State-Backed Financial Institution Serving the Cannabis Industry

AI04D.3

Feasibility Study Report

Level 4

BLB MANAGEMENT CONSULTING, INC.

Jade Compliance Solutions

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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 1st, 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 more than 100,000 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)

> 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.

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.
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

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

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 profice 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.

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:

> 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*

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.

> [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*

INTRODUCTION

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 1st, 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.

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.
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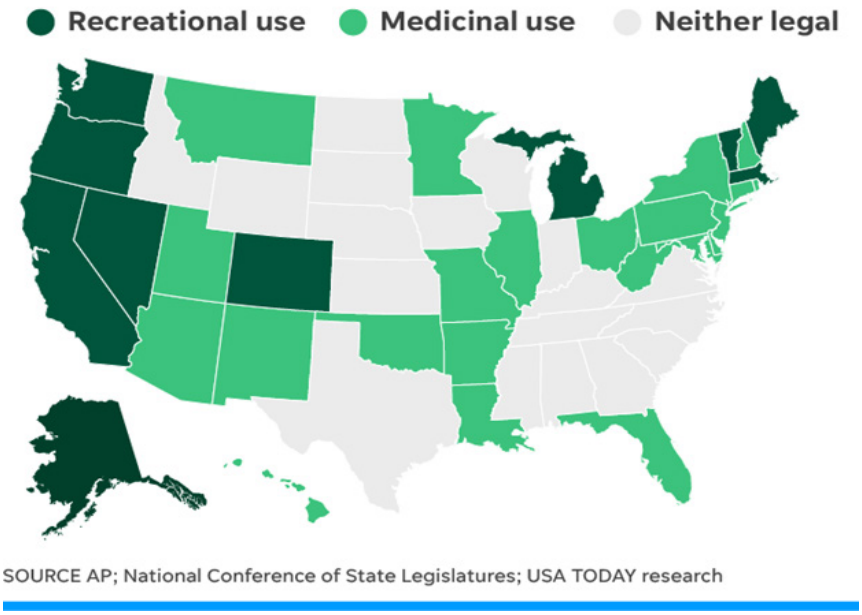

Figure 1: States with Legalized Cannabis

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

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.

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

[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 Wiener

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.

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 completed 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.

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. The technical and financial feasibility analysis for each of the options includes:

- Capitalization requirements;
- An assessment of the physical needs and information technology contemplated;
- Organizational and governance requirements and structures;
- Potential risks, including legal, regulatory, and financial, in coordination with the Attorney General's Office;
- Compliance needs;

> 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*

- 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
- 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.

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?

> The status quo for our growing legal cannabis industry is unsustainable. It's not only impractical from an accounting perspective, but it also presents a tremendous public safety problem.
>
> *State Senator Bob Hertzberg*

- 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?

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 a fedearlly-classified 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.

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 Territorial Bank of American Samoa.

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 currently houses the Public Financing Authority that does infrastructure financing for political subdivisions, and prior to 2017, thirty-seven (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 Samoa 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.

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.

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's 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.

> 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.

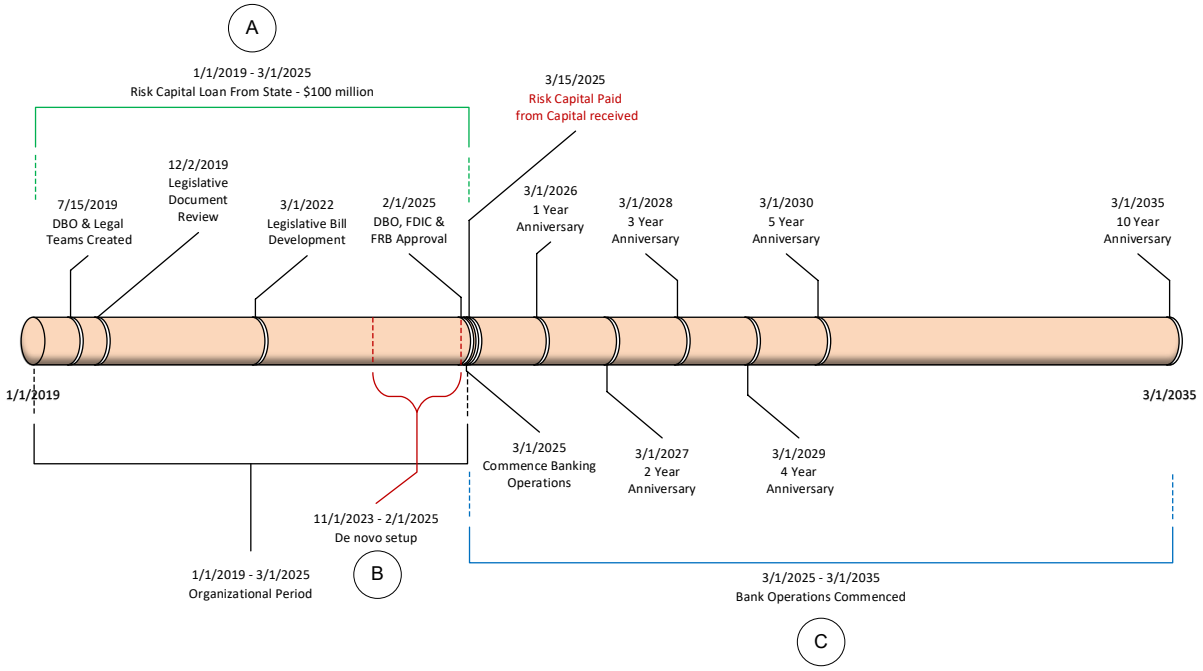

Figure 2: Anticipated Timeline to Establish a Public Bank

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

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

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

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

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 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 is 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 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 Procedures, 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.

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 the degree to which a bank's portfolio lacks diversification, with numbers above 0.24 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 concentration risk 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 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 a federally-classified 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.

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.

Cannabis Only Banking 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. 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 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.

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.

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 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 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.

Conclusions for Public Bank Alternatives

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.

> All public bank options should be rejected based on unacceptable risk levels, non-profitable financial forecasts, and an overall inability to achieve the desired objectives.

All state-backed banking options involve 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. 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 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 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 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.

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 loses 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 state will not see net dividends 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.

Other Alternatives Considered but Rejected

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 state-backed institution. 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.***

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.

> 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*

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

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.***

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 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.

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.

> 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*

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.

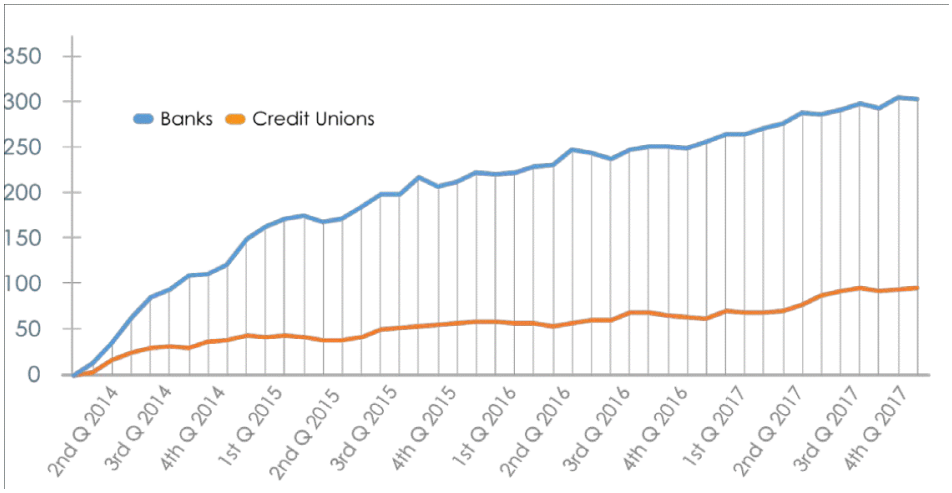

Figure 3: Depository Institutions (nationwide) providing banking services to cannabis businesses

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.

> The best option would be for the state to step in and influence banks that exist today.
> *Mr. Henry Levy, Treasurer & Tax Collector, Alameda County*

Figures 3 is from FinCEN Marijuana Banking Update.

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.
- 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.

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) and budget forecasts (Table 2):

Table 1: CBP Staffing Profile

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

Table 2: Five-year budget forecast

Expenses	2019 Yr 1	2020 Yr 2	2021 Yr 3	2022 Yr 4	2023 Yr 5	Subtotal
Staff Cost	$752,654	$1,488,592	$1,964,830	$1,211,140	$ 1,081,290	$6,498,506
Occupancy (rent)	$21.263	$36,450	$48,6000	$34,931	$33,413	$174,656
Operating & Travel Expenses	$218.400	$374,400	$499,200	$358,800	$343,200	$1,794,000
Legal & Professional Fees	$150,000	$150,000	$150,000	$60,000	$60,000	$ 570,000
Marketing	$250,000	$250,000	$250,000	$125,000	$ 125,000	$1,000,000
	$1,392,317	**$2,299,442**	**$2,912,630**	**$1,789,871**	**$1,642,903**	**$10,037,162**

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.

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 close-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.

GLOSSARY

Bank Holding Company

A bank holding company is a corporation that holds at least one quarter of the voting stock of a bank. One bank holding company led to the creation of leveraged bank holding companies. 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.

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.

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.

Correspondent bank

A Correspondent 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.

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.

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.

Herfindahl Index

In banking, the Herfindahl 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:

$$H = \sum^{n} s_i^2$$

where H is the Herfindahl Index, Si is the percentage of industry concentration in the portfolio, and N is the number of industries represented.

Know Your Customer (KYC)

It is 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 update to ensure the Know the Customer Account (KYA) is current.

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 to the Knowledge of Citywide leases or otherwise provides equipment which is directly used to grow, package, manufacture, or produce marijuana.

QAR

Questionable Activity Report: a report of activity being conducted by a bank customer that may violate one or more Bank Secrecy Act provisions or other activity that has been specifically restricted according to the deposit account agreement between the bank and its customer.

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 make 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.