

Independent Review

Cannabis Control Board (CCB) System Project For the State of Vermont



Submitted to the State of Vermont, Agency of Digital Services August 25, 2022

FINAL

Prepared by:

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1.0 Executive Summary

For all Information Technology (IT) activities over \$1,000,000, Vermont statute (or at the discretion of the Chief Information Officer [CIO]) requires an Independent Review by the Office of the CIO before the project can begin. The State of Vermont (State) Agency of Digital Services (ADS) engaged Berry Dunn McNeil & Parker, LLC (BerryDunn) to conduct an Independent Review of the Cannabis Control Board System project. This Independent Review began on June 15, 2022, and the presentation of findings is scheduled for the week of August 22, 2022.

The Vermont Cannabis Control Board (CCB or VCCB) was established through Act 164 of 2020 for the purpose of safely, equitably implementing and administering the laws and rules regulating adult-use cannabis (marijuana) in Vermont. It is responsible for establishing, administering, and regulating a cannabis regulatory system for commercial cannabis cultivators, wholesalers, product manufacturers, retailers, and testing laboratories.

On October 4, 2021, the CCB issued a Request for Information (RFI) to gather input and obtain information and cost estimates in proceeding with proposals to develop and implement software solutions for web portal, public-facing database, reporting, document and case management, compliance, and track seed-to-sale for its Cannabis Adult-Use Program. The CCB received 13 responses to the RFI. The CCB then evaluated the submissions by respondents to explore how they would meet their needs and understand the cost associated with proposed solutions.

On or before April 1, 2022, the CCB began accepting applications for licenses, processing applications and accepting application payments. Prior to doing so, the CCB required a technology solution to meet these needs, so the CCB made the decision to leverage the State of Vermont's (State) existing Salesforce platform for these purposes. The ADS posted a Statement of Work Request for Proposals (SOW RFP) on December 15, 2021, for front- and back-end Salesforce development—however, the SOW RFP was not released to all qualified vendor groups, so ADS again posted the SOW RFP on January 10, 2022 and released it to all qualified vendor groups. ADS received bids from two vendors, MTX Group Inc. (MTX) and Cogent Infotech (Cogent), and the State team selected MTX as the preferred vendor. ADS executed a contract with MTX on February 23, 2022, and later executed a contract amendment on April 4, 2022. This SOW amendment increased contract funds by \$315,000 and extended the contract term from ending on July 31, 2023, to October 31, 2023. The amendment also expanded the scope to include additional releases and certain enhancements.

On or before September 1, 2022, the CCB will need to begin establishing and implementing inventory control systems, product registrations, and associated payment processing related to the commerce of cannabis in the State. The CCB requires a technology solution to meet these needs, so the CCB made the decision to continue leveraging the existing Salesforce platform for these purposes (in conjunction with the current NIC payment solution). ADS posted another SOW RFP on May 27, 2022, for front- and back-end Salesforce development and customer relationship support. ADS did not receive any bids, so the SOW RFP was reposted with an extended due date of July 19, 2022. However, no bids were submitted, so ADS reposted the SOW RFP on July 20, 2022.



While conducting the Independent Review, BerryDunn identified five risks, with three being of high impact and/or high likelihood of occurrence. These risks are listed in summary form in Section 1.3, and in detail in Attachment 2 – Risk Register.

1.1 Cost Summary

Table 1.1 includes a summary of the costs. More detail can be found in Section 5: Acquisition Cost Assessment and Section 10: Impact Analysis on Net Operating Costs.

Table 0.1: Cost Summary

IT Activity Life Cycle	Cost and Funding Source
Total Life Cycle Costs (Five Years)	\$2,367,435
Total Implementation Costs	\$1,562,884.25
New Annual Operating Costs (Four Years)	\$804,550.75
Current Annual Operating Costs (Four Years)	\$0
Difference Between Current and New Operating Costs	\$804,550.75
Funding Source(s) and Percentage Breakdown of Multiple Sources	100% State funds

1.2 Disposition of Independent Review Deliverables

Table 1.2 includes a summary of the Independent Review findings as elaborated later in the report.

Table 0.2: Independent Review Deliverables

Deliverable	Highlights From the Independent Review Include Explanations of Any Significant Concerns
Acquisition Cost Assessment	At this time, the acquisition cost for the CCB system project is unknown due to the open procurement for Phase 1A implementation services and future procurement for Phase 2 implementation services. However, the estimated acquisition cost for Phase 1 and Phase 1A is \$1,562,884.25. The planned costs for MTX's services (Phase 1) and estimated costs for implementation services (Phase 1A) equal \$1,249,064.25. The remaining costs are for State and contractor resources to support the implementation.
	Based on BerryDunn's research and assessment of acquisition cost for the first two phases, the State appears to be paying comparable costs to similar solutions and implementation services in the market.



Deliverable	Highlights From the Independent Review		
	Include Explanations of Any Significant Concerns		
Technology Architecture and Standards Review	MTX's proposal states their solution meets all of the CCB's requirements for the following business needs: applicant or a licensed cannabis establishment are able to submit an application for a cannabis license or renewal; CCB staff members are able to process an application for a license or renewal; applicant or a licensed cannabis establishment are able to pay required license fees; CCB staff members are able to process and manage documents; and CCB staff members are able to run reports and query. Intended primary benefits of the solution include: reducing barriers to entry and facilitating innovation to encourage small cultivators and entrepreneurs in the legacy market to enter the regulated market; the ability for applicants to submit for cannabis licenses online; the ability for the State to rollout a new application process for cannabis licenses, in compliance with Act 164; and increased revenue for the State. In alignment with the State's requirements, information assets will have an owner who is responsible for the protection and inventory of assets based on the sensitivity and value of information. If ownership has not been assigned, it will default to		
	the administrators of the system.		
	The solution:		
	 Will not only provide a modern interface for the public to interact with their government, but it will also provide efficiencies and insights for CCB members and agency staff. 		
	 Is ISO 27001 certified and PCI-DSS compliant. 		
	 Will meet Section 508 Amendment compliance requirements. 		
	 Will be configured in accordance with the State's record retention schedules and information management standards and best practices. 		
	The project follows the IT modernization and Vermonter experience principles enumerated in the ADS Strategic Plan 2022 – 2026.		
	The disaster recovery plan will be provided through the State's agreement with Salesforce.		
Implementation Plan Assessment	At the time of this Independent Review, Phase 1 development work is nearing completion. BerryDunn has no concerns regarding the Phase 1 implementation timetable. Regarding Phase 1A of the project, at the time of this Independent Review there is no definite implementation timetable because a vendor		



Deliverable	Highlights From the Independent Review	
Deliverable	Include Explanations of Any Significant Concerns	
	has not been awarded the related contract. BerryDunn does have a concern regarding the implementation timetable for Phase 1A of project (see Risk 1 in the Attachment 2 – Risk Register).	
	Based on interviews, it appears that State staff are ready to embrace the new platform and is supportive of the initiative to implement the new system. MTX plans to provide documentation and training to responsible entity support staff along with release notes. MTX's proposal provides a sufficient plan/approach for such.	
	The Phase 1 project milestones and deliverables in the area of project management are sufficient to hold MTX accountable for meeting the State's needs. The Phase 1A project milestones and deliverables appear to be sufficient for meeting the State's needs, but BerryDunn could not assess any final vendor approach to such, as no vendor has been awarded the related contract at the time of our Independent Review.	
	The State Project Manager has been actively engaged in the project, and based on our interactions with the State Project Manager during this Independent Review, BerryDunn has confidence that the individual has the skills and experience necessary for the role.	
Cost Analysis and Model for Benefits Analysis	The technical solution is expected to help the CCB achieve compliance with Act 164 and increase revenue generated by the fees associated to Cannabis Commerce. While the tangible benefits are speculative currently, BerryDunn and the State feel these benefits outweigh the cost for the solution.	
	The State explored leveraging Vermont's current medical marijuana system for the CCB, but after investigation the State determined that the solution was not able to meet the technical and business needs due certain system limitations and difficulties the medical marijuana program has had with setting up and using the system.	
Analysis of Alternatives	On October 4, 2021, the CCB issued a RFI to gather input and obtain information and cost estimates in proceeding with proposals to develop and implement software solutions for web portal, public-facing database, reporting, document and case management, compliance, and track seed-to-sale for its Cannabis Adult-Use Program. The CCB received 13 responses to the RFI. The CCB then evaluated the submissions by respondents to explore how they would meet their needs and understand the cost associated with proposed solutions.	



Deliverable	Highlights From the Independent Review	
Deliverable	Include Explanations of Any Significant Concerns	
	The CCB made the decision to leverage their existing Salesforce platform for these purposes, and to post a SOW RFP on December 15, 2022 for front- and back-end Salesforce development. As part of the procurement, a team of business and technical representatives from the State evaluated and scored various aspects of the vendors' proposals, with the total score comprising demonstrated performance: quality of proposal content (25%), cost (25%), prior experience with this type of work and timeline for completion of work to be performed (25%). Other criteria such as acceptance to the State's terms and conditions and mandatory bidding requirements were also evaluated. Based on the weighted scores, the State's evaluation team deemed MTX the favorable of the two proposals for Phase 1 of the project.	
	BerryDunn believes the State took the appropriate steps for understanding financially feasible and sustainable options for the CCB.	
Impact Analysis on Net Operating Costs	The State will expend most one-time costs on vendor and State labor in Year 1 and Year 2 but will result in a cost decrease at Year 3 after the initial implementation. The costs do not break even since the State does not have any costs associated to an existing solution.	
	The system will use the Salesforce security controls and will be configured by MTX and the implementation vendor for Phase 1A.	
Security Assessment	The State will use the Salesforce Incident Management Process for the identification and notification process for security breaches. The process includes investigation, communication, and resolution activities.	

1.3 Risks Identified as High Impact and/or Having High Likelihood of Occurrence

Table 1.3 provides a summary of each risk, including risk probability, impact, and overall rating. A complete Risk Register is included in Attachment 2.



Table 0.3: Project Risk Summaries and Ratings

Risk ID	Risk Description	Risk Likelihood/ Probability	Risk Impact	Overall Risk Rating
1	The new solution might not be fully operational by October 2022 due to delays in procuring IT services for the next phase of the project.	Medium	High	High
2	Delays in end-user training could negatively impact CCB operations.	High	Low	Medium
3	The implementation timeline could result in limitations on and/or challenges for the State's business resources.	Medium	Medium	Medium
4	Unidentified business and technical needs could result in changes to the project scope, schedule, and budget.	Medium	Low	Medium
5	The lack of dedicated State IT resources for post-implementation support could result in the reliance on vendor resources and actual costs exceeding projected costs for ongoing maintenance and operations.	Medium	Low	Medium

1.4 Other Key Issues

BerryDunn identified no other key issues during our independent review.

1.5 Recommendation

Based on the assessment as provided in this report, and assuming that the CCB and ADS execute the mitigation strategies as defined in Attachment 2, BerryDunn recommends the State proceed with Phase 1 of this project and with the chosen vendor (MTX). Considering that the CCB must begin establishing and implementing inventory control systems, product registrations and associated payment processing functions related to the commerce of cannabis in the State of Vermont (as the CCB has already issued cannabis licenses to applicants), BerryDunn recommends the State proceed with obtaining and evaluating bids for the related development work and award the related contract to a qualified vendor.



Independent Reviewer Certification

I certify that this Independent Review Report is an independent and unbiased assessment of the proposed solution's acquisition costs, technical architecture, implementation plan, cost-benefit analysis, and impact on net operating costs, based on the information made available to BerryDunn by the State.

Independent Reviewer Signature	Date	
Charlie Leadhetter E0E8D90BAA8541F	8/31/2022	

1.6 Report Acceptance

The electronic signature below represents the acceptance of this document as the final completed Independent Review Report.





2.0 Scope of This Independent Review

2.1 In Scope

The scope of this document is fulfilling the requirements of Vermont Statute, Title 3, Chapter 56, §3303(d).

The Independent Review Report includes:

- An acquisition cost assessment
- A technology architecture review and standards review
- An implementation plan assessment
- A cost analysis and model for benefit analysis
- An analysis of alternatives
- An impact analysis on net operating costs for the agency carrying out the activity
- A security assessment

This Independent Review used the following schedule:

- Week of June 13, 2022: Conduct a project planning meeting, develop a participation memo, schedule interviews, and review documentation
- Week of June 20, 2022: Conduct the first round of interviews and document initial findings, risks, and issues
- Weeks of June 27, 2022, July 11, 2022, and July 18, 2022: Conduct additional research and follow-up interviews
- Week of July 25, 2022: Provide a preliminary Independent Review Report to the State
- Week of August 1, 2022: Collect feedback, revise, and resubmit the Independent Review Report
- Week of August 22, 2022: Present the Independent Review Report findings, and facilitate a project closeout meeting

2.2 Out of Scope

The State determined that Phase 2 of the project is out of scope for this Independent Review.



3.0 Sources of Information

3.1 Independent Review Participants

Table 3.1 includes a list of stakeholders who participated in fact-finding meetings and/or communications.

Table 0.1: Independent Review Participants

Name	Organization and Role	Participation Topic(s)
Tylor Lahue	ADS / Project Manager	 General Project Information Implementation Plan Review Financial Analysis Cost-Benefit Analysis Risk Assessment
Hunter Thompson	ADS / IT Director	 General Project Information Implementation Plan Review Technology Architecture and Standards Review Risk Assessment
David Ladouceur	ADS / IT Security	 General Project Information Implementation Plan Review Technology Architecture and Standards Review Risk Assessment
Seamus Loftus	ADS / Enterprise Architect	 General Project Information Implementation Plan Review Technology Architecture and Standards Review Risk Assessment
Kimberly Lashua	CCB / Director of Operations	General Project InformationImplementation Plan ReviewCost-Benefit AnalysisRisk Assessment
James Pepper	CCB / Chair of CCB	General Project InformationImplementation Plan ReviewCost-Benefit AnalysisRisk Assessment



Name	Organization and Role	Participation Topic(s)
Khatri Hitesh	MTX / Technical Lead	 General Project Information Implementation Plan Review Technology Architecture and Standards Review Risk Assessment
Jeanice Young	MTX / Project Manager	 General Project Information Implementation Plan Review Technology Architecture and Standards Review Risk Assessment
Alex Philips	MTX / Technical Architect	 General Project Information Implementation Plan Review Technology Architecture and Standards Review Risk Assessment
Adam Turner	MTX / Business Analyst	 General Project Information Implementation Plan Review Technology Architecture and Standards Review Risk Assessment

3.2 Independent Review Documentation

Table 3.2 below includes a list of the documentation utilized to compile this Independent Review.

Table 0.2: Independent Review Documentation

Document Name	Description	Source
SOW-RFP VCCB Application System	SOW RFP for back- and front- end development for Salesforce and related project management services	<u>HERE</u>
MTX ADS Form SOW Amendment 1	Approved amendment to the contract between MTX and ADS for solution licensing and implementation services	<u>HERE</u>



Document Name	Description	Source
VCCB Application Implementation Budget	Planned implementation costs for each cost type associated with the VCCB Application Implementation	<u>HERE</u>
VCCB Application System - Security Penetration Test	RFP for security penetration testing services of MTX's solution	<u>HERE</u>
Sealed Bid Request for Information	Request for technical and financial information relating to the acquisition of a Seed-to-Sale/Inventory Tracking solution	<u>HERE</u>
SOW-RFP Evaluation Workbook	Scorecard for evaluating responses to the VCCB Application System SOW RFP	<u>HERE</u>
VCCB Pen Test Evaluation	Scorecard for evaluating responses to the VCCB Application System - Security Penetration Test RFP	<u>HERE</u>
Cogent Financial Proposal for SOW-RFP VCCB Application System	Financial Proposal from Cogent in response to SOW-RFP VCCB Application System	<u>HERE</u>
Cogent Technical Proposal for SOW-RFP VCCB Application System	Technical Proposal from Cogent in response to SOW-RFP VCCB Application System	<u>HERE</u>
SOW-RFP VCCB Application System - Financial	Financial Proposal from MTX in response to SOW-RFP VCCB Application System	<u>HERE</u>
SOW-RFP VCCB Application System - Technical	Technical Proposal from MTX in response to SOW-RFP VCCB Application System	<u>HERE</u>
SOW-RFP VCCB PR IT & PP	SOW RFP for establishing and implementing inventory control systems, product registrations and associated payment processing functions	<u>HERE</u>
GovWin bid Notification #2549670	Publicly available documentation of Washington's State Liquor and Cannabis Board's	<u>HERE</u>



Document Name	Description	Source
	acquisition of a Seed-to-Sale Marijuana Traceability System	
GovWin bid Notification #6137834	Publicly available documentation of Illinois' Department of Agriculture's acquisition of a Seed-to-Sale Inventory Tracking System	<u>HERE</u>
GovWin bid Notification #1200693	Publicly available documentation of Oregon's Department of Administrative Services' acquisition of a Seed-to-Sale Tracking System	<u>HERE</u>
GovWin bid Notification #1971664	Publicly available documentation of Nevada's Department of Administration's acquisition of a Seed-to-Sale Inventory Tracking and Management System	<u>HERE</u>



4.0 Project Information

4.1 Historical Background

The CCB was established through Act 164 of 2020—amended in 2021 by Act 62—for the purpose of safely, equitably implementing and administering the laws and rules regulating adultuse cannabis (marijuana) in Vermont. The CCB is responsible for establishing, administering, and regulating a cannabis regulatory system for commercial cannabis cultivators, wholesalers, product manufacturers, retailers, and testing laboratories.

On or before April 1, 2022, the CCB began accepting applications for licenses, processing applications, and accepting application payments. Prior to doing so, the CCB required a technology solution to meet these needs, so the CCB made the decision to leverage the State's existing Salesforce platform for these purposes.

On or before September 1, 2022, the CCB will need to begin establishing and implementing inventory control systems, product registrations and associated payment processing functions related to the commerce of cannabis in the State. The CCB made the decision to continue leveraging the existing Salesforce platform (in conjunction with the current NIC payment solution).

4.2 Project Goals

Goals of the project include:

- Reduce barriers to entry and facilitating innovation to encourage small cultivators and entrepreneurs in the legacy market to enter the regulated market
- Provide the ability for applicants to submit for cannabis licenses online
- Provide ability for the State to rollout a new application process for cannabis licenses, in compliance with Act 164
- Increase revenue for the State

4.3 Project Scope

As part of Phase 1, the CCB needed to begin accepting applications for licenses, processing applications, and accepting application payments. The CCB required a technology solution to meet those needs. To this end, the State worked to hire a vendor to perform back- and front-end development of the Salesforce platform, in compliance with the non-functional requirements, EPIC backlog, and Salesforce Data Model Vendor Summary, and to provide related project management and testing services—as stated within the related SOW RFP and awarded vendor contract.

As part of Phase 1A, the CCB will need to begin establishing and implementing inventory control systems, product registrations and associated payment processing functions related to



the commerce of cannabis in the State of Vermont. To this end, the State is working to hire a vendor perform back- and front-end development of the Salesforce platform and provide customer relationship support, in compliance with the functional and non-functional requirements, ADS Salesforce NFRs 2.0 & SaaS NFS, EPIC Backlog, and the Salesforce Data Model Vendor Summary, and to provide project management and testing services—as stated within the related SOW RFP.

4.4 Major Deliverables

Table 4.1 provides a summary of the project milestones and deliverables outlined in the contract with MTX for Phase 1.

Table 4.1: Phase 1 Project Milestones and Deliverables

Project Milestone	Deliverables
Completion of Discovery and Final Project Plan	 Project Schedule detailing release plan and sprint schedule Project Kickoff Agenda and Presentation Risk and Issues (Ongoing) Decision Log (Ongoing) Project Status Reports (Ongoing/Weekly)
MVP Release 1 – Start of Development	 Approved Business Requirements - State approval of User Stories provided via Contractor extract – Email Approval Action Items (Ongoing)
MVP Release 1 – Completion of Development and Start of UAT	 Development Complete UAT Scheduled Test Plan Defined – Detailing Approach Test Cases and Results - Contractor to supply specific test cases and their results prior to State Testing. Only approved test cases may be tested by State.
MVP Release 1 – Completion of UAT and Regression Testing, Production Deployment	 UAT Sign off by State – Email Approval Test Cases Executed – ADO Testing Report; Validation of Acceptance of Scope All Priority 1 Issues Resolved: ADO Defect Log Report Deployment to Production - Release Notes
Release 2 – Development, UAT, and Regression Testing, Production Deployment	 Approved Business Requirements - State approval of User Stories provided via Contractor extract – Email Approval Development Complete UAT Scheduled Test Plan Defined – Detailing Approach



Project Milestone	Deliverables		
	 Test Cases and Results - Contractor to supply specific test cases and their results prior to State Testing. Only approved test cases may be tested by State 		
	UAT Sign off by State – Email Approval		
	 Test Cases Executed – ADO Testing Report; Validation of Acceptance of Scope 		
	All Priority 1 Issues Resolved; ADO Defect Log Report		
	Deployment to Production - Release Notes		
	Approved Business Requirements – State approval of User Stories provided via Contractor extract – Email Approval		
	Development Complete		
	UAT Scheduled		
Dalagae 2 Davidanment	Test Plan Defined – Detailing Approach		
Release 3 – Development, UAT, and Regression Testing, Production	 Test Cases and Results - Contractor to supply specific test cases and their results prior to State \$74,852.25 5/27/2022 Testing. Only approved test cases may be tested by State 		
Deployment	UAT Sign off by State – Email Approval		
	 Test Cases Executed – ADO Testing Report; Validation of Acceptance of Scope 		
	All Priority 1 Issues Resolved; ADO Defect Log Report		
	Deployment to Production - Release Notes		
	Employee ID Card Apply		
	License Document Generation and ID Cards		
Release 2 and Release 3	Employee Card Document Generation		
Enhancements	Employee Card Temporary Document Generation		
	Employee ID Card Review		
	Add External Principal Contact		
	 Approved Business Requirements – State approval of User Stories provided via Contractor extract – Email Approval 		
	Development Complete		
Release 4 – Development,	UAT Scheduled		
UAT, and Regression	Test Plan Defined – Detailing Approach		
Testing, Production Deployment	Test Cases and Results		
Берюунтент	UAT Sign off by State – Email Approval		
	 Test Cases Executed – ADO Testing Report; Validation of Acceptance of Scope 		
	All Priority 1 Issues Resolved; ADO Defect Log Report		



Project Milestone	Deliverables		
	Deployment to Production - Release Notes		
	Approved Business Requirements – State approval of User Stories provided via Contractor extract – Email Approval		
	Development Complete		
	UAT Scheduled		
Release 5 – Development,	Test Plan Defined – Detailing Approach		
UAT, and Regression Testing, Production	Test Cases and Results		
Deployment	UAT Sign off by State – Email Approval		
	 Test Cases Executed – ADO Testing Report; Validation of Acceptance of Scope 		
	All Priority 1 Issues Resolved; ADO Defect Log Report		
	Deployment to Production - Release Notes		
	90 Days Postproduction Deployment		
	Metadata Configuration Workbook		
	Admin Guide/Manual		
	User Guide/Manual		
Warranty – Project Complete	 Data Dictionary Bugs/Issues that are discovered during penetration testing, which require remediation as specified by the State, shall be addressed by Contractor during the 90-day warranty period. For the Warranty Period, a defect/bug is solely defined as any signed off acceptance criteria related to a user story in production where that acceptance criteria was previously defined, signed off, tested, and approved, and is not functioning per the acceptance criteria previously approved. 		

The deliverables for Phase 1A were not finalized at the time of this Independent Review; however, Table 4.2 provides a summary of the expected deliverables, descriptions, and frequency as outlined in the CCB's SOW RFP.

Table 4.2: Phase 1A Project Deliverables and Frequency

Deliverable	Description	Frequency
Project Kick Off Agenda and Presentation	Contractor shall hold a project kickoff meeting providing an agenda and presentation to the State.	Once
Product Backlog	Backlog of all user stories that are prioritized according to their business value. This is an ongoing exercise through the project lifecycle that is typically done before each sprint.	Ongoing



Deliverable	Description	Frequency
Implementation Schedule detailing Release Plan and Sprint Schedule	The IMS outlines how the project will go-live and will include a detailed plan for the exact events that need to occur, assigned to the resources that need to do them, and the time frame for when they need to get done.	Once, then updated accordingly
Risk and Issues Log	A log of all risks and issues (opened and closed) that could (risk) or are (issue) impacting the project. Risks should be outlined by their impact and their potential to occur. All risks and issues should have an owner and a clearly defined response strategy.	Ongoing
Action Items	A log of open and resolved/completed action items. Each action item should identify an owner and date needed for completion.	Ongoing
Decision Log	A log of all decisions made over the course of the project. Decisions should have a date and name of decider.	Ongoing
Test Plans	A description of the testing approach, participants, sequence of testing and testing preparations.	Once
Test Cases and Results	The specific test cases and/or scripts to be tested and the testing results. Test cases must tie back to the project requirements (to help ensure each one has been met).	Create once then update with Results
Project Status Reports	Provides an update on the project health, accomplishments, upcoming tasks, risks, and significant issues. The Status Report and the project color being report shall be developed in consultation with the State business lead and State project manager.	Ongoing
Meeting Agenda / Minutes	All meetings will have an agenda and minutes. The minutes shall contain items discussed and the risks, issues, action items, and decisions made during the meeting. Minute criteria shall be transcribed over to the main logs.	Ongoing
Deployment(s) to PROD	Conducted in accordance with state approval and with the Implementation Master Schedule.	As needed



Deliverable	Description	Frequency
Training and Documentation	Conduct appropriate training with supplied system guidance in the form User Guides.	Once
System Design Document(s)	Documentation that outlines the design developed by the vendor.	Once
Deliverable Acceptance Document (DAD)	Criteria that establish what the acceptance and rejection criteria of each project deliverable and who is responsible for approval of the deliverable. The Contractor shall draft, and the State shall approve the criteria and template. DADs must be completed and approved prior to the submission of invoices and payments.	Once Per Deliverable

4.5 Project Phases and Schedule

Table 4.3 provides a summary of the project milestones and expected completion dates, as articulated in the contract with MTX for Phase 1. The project phases/milestones and schedule for Phase 1A were not available at the time of this Independent Review.

Table 4.3: Phase 1 Project Milestones and Expected Completion Dates

Project Milestone	Expected Completion Date
Completion of Discovery and Final Project Plan	2/22/2022
MVP Release 1 – Start of Development	2/21/2022
MVP Release 1 – Completion of Development and Start of UAT	3/21/2022
MVP Release 1 – Completion of UAT and Regression Testing, Production Deployment	3/31/2022
Release 2 – Development, UAT, and Regression Testing, Production Deployment	4/21/2022
Release 3 – Enhancements	5/31/2022
Release 4 – Development, UAT, and Regression Testing, Production Deployment	6/30/2022
Release 5 – Development, UAT, and Regression Testing, Production Deployment	7/22/2022



Project Milestone	Expected Completion Date
Maintenance and Operations Support – Upon Expiration of 90-day Warranty	10/21/2023



5.0 Acquisition Cost Assessment

Table 5.1 includes a summary of acquisition costs reported to BerryDunn during this Independent Review.

Table 0.1: Acquisition Cost Assessment

Acquisition Costs	Cost	Comments	
Hardware	\$0	Not applicable	
Software/Licensing	\$0	Not applicable	
Implementation Services	\$1,249,064.25	\$749,064.25 for Phase 1 was obtained from the MTX SOW Agreement #ADS 2022-33, Amendment No. 1 and estimated cost of \$500,000 from the approved IT ABC Form	
ADS Enterprise Project Management Office (EPMO) Project Oversight	\$5,280	60 hours at \$88 per hour Obtained from the approved IT ABC Form	
ADS EPMO Project Manager	\$67,584	768 hours at \$88 per hour Obtained from the approved IT ABC Form	
ADS EPMO Business Analyst (BA)	\$147,456	1,112.5 hours at \$150 per hour Obtained from the approved IT ABC Form	
ADS Enterprise Architect (EA)	\$17,600	200 hours at \$88 per hour Obtained from the approved IT ABC Form	
ADS Security Staff	\$8,800	100 hours at \$88 per hour Obtained from the approved IT ABC Form	
ADS IT Labor	\$17,600	200 hours at \$88 per hour Obtained from the approved IT ABC Form	
Other Costs	\$25,000 Estimated cost for penetration testing Obtained from the approved IT ABC Fe		
Independent Review	\$24,500	Obtained from BerryDunn's contract	
Total One-Time Acquisition Costs	\$1,562,884.25		

- 1. Cost Validation: Describe how you validated the acquisition costs.
 - BerryDunn validated acquisition costs during documentation review and an interview with ADS' project manager.
- **2. Cost Comparison:** How do the acquisition costs of the proposed solution compare to what others have paid for similar solutions? Will the State be paying more, less, or about the same?



BerryDunn researched GovWin—a government contracting intelligence platform from Deltek—to research what other state government agencies have paid for similar solutions and services. In Table 5.2 below, BerryDunn compared the anticipated cost to peer states agencies.

Table 0.2: Peer State Acquisition Examples

Vendor	State/Agency	Solution	Approx. Contract Value
BioTrack THC	Illinois Department of Agriculture	Seed-to-Sale Inventory Tracking System (2018)	\$74,864
Metric LLC	Nevada Department of Administration	Seed-to-Sale Inventory Tracking and Management System (2015)	\$816,000
Franwell	Oregon Department of Administrative Services	Seed-to-Sale Tracking System. (2015)	\$1,730,962
MJ Freeway	Washington State Liquor and Cannabis Board	Seed-to-Sale Marijuana Traceability System (2017)	\$800,000

Given potential differences in solutions and services procured by other states—as well as the contract execution dates—this analysis is intended to be directional in nature and should not serve as a basis for what Vermont should be paying.

3. Cost Assessment: Are the acquisition costs valid and appropriate in your professional opinion? List any concerns or issues with the costs.

In addition to our market research, we based our cost assessment on the work we have performed in other states during the planning and implementation of similar Salesforce solutions.

Based on BerryDunn's analysis experience, we believe the State is paying comparable costs to similar solutions and services in the market.



6.0 Technology Architecture and Standards Review

- **1. State's IT Strategic Plan:** Describe how the proposed solution aligns with each of the State's IT Strategic Principles:
 - a. Assess how well the technology solution aligns with the business direction

Key Desired Outcome	Description		
Applicant or a Licensed Cannabis Establishment are able to submit an application for a cannabis license or renewal	MTX's proposal states their development work will meet all the CCB's requirements. The Application Review and Approval feature will route applications to CCB staff (either randomly or prescribed by priority based on predetermined criteria) and allow them to begin the review of the applications - initial, renewal or amendment applications. This feature will be collaborative and allow staff to directly message each other or assign tasks to one another on the application record. During that process, CCB staff can ask applicants to resubmit documentation if necessary or clarify information provided, and then submit the completed application to the CCB for final approval or denial. This feature will also provide notifications to the applicant during the process at the intervals prescribed by the CCB. The application process will include the ability to document and store key required information. The Issuance feature will automatically generate the needed ID Card and License or Certificate document and automatically provide that document to the recipient via email. The document will also be able to be printed and mailed or displayed electronically and accessed anytime through the Portal. CB will also have the ability based on permission level to suspend or revoke a license including automating the process that follows such action.		
Cannabis Control Board Staff Members are able to process an application for a License or Renewal	MTX's proposal states their development work will meet all the CCB's requirements. The Compliance and Appeals feature in the portal will allow applicants to submit an appeal to the CCB by providing key information related to the appeal and uploading necessary documents. This feature will also provide tracking and management of the compliance process from complaints to compliance actions as well as the subsequent appeals process. This feature will include investigations, case tracking, and case preparation, as well as tracking and sending automatic notifications of key dates such as statute of limitations, time limits around specific investigation steps, and hearing dates. This feature will also include tracking of penalties and violations.		



Key Desired Outcome	Description		
	Respondents will be able to pay fines through the payment gateway on the portal after final adjudication. Through the online portal, appellants will also be able to view the status of their case as well as submit attachments as part of their appeal. A copy of the appeal will then be emailed to the appellant.		
Applicant or a Licensed Cannabis Establishment are able to pay required license fees	MTX's proposal states their development work will meet all the above requirements. The Payment feature will allow applicants or licensees to pay fees online and receive refunds through the CCB's chosen payment processor. For PCI compliance purposes card information will be stored within the payment processor and the status of payment will be sent back to the system. CCB staff will be able to track and report on payments directly in the system. The solution will be able to calculate fees based on the application's requirements. CCB staff will be able to create outstanding payments and applicants or licensees can pay through the portal. The solution will also be able to create and email a receipt upon successful payment.		
Cannabis Control Board Staff Members are able to process and manage documents	MTX's proposal states their development work will meet all the above requirements. The Inspections feature will allow for complete tracking, automatic assignment, routing, scheduling an optimization of inspections. CCB staff will also be able to create an inspection record to document the details of the inspection and request follow up from the licensed establishment. Inspector will be able to capture specifics around the Inspections, upload photos/videos as well as Pass/Fail an Inspection and generate a site visit report directly from Salesforce. If follow-up is required, inspectors will be able to email that request through the system so that there is an audit trail of requested items. The results of the inspection can then be posted to the public registry.		
Cannabis Control Board Staff Members are able to run reports and query	MTX's proposal states their development work will meet all the above requirements. The solution will enable tracing of product provenance to collect required data and achieve necessary compliance. MTX will also create standard and user-customizable reports and QR code technology, saving the end user significant expenditure and making it easier for cultivators and regulators.		

Assess how well the technology solution maximizes benefits for the State
 Primary benefits to the State provided by the solution will be those articulated in the IT ABC Form, including:



- Engagement Alignment and Readiness To encourage small cultivators and entrepreneurs in the legacy market to enter the regulated market by reducing barriers to entry and facilitating innovation
- Customer Service To provide the ability for applicants to submit for Cannabis Licenses online
- Compliance To provide the ability for the State to rollout a new application process for Cannabis Licenses, in compliance with Act 164
- Financial To increase revenue for the State
- c. Assess how well the information architecture of the technology solution adheres to the principle of Information is an Asset
 - In alignment with the State's requirements, information assets will have an owner who is responsible for the protection and inventory of assets based on the sensitivity and value of information. If ownership has not been assigned, it will default to the administrators of the system.
- d. Assess if the technology solution will optimize process
 - Salesforce will be used for the management of the State's cannabis licensing and product registration processes. The system will consist of an Online Portal for users to register and login. Within the portal an application intake system will allow patients to complete necessary forms, upload documents and pay fees online. State staff will be able to process applications for licenses or renewals by quickly and easily reviewing all the submitted application details. State staff will also be able to report on information in real time to analyze essential data points regarding the licensing process. The solution will not only provide a modern interface for the public to interact with their government, it will also provide efficiencies and insights for CCB members and agency staff.
- e. Assess how well the technology solution supports resilience-driven security
 Salesforce and the Salesforce Lightning Platform is ISO 27001 certified and PCI-DSS compliant.
- **2. Sustainability:** Comment on the sustainability of the solution's technical architecture (i.e., is it sustainable?).

MTX's proposal states it applies standards-based and agile approach to implementing Salesforce projects that are reliable and scalable. The underlying framework, and design approach to be used by MTX, provides for the flexibility to customize and accommodate new requirements and features that may be needed by the State's assessment programs over time.



3. Compliance with the principles enumerated in the ADS Strategic Plan 2022 – 2026 (https://digitalservices.vermont.gov/sites/digitalservices/files/doc_library/ADS-StrategicPlan2022-2026.pdf):

The project complies with the following ADS strategic goals, enumerated in the ADS Strategic Plan 2022 – 2026:

- IT Modernization The ability for the State to rollout a new electronic application process for cannabis licenses and product registration/inventory processes, in compliance with Act 164
- Vermonter Experience Reducing barriers to entry and facilitating innovation to encourage small cultivators and entrepreneurs in the legacy market to enter the regulated market; the ability for applicants to submit for cannabis licenses online
- 4. Compliance with the Section 508 Amendment to the Rehabilitation Act of 1973, as amended in 1998: Comment on the solution's compliance with accessibility standards as outlined in this amendment. Reference: http://www.section508.gov/content/learn.
 - During an interview with MTX, the team confirmed that the Salesforce solution supports Section 508 compliance and that development and testing will be done to help ensure these requirements are met in Phase 1.
- **5. Disaster Recovery:** What is your assessment of the proposed solution's disaster recovery plan; do you think it is adequate? How might it be improved? Are there specific actions that you would recommend to improve the plan?
 - The disaster recovery plan will be provided through the State's agreement with Salesforce.
- **6. Data Retention:** Describe the relevant data retention needs and how they will be satisfied for or by the proposed solution.
 - Salesforce provides the ability to configure and manage the lifecycle of records from creation to disposition. MTX will configure the system in accordance with the State's record retention schedules and information management standards and best practices.
- **7. SLA:** What are the post-implementation services and service levels required by the State? Is the vendor proposed SLA adequate to meet these needs in your judgment?
 - The MTX contract amendment states that they will provide responses, updates, and resolution based on severity levels (i.e., critical, high, medium, and minor). The amendment also lists escalation procedures for critical severity issues and monitoring/alerting procedures for cloud services and related reporting/metrics.
 - It is BerryDunn's belief that the vendor's proposed SLAs will be adequate to meet the State's needs.



8. System Integration: Is the data export reporting capability of the proposed solution consumable by the State? What data is exchanged and what systems (State and non-State) will the solution integrate/interface with?

The Salesforce solution allows for data export reporting capability that should be consumable by the State. In its proposal MTX agreed to help ensure, through their development work, the State's data/reporting requirements will be met in regard to:

- Allowing data and documents to be compiled and exported to meet a public disclosure requests
- Allowing data captured to be exposed via internal API to share data with coexisting seed-to-sale tracking system
- Providing the ability to search and extract data, documents, and records and compile robust reports as required by all business units
- Providing the ability to sort and filter report data based on user defined sort/filter criteria
- Providing the ability to develop reports from any system data field
- Providing the ability to generate an Excel file and.csv file of data for reporting
- Export information or data in a usable (e.g., interoperable and accessible) format.



7.0 Assessment of Implementation Plan

1. The reality of the implementation timetable.

At the time of this Independent Review, Phase 1 development work is nearing completion. BerryDunn has no concerns regarding the Phase 1 implementation timetable. In regard to Phase 1A of the project, at the time of this Independent Review there is no definite implementation timetable because a vendor has not been awarded the related contract. BerryDunn does have a concern regarding the implementation timetable for Phase 1A of project (see Risk 1 in the Attachment 2 – Risk Register).

2. Readiness of impacted divisions/departments to participate in this solution/project (consider current culture, staff buy-in, organizational changes needed, and leadership readiness).

Based on interviews, it appears that State staff are ready to embrace the new platform and is supportive of the initiative to implement the new system. MTX plans to provide documentation and training to responsible entity support staff along with release notes. MTX's proposal provides a sufficient plan/approach for such.

3. Do the milestones and deliverables proposed by the vendor provide enough detail to hold the vendor accountable for meeting the business needs in these areas?

a. Project Management

In its proposal, MTX provides guiding principles for project management, processes for risk and issue management, approach for communicating with different levels of State leadership, key activities and deliverables by milestone along with estimated hours per resource. The Phase 1 project milestones and deliverables in the area of project management are sufficient to hold MTX accountable for meeting the State's needs.

The Phase 1A project milestones and deliverables in project management appear to be sufficient for meeting the State's needs but BerryDunn could not assess any final vendor approach to such, as no vendor has been awarded the related contract at the time of our Independent Review.

b. Training

In its proposal, MTX provides access to the Help and Training Portal, options for how training can be provided within the Premier Success Plan. MTX defines training to include internal staff as well as tools for external users to optimize the use of the system. The MTX contract also lists several requirements in regard to MTX providing training to state staff. However, solution training for State end users is not occurring until toward the end of Phase 1 of the project, which is after portions of the solution becoming operational. Untimely or inadequate training could lead to low productivity,



decrease in employee morale, and/or staff turnover (see Risk 2 in the Attachment 2 – Risk Register).

The Phase 1A project milestones and deliverables in the area of training appear to be sufficient for meeting the State's needs, but BerryDunn could not assess any final vendor approach to such, as no vendor has been awarded the related contract at the time of our Independent Review.

c. Testing

In its proposal, MTX provides details on the types of tests that will be conducted during UAT, the use of a Test Plan and test execution results, database documentation, requirements validation, load testing, end-to-end and integration testing, and SIT. The MTX contract also states that MTX will be responsible for generation and execution of test plans which address: unit testing, API testing, integration testing, system testing, and regression testing. The MTX contract also states that the solution will not be considered ready for release until all test plans have been fully executed and pass without detected defects. And furthermore, that in the event a product is released, and defects are detected, in addition to the defect remediation MTX shall produce a POAM to address the shortcomings in the test plan which will identify the root cause failure of the plan to detect the defect and provide a framework and path to address the issue moving forward.

The milestones and deliverables in the area of testing are sufficient to hold MTX accountable for meeting the State's needs.

The Phase 1A project milestones and deliverables in the area of testing appear to be sufficient for meeting the State's needs, but BerryDunn could not assess any final vendor approach to such, as no vendor has been awarded the related contract at the time of our Independent Review.

d. Design

In its proposal, MTX describes how it will work with the CCB to conduct the Discovery and Design phase of the Project. MTX will: conduct working sessions with the CCB team to map out requirements and add detail to the project plan; work with the CCB's system owners to understanding technical and connectivity options available and work together to identify the best approach; and work to define requirements via the use of user stories, as well as collaborate with stakeholders to begin planning the development process. The MTX contract also provides for a discovery period that appears to be sufficient in length and a list of items to be investigated/determine during the discovery period.

The milestones and deliverables in the area of design are sufficient to hold MTX accountable for meeting the State's needs.



The Phase 1A project milestones and deliverables in the area of design appear to be sufficient for meeting the State's needs but BerryDunn could not assess any final vendor approach to such, as no vendor has been awarded the related contract at the time of our Independent Review.

e. Implementation Planning

In coordination with the State, MTX is responsible for creating and executing a Production Release Plan. The plan includes, but not be limited to, the following components:

- Updated Configuration Information required satisfying the solutions' production configuration management requirements
- Updated Solution Architecture
- Updated Detailed Design, including detailed system, technical, and user documentation
- Deployment schedule.

MTX has worked with the State to mature its release management process using the Azure DevOps (ADO) tool, as well as Capado.

f. Implementation

As outlined in the contract with MTX, the State will accept the products into the production environment through application of the acceptance criteria in testing plans. Deliverables—such as ADO testing reports, validation of acceptance of scope, and release notes—are sufficient for holding MTX accountable for meeting the State's deployment/implementation requirements and needs.

4. Does the State have a resource lined up to be the project manager on the project? If so, does this person possess the skills and experience to be successful in this role in your judgment? Please explain.

The State Project Manager has been actively engaged in the project and based on our interactions with the State Project Manager during this Independent Review, BerryDunn has confidence that the individual has the skills and experience necessary for the role.



8.0 Cost Analysis and Model for Benefit Analysis

1. Analysis Description: Provide a narrative summary of the cost-benefit analysis conducted. Be sure to indicate how the costs were independently validated.

To conduct the cost-benefit analysis, BerryDunn used the current contract with MTX and the most recent version of the IT ABC form, both of which the State provided.

BerryDunn validated each cost through the following methods:

- The cost for MTX's implementation services for Phase 1 were verified in the executed contract amendment.
- The costs for the following items were verified in the most recent version of the IT ABC Form:
 - ADS EPMO Project Oversight, Project Management, and BA
 - ADS Security Staff, EA, and Other ADS Labor
 - Vendor implementation services for Phase 1A

A detailed breakdown of these costs can be found in Attachment 1 – Life Cycle Cost-Benefit Analysis.

2. Assumptions: List any assumptions made in your analysis.

BerryDunn used the following assumptions in our cost-benefit analysis:

- Implementation will be completed in fiscal year (FY) 2023
- Costs for licenses will begin in FY 2023
- Penetration testing will be conducted in FY 2023
- Professional services for maintenance and support are not needed for FY 2024 through FY 2026
- Vendor implementation services for Phase 1A will not exceed the estimated cost of \$500,000
- **3. Funding:** Provide the funding source(s). If multiple sources, indicate the percentage of each source for both acquisition costs and ongoing operational costs over the duration of the system/service life cycle.

State funds will be used for both acquisition and ongoing operational costs over the system life cycle.

4. Tangible Costs and Benefits: Provide a list and description of the tangible costs and benefits of this project. It is "tangible" if it has a direct impact on implementation or operating costs (an increase = a tangible cost, and a decrease = a tangible benefit). The cost of



software licenses is an example of a tangible cost. Projected annual operating cost savings is an example of a tangible benefit.

Tangible Costs

Professional Services:

- Vendor implementation services total \$674,064.25 for FY 2022
- Vendor implementation services, BerryDunn's Independent Review services, and penetration testing services total \$624,500 for FY 2023

Licenses:

- Salesforce \$1,100 per user for 17 users totaling \$18,700 for FY 2023 through FY 2026
- Customer Community Plus Login \$7.75 per user for 500 users totaling \$3,875 for FY 2023 through FY 2026
- Seed-to-Sale \$170,000 for FY 2024 through FY 2026

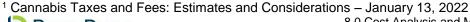
ADS Services:

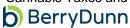
- ADS EPMO Project Oversight \$2,640 for FY 2022 and FY 2023
- ADS EPMO Project Manager \$33,792 for FY 2022 and FY 2023
- ADS EPMO BA \$27,456 for FY 2022 and FY 2023
- ADS EA \$8,800 for FY 2022 and FY 2023
- ADS Security \$4,400 for FY 2022 and FY 2023
- Other ADS Labor \$8,800 for FY 2022, \$44,000 FY 2023, and \$35,200 for FY 2024 through 2026

Tangible Benefits

Based on financial analysis conducted by the State's Joint Fiscal Office (JFO), the State is projecting approximately \$40.2 million dollars in taxable sales revenue for FY 2023.¹

5. Intangible Costs and Benefits: Provide a list and descriptions of the intangible costs and benefits. Its "intangible" if it has a positive or negative impact but is not cost related. Examples: Customer service is expected to improve (intangible benefit) or employee morale is expected to decline (intangible cost).





Based on documentation review and interviews with the State, BerryDunn identified the following intangible benefits:

- **Customer Service** The CCB solution will provide a public-facing portal so entities can submit applications for a cannabis license.
- **Compliance** As required in Act 164, the CCB will have a technical solution for operationalizing the cannabis licensing process.
- **6.** Costs vs. Benefits: Do the benefits of this project (consider both tangible and intangible) outweigh the costs in your opinion? Please elaborate on your response.

The anticipated benefits, specifically the increased revenue for the State, outweigh the costs for the CCB solution.

7. IT ABC Form Review: Review the IT ABC form (Business Case/Cost Analysis) created by the Business for this project. Is the information consistent with your Independent Review and analysis? If not, please describe. Is the life cycle that was used appropriate for the technology being proposed? If not, please explain.

At the time of this Independent Review, the IT ABC form reflects the known and estimated costs for the project, which were used in BerryDunn's financial analysis. However, as the State learns more about the actual costs for Phase 1A implementation services, we recommend that the project team update the IT ABC form to reflect the actual costs, including the projected tangible benefits related to increased revenue.



9.0 Analysis of Alternatives

- 1. Provide a brief analysis of alternative solutions that were deemed financially unfeasible.
- 2. Provide a brief analysis of alternative technical solutions that were deemed unsustainable.
- 3. Provide a brief analysis of alternative technical solutions where the costs for operations and maintenance were unfeasible.

The State explored leveraging Vermont's current medical marijuana system for the CCB, but after investigation, the State determined that the solution was not able to meet the technical and business needs due certain system limitations and difficulties the medical marijuana program has had with setting up and using the system.

On October 4, 2021, the CCB issued a RFI to gather input and obtain information and cost estimates in proceeding with proposals to develop and implement software solutions for web portal, public-facing database, reporting, document and case management, compliance, and track seed-to-sale for its Cannabis Adult-Use Program. The CCB received 13 responses to the RFI. The CCB then evaluated the submissions by respondents to explore how they would meet their needs and understand the cost associated with proposed solutions.

The CCB made the decision to leverage their existing Salesforce platform for these purposes, and to post an SOW RFP on December 15, 2022, for front- and back-end Salesforce development. As part of the procurement, a team of business and technical representatives from the State evaluated and scored various aspects of the vendors' proposals, with the total score comprising demonstrated performance: quality of proposal content (25%), cost (25%), prior experience with this type of work and timeline for completion of work to be performed (25%). Other criteria such as acceptance to the State's terms and conditions and mandatory bidding requirements were also evaluated.

Table 9.1 below provides a summary of the proposal scores.

Table 9.1: Summary of Proposal Scores

Criteria	Weight Factor	Cogent	MTX
Quality of Proposal Content	25%	93.75	175.00
Cost	25%	37.50	143.75
Prior Experience	25%	93.75	143.75
Timeline for Completion of Work to be Performed	25%	131.25	143.75
Total Weighted Score		356.25	606.25



Criteria	Weight Factor	Cogent	MTX
Acceptance of State Terms and Conditions	Pass/Fail	Pass	Pass
Adherence to Mandatory Bidding Requirements	Pass/Fail	Pass	Pass
Security Assessment	Pass/Fail	Fail	Pass

Based on the weighted scores, the State's evaluation team deemed MTX the favorable of the two proposals for Phase 1 of the project.

BerryDunn believes the State took the appropriate steps for understanding financially feasible and sustainable options for the CCB.



10.0 Impact on Analysis of Net Operating Costs

1. Insert a table to illustrate the Net Operating Cost Impact.

Table 10.1, on the following page, illustrates the impact on net operating costs over a five-year life cycle.



Table 10.1: Life Cycle Costs by Year

Impact on Operating Costs	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Five-Year Totals
Professional Services (Non-Software Costs)						
Current Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Projected Costs	\$674,064.25	\$624,500.00	\$0.00	\$0.00	\$0.00	\$1,298,564.25
Maintenance, Support, and Licenses Costs						
Current Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Projected Costs	\$0.00	\$86,025.75	\$192,575.00	\$192,575.00	\$192,575.00	\$663,750.75
Other Costs (State Labor)						
Current Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Projected Costs	\$85,888.00	\$213,632.00	\$35,200.00	\$35,200.00	\$35,200.00	\$405,120.00
Baseline Annual Current Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Baseline Annual Projected Costs	\$759,952.25	\$924,157.75	\$227,775.00	\$227,775.00	\$227,775.00	\$2,367,435.00
Cumulative Current Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cumulative Projected Costs	\$759,952.25	\$1,684,110.00	\$1,911,885.00	\$2,139,660.00	\$2,367,435.00	\$2,367,435.00
Net Impact on Professional Services	(\$674,064.25)	(\$624,500.00)	\$0.00	\$0.00	\$0.00	(\$1,298,564.25)
Net Impact on Maintenance, Support, and Licenses Costs	(\$85,888.00)	(\$299,657.75)	(\$227,775.00)	(\$227,775.00)	(\$227,775.00)	(\$1,068,870.75)
Net Impact on Operating Costs	(\$759,952.25)	(\$924,157.75)	(\$227,775.00)	(\$227,775.00)	(\$227,775.00)	(\$2,367,435.00)



2. Provide a narrative summary of the analysis conducted and include a list of any assumptions.

BerryDunn conducted an impact analysis on net operating costs using the costs validated and verified in the acquisition cost assessment and cost-benefit analysis.

The following calculations were used in performing the analysis:

- The projected costs for Professional Services FY 2022 includes:
 - \$674,064.25 for MTX's services, including the following milestone payments:
 - Completion of discovery and final project plan: \$124,753.75
 - Start of development Minimal Viable Product (MVP): \$49,901.50
 - Completion of development MVP: \$74,852.25
 - Completion of testing MVP: \$74,852.25
 - Development, testing, production deployment Release 2: \$137,352.25
 - Development, testing, production deployment Release 3: \$137,352.25
 - Development, testing, production deployment Release 4: \$75,000
- The projected costs for Other Costs FY 2022 includes:
 - \$2,640 for ADS EPMO Project Oversight:
 - \$33,792 for ADS EPMO Project Manager
 - \$27,456 for ADS EPMO BA
 - \$8,800 for ADS EA
 - \$4,400 for ADS Security
 - \$8,800 for Other ADS Labor
- The projected costs for Professional Services FY 2023 includes:
 - \$75,000 for MTX's services including the following milestone payments:
 - Development, testing, production deployment Release 5: \$75,000
 - \$500,000 for vendor implementation services
 - \$25,000 for penetration testing services
 - \$24,500 for Independent Review services



- The projected costs for Maintenance, Support, and Licenses FY 2023 includes:
 - \$22,575 for licenses
 - \$63,450.75 for MTX maintenance and support services
- The projected costs for Other Costs FY 2023 includes:
 - \$2,640 for ADS EPMO Project Oversight:
 - o \$33,792 for ADS EPMO Project Manager
 - \$120,000 for ADS EPMO BA
 - \$8.800 for ADS EA
 - \$4,400 for ADS Security
 - \$44,000 for Other ADS Labor
- The projected costs for Maintenance, Support, and Licenses FY 2024, 2025, and 2026 includes:
 - \$192,575 for licenses
 - \$35,200 for Other ADS Labor
- 3. Explain any net operating increases that will be covered by federal funding. Will this funding cover the entire life cycle? If not, please provide the breakouts by year.

All net operating increases will be covered by State funds.

4. What is the break-even point for this IT activity (considering implementation and ongoing operating costs)?

Since this is a solution for a new program in the State, Figure 10.1 shows that there is no break-even point for this IT activity.



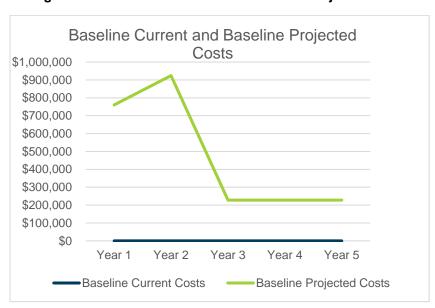


Figure 10.1: Baseline Current and Baseline Projected Costs



11.0 Security Assessment

1. Will the new system have its own information security controls, rely on the State's controls, or incorporate both?

The system will use the Salesforce security controls and will be configured by MTX and the implementation vendor for Phase 1A.

2. What method does the system use for data classification?

The State's requires the following data types be securely stored, accessed, or transmitted:

- Publicly Available Information
- Personally Identifiable Information (PII)
- Payment Card Information.
- 3. What is the vendor's breach notification and incident response process?

MTX and the State will use the Salesforce Incident Management Process for the identification and notification process for security breaches. The process includes investigation, communication, and resolution activities.

4. Does the vendor have a risk management program that specifically addresses information security risks?

As stated above in Section 6, according to MTX's proposal, Salesforce and the Salesforce Lightning Platform is ISO 27001 certified and PCI-DSS compliant. SOC1, SOC2 and SOC3 audits are performed by third-party auditor annually at a minimum. MTX's proposal also states that a comprehensive security audit was performed in 2020 and MTX's solution was found to have met all security and privacy standards as required by the state of Vermont.

Furthermore, MTX provided in its proposed details regarding Salesforce's FedRAMP Authority to Operate (ATO) at the Moderate Impact level for the Salesforce Government Cloud. Salesforce also maintains a Provisional Authorization for the Salesforce Government Cloud at Information Impact Level 4 (IL4) by the Defense Information Systems Agency (DISA).

5. What encryption controls/technologies does the system use to protect data at rest and in transit?

MTX uses its multi-protocol label switching (MPLS) network across all data centers to transmit backup cloning information. Backups never physically leave MTX's secure data center facilities unless they are to be retired and destroyed through a secure destruction process.

6. What format does the vendor use for continuous vulnerability management, what process is used for remediation, and how do they report vulnerabilities to customers?



To maintain compliance with FedRAMP, Salesforce conducts continuous monitoring. Continuous monitoring includes ongoing technical vulnerability detection and remediation, remediation of open compliance related findings, and at least annual independent assessment of a selection of security controls by a third-party assessment organization (3PAO). Upon request, the CCB may access the Salesforce Government Cloud FedRAMP package on the OMB MAX website, which includes Plan of Action & Milestones (POA&M) and contains vulnerability remediation information. Additionally, Salesforce the State can perform penetration testing after completing Salesforce's Security Assessment Agreement (SAA). However, Salesforce does not provide its customers the ability to conduct scans behind our firewall.



12.0 Risk Assessment and Risk Register

This section describes the process for development of a Risk Register; including the following activities:

- A. Ask the Independent Review participants to provide a list of the risks that they have identified and their strategies for addressing those risks.
- B. Independently validate the risk information provided by the State and/or vendor and assess their risk strategies.
- C. Identify any additional risks.
- D. Ask the Business to respond to your identified risks, as well as provide strategies to address them.
- E. Assess the risks strategies provided by the Business for the additional risks you identified.
- F. Document all this information in a Risk Register and label it Attachment 2. The Risk Register should include the following:
 - Source of Risk: Project, Proposed Solution, Vendor, or Other
 - Risk Description: Provide a description of what the risk entails
 - Risk Ratings to Indicate: Likelihood and probability of risk occurrence; impact should risk occur; and overall risk rating (high, medium, or low priority)
 - State's Planned Risk Strategy: Avoid, Mitigate, Transfer, or Accept
 - State's Planned Risk Response: Describe what the State plans to do (if anything) to address the risk
 - **Timing of Risk Response:** Describe the planned timing for carrying out the risk response (e.g., prior to the start of the project, during the Planning Phase, prior to implementation, etc.)
 - Reviewer's Assessment of State's Planned Response: Indicate if the planned response is adequate/appropriate in your judgment, and if not, what would you recommend?

Additional Comments on Risks:

The risks identified during this Independent Review can be found in Attachment 2 – Risk Register.



Attachment 1 – Life Cycle Cost-Benefit Analysis

Table A.1, on the following page, reflects a five-year life cycle cost analysis for the CCB solution.



Table A.1: Life Cycle Analysis

Description	Initial Impl	ementation	Maintenance	Maintenance	Maintenance	Maintenance	Total
Description	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	Total
Implementation Services	\$674,064.25	\$575,000.00					\$1,249,064.25
License Fees	\$0.00	\$0.00	\$22,575.00	\$192,575.00	\$192,575.00	\$192,575.00	\$600,300.00
Other Professional Services							
Support and Maintenance	\$0.00	\$0.00	\$63,450.75	\$0.00	\$0.00	\$0.00	\$63,450.75
Security Penetration Testing	\$0.00	\$25,000.00					\$25,000.00
State Labor Costs							
ADS EPMO Project Oversight	\$2,640.00	\$2,640.00					\$5,280.00
ADS EPMO Project Manager	\$33,792.00	\$33,792.00					\$67,584.00
ADS EPMO BA	\$27,456.00	\$120,000.00					\$147,456.00
ADS EA	\$8,800.00	\$8,800.00					\$17,600.00
ADS Security Staff	\$4,400.00	\$4,400.00					\$8,800.00
Other ADS IT Labor	\$8,800.00	\$8,800.00	\$35,200.00	\$35,200.00	\$35,200.00	\$35,200.00	\$158,400.00
Totals							
Implementation Costs + State Labor Costs	\$759,952.25	\$778,432.00					\$1,538,384.25
BerryDunn IR	\$0.00	\$24,500.00					\$24,500.00



Description	Initial Impl	ementation	Maintenance	Maintenance	Maintenance	Maintenance	Total
Description	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	Total
Total Implementation Costs	\$759,952.25	\$802,932.00					\$1,562,884.25
Total Lifecycle Operating Costs			\$121,225.75	\$227,775.00	\$227,775.00	\$227,775.00	\$804,550.75
Total Lifecycle Costs to be paid with State funds	\$759,952.25	\$802,932.00	\$121,225.75	\$227,775.00	\$227,775.00	\$227,775.00	\$2,367,435.00
Total Lifecycle Costs to be paid with Federal funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



Attachment 2 – Risk Register

Data Element	Description
Risk#	Sequential number assigned to a risk to be used when referring to the risk.
Risk Probability, Impact, Overall Rating	Two-value indicator of the potential impact of the risk if it were to occur, along with an indicator of the probability of the risk occurring. Assigned values are High, Medium, or Low.
Source of Risk	Source of the risk, which might be interviews with the State, project documentation review, or vendor interview.
Risk Description	Brief narrative description of the identified risk.
State's Planned Risk Strategy	Strategy the State plans to take to address the risk. Assigned values are Avoid, Mitigate, Transfer, or Accept.
State's Planned Risk Response	Risk response the State plans to adopt based on discussions between State staff and BerryDunn reviewers.
Timing of Risk Response	Planned timing for carrying out the risk response, which might be prior to contract execution or subsequent to contract execution.
Reviewer's Assessment of State's Planned Response	Indication of whether BerryDunn reviewers feel the planned response is adequate and appropriate, and recommendations if not.

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
1	Medium	High	High

Source of Risk: Project Management and Documents

Risk Description: The new solution might not be fully operational by October 2022 due to delays in procuring IT services for the next phase of the project.

The State has posted the SOW RFP for Phase 1A of the project (i.e., implementing an IT Solution for Seed-to-Sale/Inventory Tracking and Product Registration) twice—and extended the response date for the second instance of the posting—due to lack of response to the SOW RFP, and the IT solution must be operational when the cannabis retail market opens in October 2022 to avoid manual processing.

State's Planned Risk Strategy: Mitigate

State's Planned Risk Response: The CCB is deploying a manual process the week of 7/25 or 8/1 to receive and process product registrations and associated payments. However, CCB is currently unable to receive and process documentation regarding inventory tracking. With the recent hire of a Compliance Director, CCB has undertaken the task of developing a stop gap to process inventory while the project stands up the long-term vision.

Timing of Risk Response: Prior to Contract Execution

Reviewer's Assessment of State's Planned Response: The State's planned risk response is acceptable.



Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
2	High	Low	Medium

Source of Risk: Project Management and Project Leadership

Risk Description: Delays in end-user training could negatively impact CCB operations.

Solution training for State end users is not occurring until toward the end of Phase 1 of the project, which is subsequent to portions of the solution becoming operational. Given the delay in procuring implementation services for Phase 1A, the timeline for end-user training will could also be compressed or delayed. Untimely or inadequate training could lead to low productivity, decrease in employee morale, and/or staff turnover.

State's Planned Risk Strategy: Mitigate

State's Planned Risk Response: The State has leveraged (recorded) product demos of new features, training on any complex new features (Due Diligence) prior to deployment/or after, in real time and UAT to serve as a means accommodate any lack of confidence/knowledge of (new) functionality in the product. All of which are made available and easy for the team to reference. The team also deploys a Bi-Weekly Sync (twice a week) to triage and review any open questions regarding the application. This approach will likely occur for Phase 1A.

Timing of Risk Response: Prior to Contract Execution

Reviewer's Assessment of State's Planned Response: The State's planned risk response is acceptable.

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
3	Medium	Medium	Medium

Source of Risk: Project Management and Project Leadership

Risk Description: The implementation timeline could result in limitations on and/or challenges for the State's business resources.

There is a staffing shortage in the CCB and the condensed project schedule, with multiple work efforts occurring in parallel (due to various legislatively mandated deadlines and later-than-expected project budget approval), present risk of staff burnout and/or turnover.

State's Planned Risk Strategy: Accept

State's Planned Risk Response: CCB acknowledges the risk.

Timing of Risk Response: N/A

Reviewer's Assessment of State's Planned Response: BerryDunn understands that the implementation timeline is largely being dictated in accordance with meeting related legislatively set deadlines and that nationally organizations are having difficulties hiring and retaining staff. BerryDunn recommends that:

• The State Project Manager monitor this risk so that it does not become an issue



Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
3	Medium	Medium	Medium

• The CCB consider options for making key business resources available to the project, such as backfilling positions or hiring temporary staff to handle daily administrative responsibilities.

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
4	Medium	Low	Medium

Source of Risk: Project Management and Project Leadership

Risk Description: Unidentified business and technical needs could result in changes to the project scope, schedule, and budget.

The CCB and cannabis program/licensing—and related processes—are new to the State, which inherently creates unknowns in regard to solution/operational needs and potential for further statutory amendments related to the cannabis program (as were recently ratified during Phase 1 solution implementation).

State's Planned Risk Strategy: Accept

State's Planned Risk Response: The project has re-baselined the budget and the team has allocated a contingency fund to help assist with any unforeseen changes in legislation/new functionality as development occurs.

Further, the requirements procured upon and approach to the definition follow an agile methodology that allows the business to procure upon key business goals and objectives then subsequently partner with a vendor that elicits and discovers business requirements and process that support a functional need. The project has also deployed a State business analyst to help prep for upcoming discovery sessions to ensure they are as productive as possible. This is a standard agile approach that aligns to the nature of the work being completed.

Timing of Risk Response: Prior to Contract Execution

Reviewer's Assessment of State's Planned Response: With the deployment of a State business analyst, BerryDunn believes the State's planned risk response is acceptable.

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
4	Medium	Low	Medium

Source of Risk: IT

Risk Description: The lack of dedicated State IT resources for post-implementation support could result in the reliance on vendor resources and actual costs exceeding projected costs for ongoing maintenance and operations.

The State plans to hire more resources internally to eventually fully provide support/maintenance for the solution, but at this time, support and maintenance seems to be currently mixed between MTX, the future Phase 1A vendor, and the State. Without hiring such staff, the State will be reliant upon vendors to provide such support.



Risk#:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
4	Medium	Low	Medium

State's Planned Risk Strategy: Mitigate

State's Planned Risk Response: The State has deployed an IT Manager and Delegate Admin to support CCB in their operational needs, post project completion. What functionality cannot be supported by internal State resources, can be covered by support services purchased by CCB, up to 250 dev hours, for year 1 M&O. The State will continue to build its knowledge base around Salesforce to support CCB and what cannot be completed by internal resources, will be supported by the implementation vendor up to the terms and conditions outlined in the agreement.

Additionally, the State is pursuing a managed services contract for assistance with the Salesforce Platform in the future.

Timing of Risk Response: Prior to Contract Execution

Reviewer's Assessment of State's Planned Response: The State's planned risk response is acceptable.

