668,320</b>			-			-	<b>15,661,160</b>	<b>1,992,840</b>	<b>13,668,320</b>
<b>INCOME BEFORE PROVISION FOR INCOME TAXES</b>	<b>109,781,131</b>	<b>(1,992,840)</b>	<b>111,773,971</b>			-			-	<b>109,781,131</b>	<b>(1,992,840)</b>	<b>111,773,971</b>
Provision for Income Taxes	-		-			-			-	-		-
<b>NET INCOME (Loss)</b>	<b>109,781,131</b>	<b>(1,992,840)</b>	<b>111,773,971</b>			-			-	<b>109,781,131</b>	<b>(1,992,840)</b>	<b>111,773,971</b>
Accumulated Net Income (Loss)	595,876,086		595,876,086			-			-	595,876,086		595,876,086

**Consolidated Cash Flow Statement - California State Controlled Public Bankers (Correspondent) Bank for the Cannabis Industry**

**Bank Operating Year 10**

	Cannabis Banker's Bank			Holding Company			State of California			Consolidated		
	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total	Amount	Adjustment	Total
<b>OPERATING ACTIVITIES</b>												
Net Income	109,781,131		109,781,131			-			-	109,781,131		109,781,131
Net Cash From/(Used By) Operating	125,952,408		125,952,408			-			-	125,952,408		125,952,408
Net Cash From/(Used By) Investing	(444,536,217)		(444,536,217)			-			-	(444,536,217)		(444,536,217)
Net Cash From/(Used By) Financing	326,819,402		326,819,402			-			-	326,819,402		326,819,402
Net Cash Flow	8,235,593		8,235,593			-			-	8,235,593		8,235,593
Cash Beginning of Period	93,331,726		93,331,726			-			-	93,331,726		93,331,726
Cash End of Period	101,567,319		101,567,319			-			-	101,567,319		101,567,319
Cash Balance	101,567,319		101,567,319			-			-	101,567,319		101,567,319

\* State of California is included here to identify the expenses and other items that impact the State budget as a result of direct costs that will not be paid by the bank or holding company during the same fiscal period that the expense is booked.