Independent Review

Voter Accessibility Project

For the
State of Vermont
Secretary of the State

Submitted to the
State of Vermont, Office of the CIO
December 19, 2017

FINAL

Prepared by:

Charlie Leadbetter, PMP, Principal
Doug Rowe, Project Manager
Berry, Dunn, McNeil & Parker, LLC (BerryDunn)
100 Middle Street, PO Box 1100
Portland, Maine 04104-1100
207-541-2249, cleadbetter@berrydunn.com
207-541-2330, drowe@berrydunn.com

TABLE OF CONTENTS

1.0 Executive Summary

This section includes an introduction with a brief overview of the technology project and selected vendor(s) as well as any significant findings or conclusions. Significant findings or conclusions are supported by data provided later in the report.

1.1 Introduction

This Independent Review (IR) was undertaken to evaluate the viability of, and provide a recommendation to proceed or not proceed with respect to a Voter Accessibility Project for the State of Vermont's (State's) Secretary of State (SOS). For all Information Technology (IT) activities over $1,000,000, Vermont statute (or at the discretion of the Chief Information Officer [CIO]) requires an IR by the Office of the CIO before the project can begin. This IR began on November 8, 2017, and is projected to conclude by December 19, 2017.

The subject of review is the planned SOS Voter Accessibility Project. The State issued a request for proposals (RFP) for a Voter Accessibility solution. In scope are the technology solution, implementation services, and ongoing support of the Voter Accessibility solution. The RFP included specific requirements that the voter accessibility solution must meet:

1. The solution must provide individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, the ability to vote independently and privately either at a polling place or at home or the town clerk's office during the early voting period.
2. There must be at least one accessible voting device available at approximately 275 polling locations.
3. The solution must produce a printed paper ballot reflecting the selections made by the voter.
4. The solution must allow for absentee voting with text-to-speech support.
5. Sufficient and timely training must be made available to poll workers and Election staff.
6. The solution must allow for Election staff the ability to add/delete/edit/customize all ballots by district and/or polling location.
7. The solution must provide an accessible sample ballot prior to each election.
8. The solution must allow voters to practice and preview the system at least 45 days prior to an election.
9. The solution must provide annual maintenance on all hardware and software including repair, replacement, and upgrading where necessary.
10. Note: The solution may include a service agreement whereby hardware is delivered to the towns on an as-needed basis in advance of elections; such hardware is not purchased, but rather used on an ongoing, intermittent basis.

Additionally, the RFP included specific Business Values that the voter accessibility solution should seek to achieve:

1. Cost Savings: Over the life cycle of the new solution, the total costs will be less than the current solution.
2. Customer Service Improvement: The new solution will provide improved customer service in that the voting experience for voters with a disability will be significantly improved.
3. Risk Reduction: A new solution will reduce the risk of a potential federal violation for not providing an accessible voting platform at every polling location.
4. Compliance: The new solution meets a previously unmet federal compliance requirement that voters who are blind or visually impaired be able to vote independently and privately during the early voting period.

This independent review was written as a point-in-time report as of December 1, 2017.

1.2 Cost Summary

IT Activity Life Cycle:	5 years
Total Life Cycle Costs:	$1,344,118
Total Implementation Costs:	$715,868
New Annual Operating Costs:	$3,300 in Year 1 $141,300 in Year 2 $177,150 in Year 3 $141,300 in Year 4 $165,200 in Year 5
Current Annual Operating Costs:	$227,299
Difference Between Current and New Operating Costs:	$-223,999 in Year 1 $-85,999 in Year 2 $-50,149 in Year 3 $-85,999 In Year 4 $-62,099 In Year 5
Funding Source(s) and Percentage Breakdown if Multiple Sources:	Help America Vote Act (HAVA) grant funding
Implementation: Federal Funds	$715,868
Implementation: State Special Funds	$0.00
Operations: State General Fund	$0.00
Operations: State Special Funds	$0.00

Operations: Federal Funds	$628,250

1.3 Disposition of IR Deliverables

Deliverable	Highlights From the Review *Include explanations of any significant concerns*
Acquisition Cost Assessment	Acquisition of the new solution will cost $715,868.
Technology Architecture Review	Because the two proposed systems are developed on commonly used platforms and one of them (OmniBallot Online) is a hosted cloud-based solution implemented on the Amazon Web Services cloud platform, BerryDunn has found no major issues with the proposed systems' architecture.
Implementation Plan Assessment	Based on the draft contract reviewed by BerryDunn during this independent review process, the proposed implementation plan (including a detailed project schedule) must be more fully elaborated. The implementation planning should occur prior to contract execution; the detailed schedule should be developed immediately upon contract execution.
Cost Analysis and Model for Benefit Analysis	In our opinion, the benefits of this product outweigh the costs. Especially compared to the current voter accessibility phone system, which is underutilized and not user friendly, the Democracy Live system should be a better fit for the SOS. Although more expensive, the intangible benefits showcase the additional features, access, utilization rates, and ease of use that should occur.
Impact Analysis on Net Operating Costs	The net change to operating costs is an increase.

1.4 Identified High Impact and/or High Likelihood of Occurrence Risks

Risk Description	State's Planned Risk Response	Reviewer's Assessment of Planned Response
There is a risk of project delay, resulting in voter accessibility solution tablets being unavailable for use during the August 14, 2018 (and possibly November 6, 2018) voting period(s).	In order to mitigate the risk of project delay, the State plans to require the vendor to develop a project management plan based on Project Management Institute (PMI) standards in order to ensure the full voter accessibility solution tablets are available for use during the August 14, 2018	The State's response is based on industry best practices. Development and management of a project management plan and schedule, using the guidelines provided by PMI, should help to reduce or eliminate the likelihood of this risk occurring. Should the risk

Risk Description	State's Planned Risk Response	Reviewer's Assessment of Planned Response
	(and possibly November 6, 2018) voting period(s). However, if the project management plan fails due to unforeseen circumstances, the State has provided the mitigation option of contracting with the current telephone-based provider to use their balloting process during these elections. Or if this is not a possibility, the State will knowingly be non-compliant with federal statute, resulting in the need to develop a corrective action plan to provide this capability for future elections.	occur, the State's mitigation strategy might result in increased support required of local clerks on election day Because the current telephone-based system has inherent flaws (i.e., the voter does not receive a paper copy of their ballot), and experiences a current low level of utilization, leveraging local clerks is also the current model for assisting impaired voters. Because of this, the State's mitigation strategy seems reasonable.
There is a risk that the voter accessibility solution tablets will stop working at any particular polling station, resulting in delayed voting for impaired persons.	1. Mitigate: To mitigate the risk of tablet failure on Election Day, the State plans to utilize vendor resources. Democracy Live has verbally stated they plan to have staff stationed throughout the State in order to help with system malfunctions should they occur. However, this should be noted within the contract before execution. 2. Accept: To accept the risk of tablet failure on Election Day, the State plans to acquire a surplus of tablet inventory in order to account for potential system malfunction. Replacement systems will be strategically positioned throughout the State so that they can be easily distributed if need be.	Of the two mitigation options described by the State, the SOS should select the one that results in the most significant reduction (or elimination) of any downtime at any given polling station throughout the State. Both options seem reasonable, though costs may differ. Deciding on the specific approach to addressing this risk must be done prior to finalizing the contract with the vendor, since acquisition of additional devices, or engagement of the vendor's staff (or subcontracted staff) may be required to fully mitigate this risk.
There is a risk of varying technical aptitude among town personnel who will be using the voter accessibility system.	Risk responses for both strategies (mitigate risk or transfer risk) include providing training from the Elections Division and the vendor,	The State's mitigation strategy regarding the ongoing training of staff in the local offices seems reasonable and is aligned with a strategy that has worked for

Risk Description	State's Planned Risk Response	Reviewer's Assessment of Planned Response
	Democracy Live. The Elections Division currently provides ongoing, targeted training to ensure that all town clerks have similar technical aptitude surrounding elections-related technology. Therefore, the level of support that the Elections Division currently provides to the clerk's office for all election-related functions will also be applied to this project. Additionally, Democracy Live has instructional materials, including video guides, which can be leveraged as training resources for town clerks throughout the State. However, if tablets are purchased, and the risk strategy is to mitigate, the response to tablet version control in terms of town clerk technical aptitude is different than if tablets are leased, and the risk strategy is to transfer: 1. Mitigate Risk (Response for Purchasing of Tablets): To mitigate risk surrounding the need for town clerks to update tablet versions, the State would use thumb drives, patching, or alternative methods to ensure tablets are at the same version level for every election, without needing to leverage the town clerks' technical capabilities. 2. Transfer Risk (Response for Leasing of Tablets): To transfer risk surrounding the need for town clerks to update tablet versions, Democracy Live would be	other local technology deployments. In terms of configuring the tablets for use for each election, Risk Response #2 (Transfer) results in eliminating this risk, while Risk Response #1 (Mitigate), combined with the training strategy, should result in minimizing the risk.

Risk Description	State's Planned Risk Response	Reviewer's Assessment of Planned Response
	responsible for the reconfiguration of the leased tablets before every election necessary, therefore excluding the need to leverage the town clerks' technical capabilities.	
There is a risk of inconsistent training due to high levels of turnover at the town clerk offices.	The Elections Division currently provides ongoing, targeted training to ensure that all town clerks have a standardized understanding surrounding elections related technology. These current methods will be applied to the voter accessibility system training strategy to help ensure every clerk receives the same level of training regardless of their year of hire. Additionally, in order to ensure consistent training throughout the five-year contract period, Democracy Live has instructional materials, including video guides, which can be leveraged as resources for town clerks throughout the State.	The State's mitigation strategy regarding the ongoing training of staff in the local offices seems reasonable and is aligned with a strategy that has worked for other local technology deployments.

1.5 Other Key Issues

This section includes a recap any key issues or concerns identified in the body of the report.

The contract between the State and the preferred vendor is only in draft form and is awaiting finalization. Therefore, this report is a point-in-time document that reflects current key issues and concerns. The State may mitigate risks upon contract finalization as a reflection of this report.

All key issues and concerns are identified throughout the body of this report under relevant subheadings.

1.6 Recommendation

This section provides the independent review recommendation on whether to proceed with this technology project and vendor(s).

Although the proposed voter accessibility system has risks and concerns associated, BerryDunn does not have significant reason to oppose that the project proceed. Therefore, it is recommended that the SOS project team continue to work to on risk mitigation and contract execution in order to encourage project success.

Two of the seven risks outlined in Attachment 2 have a low likelihood of occurrence yet high impact, and both have risk mitigation timelines prior to contract execution. Additionally, two of the seven risks outlined in Attachment 2 have a high likelihood of occurrence yet medium impact, and have risk mitigation timelines of prior and subsequent to contract execution.

The risks that can be addressed prior to contract execution should be a priority for the SOS.

1.7 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 me by the State.

12/21/2017

Independent Reviewer Signature **Date**

1.8 Report Acceptance

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

e-Signed by John Quinn
on 2018-01-02 19:10:09 GMT

State of Vermont Chief Information Officer **Date**

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 45, §2222(g):

The Secretary of Administration shall obtain independent expert review of any recommendation for any information technology initiated after July 1, 1996, as information technology activity is defined by subdivision (a)(10), when its total cost is $1,000,000 or greater or when required by the State Chief Information Officer.

The IR Report includes:

- An acquisition cost assessment
- A technology architecture review
- An implementation plan assessment
- A cost analysis and model for benefit analysis
- An impact analysis on net operating costs for the SOS carrying out the activity
- An overall risk assessment of the proposed solution

This IR was developed using this schedule:

- Week of November 8, 2017: Project initiation and meeting for scheduling a discovery request
- Week of November 20, 2017: On-site interviews and interview with the vendor
- Week of November 27, 2017: Draft IR Report and Risk Register development
- Week of December 4, 2017: Risk identification and mitigation strategy review with Oversight Project Manager (OPM); continuation of draft IR Report and Risk Register development
- Week of December 11, 2017: Submit initial draft IR Report to OPM; make initial updates to IR Report and submit updated draft IR Report to OPM
- Week of December 18, 2017: Present IR to CIO; complete any follow-up work and updates to the IR Report; obtain CIO sign-off via the OPM on the IR Report

2.2 Out-of-Scope

If applicable, this section will describe any limits of this review and any area of the project or proposal that was not reviewed.

This IR Report does not include procurement negotiation advisory services. No draft contract was reviewed.

3.0 Sources of Information

3.1 Independent Review Participants

This section provides a list of individuals who participated in this Independent Review.

Name	Employer and Title	Participation Topic(s)
Lori Bjornlund	SOS Elections Administrator and Project Manager	Project Information Cost Analysis Technology Architecture Review Implementation Plan Review
Serena Kemp	ADS Oversight Project Manager	Initial Risk Assessment
Will Senning	SOS Director of Elections	Project Information Implementation Plan Review
Jon Welch	SOS IT Director	Technology Architecture Review Implementation Plan Review
Marlene Betit	SOS Director of Administrative Services	Cost Analysis
Jim Condos	SOS Project Sponsor (Current Secretary of State for Vermont)	Project Information
Keith MacMartin	ADS Enterprise Architect	Technology Architecture Review
Tim Manion	Democracy Live	Vendor Interview
Felicia Erlich	Democracy Live	Vendor Interview

3.2 Independent Review Documentation

The chart below includes a list of the documentation utilized to compile this independent review.

Document Name	Description	Source
RFP – Voter Accessibility	Sealed Bid Information Technology Request For Proposal for a Voter Accessibility Project For Secretary of State	SOS/Serena Kemp
SOS Voter Accessibility Serena Kemp mb edits	Cost Analysis Information	SOS/Serena Kemp
Stakeholder Contact Sheet	Stakeholder contact list for scheduling interviews	SOS/Serena Kemp

Document Name	Description	Source
Vermont Redline Democracy Live (Voter Accessibility Contract) redline final4	Draft contract between the State of Vermont and the proposing vendor	SOS/Serena Kemp
Voter Accessibility_State of Vermont RFP_Democracy Live Response_Searchable	Vendor (Democracy Live) Response to Secretary of State Request For Proposal For a Voter Accessibility Project	SOS/Serena Kemp
IT_ABC_Form (Voter Accessibility – VT SOS)	IT Activity Business Case and Cost Analysis	SOS/Serena Kemp
Combined Score Voter Accessibility – Scoring Form	Scoring sheets or bid tabulations for all proposals received	SOS/Serena Kemp (Scoring responses were consolidated into one document by Doug Rowe of BerryDunn)
IT Reporting Form	Form used to outline IT activities. This document represents the “statement of truth” for all costs associated with the Democracy Live vendor	SOS/Serena Kemp
Request For Information (RFI) Responses	RFI responses for the following vendors were provided: • Clear Ballot • IVS • LHS Imagecast Evolution • LHS Imagecast X • Scytl	SOS/Serena Kemp

4.0 Project Information

4.1 Historical Background

This section includes relevant background that has resulted in this project.

The current accessible voting system is a vote-by-phone system that allows a voter the ability to vote independently and privately. Each precinct must have a phone line and large-button phone where voters call the telephone-voting servers to cast their ballot. The servers programmed to know the phone number, poll worker ID and ballot access ID for each precinct. The system then presents the ballot to the voter with an audio recording of the voting instructions and ballot. The voter uses the supplied phone to cast their vote in the system. Once completed, the ballot prints to the vendor servers, the vendor then faxes the ballot to the State elections division fax line.

4.2 Project Goal

This section includes an explanation regarding why the project is being undertaken.

As stated in the RFP issued June 16, 2017, the project is being undertaken to meet the State's legal obligation to provide an accessible voting system for individuals with disabilities, including the blind and visually impaired, such that they may vote independently and privately at either a polling location or remotely during the early voting period. The system should provide a simple, easy-to-use, and error-averse voting experience. The system must produce a printed, paper version of the voter's voted ballot, marked in accordance with their selections. The printed ballot ideally would be capable of being read by the State's Accuvote OS tabulators and, if not, the printed ballot should be able to be read by standard scanning technology that is being employed by many emerging precinct voting machines.

Additionally, the proposed solution for this project should enable voting via absentee with text-to-speech support technology, enabling individuals who are disabled, including the blind and visually impaired, the ability to vote from their domicile, independently and with privacy and to return the printed ballot by mail or otherwise to their town clerk for processing.

Finally, the RFP outlines two key project objectives:

- Acquisition of a software solution meeting the requirements of the RFP
- Acquisition of hardware to support the solution

4.3 Project Scope

This section describes the project scope the major deliverables.

The scope of the project is included in the RFP issued June 16, 2017. The RFP describes the need and solution sought, and includes a list of both functional and nonfunctional requirements.

Requirements comprise the most definitive list of scope available. As stated in Section 2.0 of the RFP, Scope of Work, the following business needs were outlined:

- The solution must provide individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, the ability to vote independently and privately either at a polling place or at home or the town clerk's office during the early voting period.
- There must be at least one accessible voting device available at approximately 275 polling locations.
- The solution must produce a printed paper ballot reflecting the selections made by the voter.
- The solution must allow for absentee voting with text-to-speech support.
- Sufficient and timely training must be made available to poll workers and Elections staff.
- The solution must allow for Elections staff the ability to add/delete/edit/customize all ballots by district and/or polling location.
- The solution must provide an accessible sample ballot prior to each election.
- The solution must allow voters to practice and preview the system at least 45 days prior to an election.
- The solution must provide annual maintenance on all hardware and software including repair, replacement, and upgrading where necessary.
- Note: The solution may include a service agreement whereby hardware is delivered to the towns on an as needed basis in advance of elections; such that hardware is not purchased, but rather used on an ongoing, intermittent basis.

Additionally, the scope of work includes procurement of the following:

- A Technology Solution that addresses the business need(s)
- Professional Services for Project Management to manage the implementation of the technology solution
- Professional Services to perform Technical Work in support of the implementation
- Professional Services for Maintenance and Support of the implemented technology

4.3.1 Major Deliverables

Major deliverables required throughout the project are included in the RFP issued June 16, 2017. Major deliverables are included in the following table:

Deliverable	Description	Update Frequency
Project Charter	The Project Charter provides basic information about the project. It includes a: Scope Statement (what is in and out of scope); list of Project Deliverables; high level Project Timeline; Key Roles and Responsibilities; and	Once unless there are changes

Deliverable	Description	Update Frequency
	known Risks, Assumptions and/or Constraints. Signoff by the State is required.	
Project Management Plan	The Project Management Plan will dictate specifics on how the Contractor project manager will administer the project and will include the following documentation: 1. Change Management Plan (will dictate how changes will be handled including any service level terms on over/under estimates) 2. Communication Management Plan (will dictate what will be communicated, to whom, and how often) 3. Requirements Management Plan (will dictate the approach that the requirements will be gathered, approved, and maintained) 4. Human Resources Management Plan (will dictate what resources will be assigned to the project, for how long, under what allocation, who they report to, and how to handle changes to the resource plan) 5. Procurement Management Plan (will dictate how the vendor(s) will interact with the project and expectations regarding vendor relations with State resources) 6. Quality Management Plan (will dictate the quality controls over the work being done on the project as well as determine Key Performance Indicators – this document is not limited to deliverables) 7. Risk and Issues Management Plan (will dictate how risks and issues will be managed over the course of the project) 8. Scope Management Plan (will dictate how the scope will be maintained to prevent “scope creep”)	Monthly
Formal Acceptance Criteria	Criteria that establishes the acceptance and rejection criteria of each document on this list.	Once for each project deliverable
Formal Acceptance Sign-Off	Obtain sign-off at the completion of each project deliverable as defined by the formal acceptance criteria.	Once for each project deliverable

Deliverable	Description	Update Frequency
Change Requests	Formal document outlining any changes to the contract scope, schedule, budget, and resources.	As needed
Change Requests Log	Tracks the specific change requests approved and their impact to the project scope, budget, and schedule.	Quarterly or as needed
Budget Log	Outlines original contract costs by deliverable with billed and paid-to-date information.	As needed
Risk Log	A log of all risks (opened or closed) that could affect the project. Risks outlined by their impact and their potential to occur. All risks should have an owner.	Quarterly
Issue/Action Items/Decision Log	A log of open and resolved/completed Issues. Issues outlined by their impact, owner, date of occurrence, and remediation strategy.	As needed/applicable
Decision Log	A log of all decisions made over the course of the project. Decisions should have a date and name of decider.	As needed/applicable
Requirements Documents	Finalized list of the project requirements approved by the State. The approach is dictated by the Requirements Management Plan (see Project Management Plan), and can include: • Stated requirements document (SRD): The SRD contains current state process flows, user stories, and business rules and states the business need at a high level. • Business requirements document (BRD): The BRD contains a medium level of requirements as well as required metrics of project success. • Functional requirements document (FRD): The FRD contains detailed requirements handed off to the Contractor for execution.	Once unless there are changes
Test Plans	A description of the testing approach, participants, sequence of testing, and testing preparations	Once
Test Cases and Results	The specific test cases to be tested and the testing results. Test Cases tie back to the project requirements (to ensure each one is met).	Create once then update with results
Implementation Master Schedule (IMS)	The IMS outlines how the project will go live and will include a mini-project plan for the exact events that need to occur assigned to the resources that need to do them and the timeframe for completion (see Section 3.3 for more detail.)	Once per implementation

Deliverable	Description	Update Frequency
Project Status Reports	Provides an update on the project health, accomplishments, upcoming tasks, risks, and significant issues. The Project Status Report and the project color being report developed in consultation with the State business lead and State project manager, as set forth in detail in Section 4.2.2.	Monthly
Project Phase Audit/Gate Check	At the end of each phase, the Contractor project manager shall submit an audit of all deliverables and milestones achieved during the phase to the State project manager for review.	Once per phase
Meeting Agenda/ Minutes	All scheduled meetings will have an agenda and minutes. The minutes shall contain risk issues, action items, and decision logs. Minutes transcribed over to the main logs.	Per occurrence
End of Project Metrics	These metrics reflect the project performance. Metrics will be outlined in the Quality Management Plan	Once
Lessons Learned	A compilation of the lessons learned having 20/20 hindsight. Lessons Learned delivered in an Excel template and collected from each of the State and Contractor project team members to get a full 360-degree view of the project in retrospect.	Once
Closeout Report	This report will include all the Lessons Learned, project metrics, and a summary of the project's implementation and outcome in operation.	Once

4.4 Project Phases, Milestones, and Schedule

This section provides a list of the major project phases, milestones, and high-level schedule.

Insight into project phases, milestones, and high-level schedule is found within the draft contract between SOS and the proposed vendor, Democracy Live. The description includes proposed dates, and deliverables/outputs that will be provided to the state during each phase, and it considered a "baseline" project plan (Master Project Work Plan).

As stated in the contract, the Master Project Work Plan is an ongoing tool for anticipating and tracking changes to expectations for all project tasks, deliverables, and milestones. The complete Plan is an integrated plan; that is, it includes actions and deliverables from all project areas—both Contractor and State. All Project Management Plan deliverables outlined in section 4.3.1: Master Deliverables, of this document, are included within the Master Project Work Plan. Additionally, the State shall sign off on all deliverables from each phase of the Master Project Work Plan before initiation of subsequent phase work. Once sign-off is complete, the Contractor

and State will assess readiness to proceed with next phase. The draft Master Project Work Plan is as follows:

Phase	Estimated Dates	Phase Description
Phase 1: Project Initiation	12/15/17	Project Initiation includes validating the project scope, deliverables, Master Project Work Plan, resources, schedule, and project management structure. During this phase of the project, the Contractor will work with the State to develop and refine the following documents and obtain the State's approval and sign-off. Deliverables/Outputs: 1. Detailed Project Schedule/Work Plan (MS Project) 2. Change Management Plan (MS Word) 3. Risk Management Plan (MS Word) 4. Quality Assurance/Issue Management Plan (MS Word) 5. Staffing Plan (MS Word 2010) 6. Communications Management Plan (MS Word) 7. Agenda for Gap Analysis Kickoff meeting, planning, and preparation of project management planning documentation.
Phase 2: Business Needs and Requirements Gathering	12/17 – 1/31/18	Contractor shall collect, document and verify State requirements. State is responsible for verifying and validating the requirements. Contractor shall conduct analysis in such a manner to include State users and administrators of the current processes, key stakeholders, and subject matter experts. Contractor shall transform the requirements into complete and detailed specifications to guide the work in Phase 3. The documentation produced in this Phase 2 will be "Use Case" based and detail how the system will meet the defined functional and non-functional requirements of State. Conduct these activities in an iterative fashion, focusing first on the general system design that emphasizes the functional features of the system, and then expanding to include the lower level business rules and technical detail. Included in the technical detail is a description of how client-side layers create, manage, and protect session data. Deliverables/Outputs: 1. Gap analysis sessions (Meetings) 2. Gap notes (MS Word) 3. Updated use cases (MS Word)

Phase	Estimated Dates	Phase Description
		4. Updated data model (Erwin All-Fusion 7.2/PDF) 5. Functional Requirements Document (FRD) 6. Requirements Traceability Matrix (MS Excel) 7. Technical Design Document (MS Word) 8. Draft test cases (MS Word) 9. Training Plan (MS Word) 10. Phase 2 Revised Project Plan (MS Project) Contractor performs necessary requirements gathering to finalize functional and technical requirements and identify gaps between State requirements and solution capabilities.
Phase 3: Testing	2/1/18 – 2/28/18	Contractor shall use the deliverables from Phase 2 to create a complete system that meets the agreed-upon requirements. Contractor shall install and configure the software in a test environment for State's review, prior to promotion of software to the production environment. Contractor shall utilize working prototypes and walkthroughs in the test environment to ensure the system satisfies the agreed upon requirements and expectations. The Contractor project manager conducts "Show and Tell" sessions with the State's project team to demonstrate the progress made in the software customization. The Contractor is responsible to provide all data used in the test environment. Deliverables/Outputs: 1. Set-up Development Environment (Visual Studio Team System 2010) 2. Install and configure Base product (Code) 3. Unit testing and documentation (Visual Studio Team System 2010) 4. Test cases and documentation 5. Phase 3 Revised Project Plan (MS Project) Contractor installs and configures the Solution in a Test environment.
Phase 4: User Acceptance Testing	3/1/18 – 3/31/18	In this phase, the State will fully test the integrated systems against the requirements. Acceptance testing is designed to provide assurance that all system and performance issues have been identified and resolved during previous test phases (unit and functional) and that the design meets documented specifications. Contractor will utilize the "Use Case" methodology to guide the users through the successful acceptance testing of the system. Contractor provides on-line issue tracking and management software to

Phase	Estimated Dates	Phase Description
		assure an efficient process of error reporting. Upon successful completion of the acceptance testing, conduct training for the user groups as previously mentioned. Deliverables/Outputs for each UAT phase: 1. Test environment configured 2. Final UAT Plan and test cases (MS Word) 3. Tester Training (classroom training conducted by Democracy Live) 4. Completed Acceptance Testing with recorded results 5. Record Performance testing scripts State subject matter experts perform solution testing in in a test (not live) environment accordance with Contractor-developed test plans.
Phase 5: Training	4/1/18 – 5/31/18	In this phase, Contractor shall install the customized software in the production environment for operation and initiate Phase 5 Training after the system is tested, accepted by the users, and signed off by the State project manager. Deliverables/Outputs for each Training phase: 1. Final Training Material (MS Word) 2. Training, including Technical Training for each Region (Training Sessions) Provide initial training to approximately 250 town/city clerks in conjunction with State staff and provide sufficient and timely ongoing training to poll workers and Election staff during each election cycle. Initial training for local officials shall be in-person, led by Contractor with assistance from the State, at locations to be determined by the State and in a number that balances travel convenience for local officials, class size, and Contractor resources. The State anticipates six to eight in-person trainings over a one- to two-month period at locations spread throughout the state.
Phase 6: Production Deployment and Closeout (Deployment)	6/1/18 – 11/7/18	In this phase, the Contractor shall install the customized software in the production environment for operation after the system is tested, accepted by the users, and signed off by the State (SOS) project manager. Deliverables/Outputs for each Deployment phase: 1. Production environment configured 2. Finalized System Documentation (MS Word/NDOC) a. Updated User Manual

Phase	Estimated Dates	Phase Description
		b. Updated Data model c. Updated Technical Architecture Document Contractor implements the tested and State-approved Solution in the production environment for additional State testing and go-live.
Phase 7: Warranty Period and Transition to Maintenance and Support	11/15/18 >	The warranty period will begin the day the complete system is live, accepted and deployed on the production server. The system warranty will cover application bug fixes (on the deployed code) to support production related issues. Contractor hereby agrees that all code customizations necessary for the software to satisfy the functional and non-functional requirements of the State supported in new releases, minor and major patches. Contractor shall be responsible for fixing all defects found during the warranty period. All defects found within the warranty period, shall be corrected by Contractor at no additional cost to the State.

Additionally, the State has included the following statement regarding the phases, milestones, and schedule, in terms of "State-Caused Delays" within the contract:

"Contractor acknowledges that the State may not be able to meet the time lines specified in an IMS or that the State may determine that it is necessary to delay and/or modify the timing and sequencing of the implementation as provided in the IMS. While the State is committed to the project and shall use reasonable efforts to provide staff and resources necessary to satisfy all such time frames, the State shall not be held responsible or deemed in default for any delays in Solution implementation provided the State uses its reasonable efforts to accomplish its designated responsibilities and obligations as set forth in the IMS. In addition, the State may, at its option, delay implementation and installation of the Solution, or any part thereof.

"Notwithstanding any provision to the contrary, if the State significantly delays implementation of the Solution, either party may make a Change Request in accordance with Section 8, 'Change Order Process,' and, if required, an amendment to this Contract. Contractor agrees to adjust the IMS and Payment Milestones deadlines to take into account any State-caused delays; provided, however, that Contractor shall continue to perform all activities not affected by such State-caused delay. In the event the State's adjustment to the IMS causes Contractor scheduling conflicts or personnel unavailability, the State and Contractor shall prepare a revised mutually agreeable IMS that may delay the commencement and completion dates of the project and shall take into consideration the readjusted time lines and any necessary resequencing of the activities. Such readjustment, rescheduling or modification of the Project shall be at no additional cost to the State if the delays are less than or equal to thirty (30) days.

For purposes of this Section, a 'Significant Delay' shall mean any delay that in itself will cause a slippage of thirty (30) calendar days or more in a go-live date."

5.0 Acquisition Cost Assessment

This section lists all acquisition costs in the table below (i.e. the comprehensive list of the one-time costs to acquire the proposed system/service). It does not include any costs that reoccur during the system/service lifecycle.

Acquisition Costs	Cost	Comments
Hardware Costs	$569,000	OmniBallot Tablet Voter Stations: 310 @$1,835.50 per Station
Software Costs	$0.00	The proposed software is an annual subscription base. Please see section 9.0: Impact on Net Operating Cost.
Implementation Services	$78,000	This implementation Services cost includes: • OmniBallot Online: Accessible VBM and Sample Ballot • Configuration of OmniBallot Tablet Voter Stations • Six to eight in-person training sessions conducted by Democracy Live
Professional Services	TBD	Training Costs: The vendor has included training costs within their implementation cost. However, the SOS has not yet included training costs in any financial documentation. State training costs could include staff time, and space rental.
Technical Staff/State Labor for Project Management	$28,600	No Comment
3% DII Estimated Charge for EA & Project Oversight	$20,268	3% does not factor in IR cost
Independent Review	$20,000	No Comment
Total Acquisitions Costs	$715,868	

1. Cost Validation: Describe how you validated the Acquisition Costs.

- Hardware Costs come from the IT Reporting Form completed by SOS staff ($569,000)
- Implementation Services costs come from IT Reporting Form completed by SOS staff ($78,000)
- Professional Services costs: internal training costs have not yet been determined by the SOS.
- Technical Staff/State Labor for Project Management costs come from the IT Reporting Form completed by SOS staff ($28,600)
- 3% DII Estimated Charge for EA & Project Oversight costs come from the IT ABC form ($20,268)
- BerryDunn's IR cost ($20,000)
- During BerryDunn's validation of costs, the following assumptions were used:
    - 310 tablets would be acquired (as opposed to leased, as is being discussed)
    - The $78,000 implementation costs include configuration for the first year balloting season for both OmniBallot Online and OmniBallot Tablets
    - Democracy Live will conduct the six to eight training sessions (as opposed to a Train the Trainer approach for the initial implementation)

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?

In order to determine validity of acquisition costs as compared to other solutions, the State analyzed RFI cost analysis responses from all vendors who responded to the voter accessibility RFP. In the table below, cost estimates for each vendor include the costs of hardware, software, implementation, and annual operational/maintenance fees. For purposes of comparison, the IR cost of $20,000, and the DII Estimated Charge for EA & Project Oversight cost of $20,268, were not included in the Democracy Live average cost estimate for FY 2018.

Overall, the cost comparison in the table shows that the chosen vendor, Democracy Live, has a lower first year (FY2018) cost estimate, or lower acquisition cost, than four out of five of the other vendor RFI responses. This indicates that the State is paying significantly less for acquisition of Democracy Live than it would be for other responding vendors. Additionally, the range of acquisition costs ($2,953,615 – $382,000) is $2,571,115, which further emphasizes that the SOS could have chosen a much pricier vendor, and implies the affordability of the Democracy Live solution.

It is important to note that this cost comparison does not analyze prices that others have paid for similar Democracy Live solutions. It is known that Democracy Live provides services for the State of Virginia, San Bernardino County, CA, and Okaloosa County, FL, as described in the vendor's response to the voter accessibility RFP, yet no cost estimates for these entities were provided or compared to the Democracy Live pricing model for the State of Vermont.

Vendor	Projected Cost Estimate FY 2018 (Low)	Projected Cost Estimate FY 2018 (High)	Average Cost Estimate FY 2018
LHS Imagecast Evolution	$2,687,760	$3,219,470	$2,953,615
Clear Ballot	$1,182,375	$1,625,125	$1,403,750
LHS Imagecast X	$1,203,170	$1,458,980	$1,037,162.50
IVS	$632,500	$854,000	$743,250
Democracy Live	N/A	N/A	$675,600
SCYTL	$220,000	$545,000	$382,500

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

Finding: After consultation with the State SOS, it was determined that vendor finalists for this project were not asked to go to Best and Final Offer (BAFO). This consequently poses concern that the State may be overpaying for Democracy Live's system at the current pricing model.

Recommendation: It is recommended that the State discuss this concern, and reflectively request Democracy Live to present their BAFO in order to potentially lower the following costs:

- $78,000 Implementation Costs (One time)
- $569,000 Hardware Costs (One time)
- $60,000 First Year Subscription Fee (OmniBallot Tablet)
- $78,000 First Year Subscription Fee (OmniBallot Online)

Additional Comments on Acquisition Costs:

6.0 Technology Architecture Review

After performing an independent technology architecture review of the proposed solution, our review considered the following.

1. State's IT Strategic Plan: Describe how the proposed solution aligns with each of the State's IT Strategic Principles:

1) Leverage successes of others, learning best practices from outside Vermont
2) Leverage shared services and cloud-based IT, taking advantage of IT economies of scale
3) Adapt the Vermont workforce to the evolving needs of state government
4) Apply enterprise architecture principles to drive digital transformation based on business needs
5) Couple IT with business process optimization, to improve overall productivity and customer service
6) Optimize IT investments via sound Project Management
7) Manage data commensurate with risk
8) Incorporate metrics to measure outcomes

The Democracy Live proposal indicates that the proposed systems have been successfully deployed in more than 600 locations to date. The OmniBallot Online system is a cloud-based system that enables access to absentee voting without the need to request a paper-based ballot. The OmniBallot Tablet component is a stand-alone model that utilizes a Microsoft operating system, Microsoft-based application code, and a Microsoft-based database (SQL Server). Though no voter data is retained in either system, the ballot configurations are securely stored in the database. Through an interview with Democracy Live, then verbally indicated that a PMI-based project management approach will be used during the initial implementation of these systems. A representative of Agency of Digital Services (ADS) has reviewed the technical architecture of the proposed system and reports no major risks associated with it.

2. Sustainability: Comment on the sustainability of the solution's technical architecture (i.e., is it sustainable?)

The applications (OmniBallot Online and OmniBallot Tablet) are developed on common industry platforms.

3. Security: Does the proposed solution have the appropriate level of security for the proposed activity it will perform (including any applicable State or federal standards)? Please describe.

The proposed system is approved by the U.S. Election Assistance Commission (EAC), established by the HAVA. Among other duties, the EAC certifies voting systems, including their

ability to support secure voting. The OmniBallot tablets are stand-alone (not network-enabled) devices that store ballot structural data only and do not store any voting or voter information or data. OmniBallot Online is secure socket layer (SSL) protected and does not store any voting or voter information. Democracy Live reports that the OmniBallot Tablet meets, or exceeds the requirements in the HAVA and Title 9 of the Vermont General Statutes relating to ballot marking, accessibility, security, and voter privacy.

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

By definition, the proposed systems support accessibility for impaired voters.

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?

OmniBallot Online utilizes the Amazon Web Services cloud-based service (AWS). Democracy Live reports that the State will enjoy a unique instance of OmniBallot Live. Because no data resides on these servers (with the exception of the ballot configurations), there is no voter data to back up or recover. The ballot configurations are stored in AWS S3 file storage, with redundancy and real-time fail-over should the primary AWS location experience a failure. A representative of ADS has reviewed the technical infrastructure of the proposed system and reports no major risks associated with it.

6. Data Retention: Describe the relevant data retention needs and how they will be satisfied for or by the proposed solution.

Other than ballot configuration "data," no other data is stored on the proposed application platforms or databases. The ballot configurations are redeployed for each election, eliminating the need to retain data.

7. Service Level Agreement: What are the post implementation services and service levels required by the State? Is the vendor proposed service level agreement adequate to meet these needs in your judgement?

As of this report, the Service Level Agreement (SLA) is evolving. The draft contract reviewed by BerryDunn contained a draft SLA with response times, but little details regarding repair times for critical issues (e.g., an outage on Election Day). The SOS and Democracy Live report their intent to include repair-time SLAs in the final contract.

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?

For the initial implementation of the OmniBallot systems, there is no integration with internal or external systems.

Additional Comments on Architecture:

7.0 Assessment of Implementation Plan

After assessing the Implementation Plan, BerryDunn provides the following comments.

1. The reality of the implementation timetable.

The proposed timetable indicates that both OmniBallot Online and OmniBallot Tablet will be ready and available for use by "E-45," meaning 45 days prior to the primary election day date of August 14, 2018. This date (June 30, 2018) is approximately six months after the planned contract execution date of January 1, 2018. During this six-month period, the State must provide the vendor with ballot configuration "data," the vendor must configure the systems with this data, the State must test the configurations, then the State and vendor must conduct a series of training sessions for clerks and their staff across the State. Assuming a contract execution date of January 1, 2018, this timeline seems reasonable. (Note: Please see Section 12 – Risk Assessment and Risk Register for risks associated with not achieving this timeline goal.)

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

There are two primary components to the proposed solution: A web-based absentee balloting system (OmniBallot Online) and an accessible voting system, enabling impaired voters to vote with little or no assistance at designated polling places (OmniBallot Tablet). The OmniBallot Online system has little impact on the state or local stakeholders (i.e., SOS or local clerks). Advocacy groups and the local clerks' offices have reported that they are seeking relief from the current telephone-based impaired voter system, and are ready for a new system to replace it. Varying levels of engagement, understanding, and utilization of the OmniBallot Tablet system as a replacement to the telephone-based system are expected, but the state has reported that stakeholders are ready for it.

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

A. Project Management

Democracy Live has reported that they will use PMI concepts to manage the implementation of the proposed systems. Additionally, a project manager has been identified by the SOS to work with Democracy Live during the implementation of the system. The Standard Contract for Technology Services is being used as Attachment A of the draft contract between Democracy Live and the SOS. Using this template confirms the vendor's responsibilities regarding project management practices, deliverables, and activity management.

B. Training

The vendor's proposal and contract indicate that six to eight classroom-based training sessions will be held throughout the state once testing has been completed on the proposed systems. These sessions will be held geographically, enabling staff and clerks from a specific region to attend a training session. Additionally, the SOS has indicated that demonstrations and smaller, discrete "training" sessions may be planned during pre-scheduled clerk conferences. This latter approach is primarily to increase awareness of the project and configured systems, but should result in a general awareness of the systems and their capabilities.

C. Testing

Both the vendor and SOS staff have described their understanding of the importance of testing. The vendor will test the configurations of OmniBallot Online and OmniBallot Tablet prior to transitioning them to the State for testing. The State has reported their understanding of the importance of "user acceptance testing" for these systems; including using accessibility advocates and a representative selection of impaired voters to test the capabilities of the systems.

D. Design

The "design" activities are limited to configuring the proposed systems to accommodate the Vermont-specific ballots. The proposed plan, along with the vendor's experience in many other jurisdictions, seems to adequately address this.

E. Conversion (if applicable)

This is not applicable for the initial implementation of the OmniBallot system.

F. Implementation planning

The high-level implementation plan as described in the vendor's proposal, and as provided in the draft contract version that BerryDunn reviewed must be elaborated on, resulting in a detailed implementation plan and schedule that can be executed during the six-month implementation period described in a previous section of this report.

G. Implementation

The primary data point available for BerryDunn's assessment of the vendor's ability to successfully implement the proposed system for the Vermont SOS is the 600 previous implementations that are cited by the vendor in their proposal. Outreach to references has been conducted by SOS staff, and they have reported not identifying major implementation challenges by these references.

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 judgement? Please explain.

Yes, the SOS has identified a project manager (PM) to manage the implementation of the OmniBallot systems. The designated PM has experience with other voting systems, and understands the needs of the impaired voting community as well as absentee voters. She does not have her Project Management Professional (PMP) designation; however, she does have significant support from within the SOS as well as guidance provided by ADS. During our interviews with SOS, including the designated PM, the institutional understanding of project management concepts and techniques seem sufficient for a project of this scale. This, coupled with the reported project management capabilities of Democracy Live, should reduce any risks associated with project management capabilities.

Additional Comments on Implementation Plan:

8.0 Cost Benefit Analysis

This section involves four tasks:

1) Perform an independent Cost Benefit Analysis. Information provided by the State may be used, but the reviewer must validate it for accuracy and completeness.

2) Provide a Life Cycle Cost Benefit Analysis spreadsheet as an Attachment 1 to this report. A sample format is provided at the end of this report template.

A. The cost component of the cost/benefit analysis will include all one-time acquisition costs, ongoing operational costs (licensing, maintenance, refresh, etc.) plus internal costs of staffing and "other costs." "Other costs" include the cost of personnel or contractors required for this solution, enhancements/upgrades planned for the life cycle, consumables, costs associated with system interfaces, and any costs of upgrading the current environment to accept the proposed solution (new facilities, etc.).

B. The benefit side of the cost/benefit will include: 1. Intangible items for which an actual cost cannot be attributed. 2. Tangible savings/benefits such as actual savings in personnel, contractors, or operating expense associated with existing methods of accomplishing the work performed by the proposed solution. Tangible benefits also include additional revenue that may result from the proposed solution.

C. The cost benefit analysis will be for the IT activity's life cycle.

D. The format will be a column spreadsheet with one column for each year in the life cycle. The rows will contain the itemized costs with totals followed by the itemized benefits with totals.

E. Identify the source of funds (federal, state, one-time vs. ongoing). For example, implementation may be covered by federal dollars but operations will be paid by State funds.

3) Perform an analysis of the IT ABC form (Business Case/Cost Analysis) completed by the Business.

4) Respond to the questions/items listed below.

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

To perform a cost benefit analysis, BerryDunn used the IT Reporting Form and Democracy Live's RFP response, which were both provided by the SOS for review. Each cost figure was independently validated through the following methods:

- Hardware Costs: The $569,000 cost of hardware was found using the IT Reporting Form, and cross-referenced with Democracy Live's RFP response. This fee was estimated for 310 OmniBallot Tablet Voter Stations at $1,825/station.
- Software Costs: The $78,000 cost of software for Omniballot Online annual subscription, was found using the IT Reporting Form, and cross-referenced with Democracy Live's RFP response. Additionally, the $60,000 cost of software for OmniBallot tablet station annual subscription was found using the IT Reporting Form and cross-referenced with Democracy Live's RFP response. Finally, the $11,950 cost for optional configuration fee per election was found using the IT Reporting Form and cross-referenced with democracy Live's RFP response. It was determined by the vendor that no configuration fee would be necessary in FY 2018, which is reflected in the table.
- Training Costs: Training costs have not yet been calculated by the SOS, and are therefore not included in this analysis.
- Other Costs: Implementation Services: The $78,000 cost for implementation services was found using the IT Reporting Form and cross-referenced with Democracy Live's RFP response. This initial fee includes OmniBallot Online VBM and Sample Ballot, configuration of OmniBallot Tablet Voter Stations, and six to eight in-person training sessions conducted by Democracy Live.
- Personnel Costs: The $28,600 cost for technical staff/State labor for project management was found using the IT Reporting Form. Additionally, the $3,300 cost for annual staffing was also found using the IT Reporting Form. Finally, the $20,268 cost for the DII estimated charge for EA & project oversight (3% of acquisition costs), was found using the IT ABC form.

A detailed breakdown of these costs can be found in Attachment 1. For review, it is important to note that the current operating costs are theoretical, as the State has not yet calculated the cost of training throughout the five-year life cycle. Overall, the projected lifecycle cost for the new voter accessibility system ($1,344,118) represents a $207,623 increase, as opposed to the existing lifecycle cost for the current system ($1,136,495), over a five-year life cycle.

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

- There is a five-year life cycle.
- State staffing cost remains static, although raises, job pay rates, and change in delegation of duties cannot be reasonably projected, and are not included.
- Training costs have not yet been calculated by the SOS and are therefore not included in this analysis.
- The $11,950 cost for optional configuration was not included in FY 2018, as configuration fees will be covered by the $78,000 implementation services cost. However, the $11,950 will be included in FY 2020 (three elections) and FY 2022 (two elections).

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.

The SOS has preserved sufficient HAVA grant funding to cover the cost of project operation through at least year 5 (FY 2022), or the total contracted life cycle of the project. Therefore, 100% of funding for both acquisition and ongoing operational costs will be funded by the HAVA grant source.

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:**
  - Overall, the projected lifecycle cost for the new voter accessibility system ($1,344,118) represents a $207,623 increase, as opposed to the existing lifecycle cost for the current system ($1,136,495), over a five-year life cycle.
  - Acquisition costs in FY 2018 total $715,868 which is a payment the State would not have to pay if they stayed with the same solution. For further details, review section *5.0 Acquisition Cost Assessment*.
- **Tangible Benefits:**
  - The State will no longer have to pay the $250,000 for the current voter accessibility system.

5. Intangible Costs and Benefits: Provide a list and descriptions of the intangible costs and benefits. It is "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).

- **Intangible Costs:**
  - Ongoing maintenance for OmniBallot Online and OmniBallot tablets will be required throughout the project life cycle. For every election, both systems will need to be configured to represent specific ballots across the State. Therefore, extra work that is not necessary with the current system could be reallocated to the proposed voter accessibility system.
- **Intangible Benefits:**
  - The proposed system includes OmniBallot Online, which should enable ease of use for absentee voters. Absentee voters will not have to request a paper ballot prior to voting, allowing for a simpler voting experience. Additionally, since ballots will be

viewed through the online portal rather than heard through the phone system, the OmniBallot Online system should be faster, convenient, and more confidential for users.

- The proposed system also includes OmniBallot Tablet, which has been reported by SOS and the vendor to include more features than the current voter accessibility system. Both the SOS and Democracy Live have outlined that these features should increase security for system users. Consequently, this may increase system utilization, as users will feel their voting experience is more private.

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.

In our opinion, the benefits of this product outweigh the costs. Especially compared to the current voter accessibility phone system, which is underutilized and not user-friendly, the Democracy Live system should be a better fit for the SOS. Although more expensive, the intangible benefits outlined above showcase the additional features, access, utilization rates, and ease of use that should occur.

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.

The information in our independent review is consistent with the IT ABC form. However, this could be due to the creation timeline of the form, which was after the receiving of vendor RFP responses. This is different from IT ABC form standard, which normally takes place prior to project start. The SOS has developed a separate form (called the “IT Reporting Form”) on which they are evolving the financial elements of this project. The SOS has reported that they are using this form to determine and track how HAVA funds will be used for the acquisition and ongoing operations of the selected system. It is important to note that the financial projections articulated on the IT ABC form are still evolving in the IT Reporting Form due to on-going negotiations regarding implementation costs, tablet quantity, and staffing needs.

The proposed lifecycle for the Democracy Live solution seems to be aligned with industry costs based on requests for information submissions from multiple vendors.

Additional Comments on the Cost Benefit Analysis:

9.0 Impact Analysis on Net Operating Costs

1.) Perform a life cycle cost impact analysis on net operating costs for the agency carrying out the activity, minimally including the following:

a) Estimated future-state ongoing annual operating costs and estimated life cycle operating costs. Consider also if the project will yield additional revenue generation that may offset any increase in operating costs.

b) Current-state annual operating costs; assess total current costs over span of new IT activity life cycle

c) Provide a breakdown of funding sources (federal, state, one-time vs. ongoing)

2.) Create a table to illustrate the net operating cost impact.

3.) Respond to the items below.

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

The life cycle cost analysis is included in the table on the next page. It includes both current- and future-state costs. The figures were obtained from our analysis of documents provided.

Estimated Net Impact on Operating Costs											
Impact on Operating Costs	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**10-Year Totals**
Professional Services (Non-Software Costs)											
Current Costs[1]	$1,100	$1,100	$1,100	$1,100	$1,100	$1,100	$1,100	$1,100	$1,100	$1,100	**$11,000**
Projected Costs[2]	$28,600 $20,268 $20,000 $3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	$3,300	**$101,868**
Software Acquisition, Maintenance, Support, and Licenses Costs											
Current Costs[1]	$226,199	$226,199	$226,199	$226,199	$226,199	$226,199	$226,199	$226,199	$226,199	$226,199	**$2,261,990**
Projected Costs[3]	$569,000 $78,000	$78,000 $60,000	$78,000 $60,000 $11,950 * 3	$78,000 $60,000	$78,000 $60,000 $11,950 * 2	$78,000 $60,000 $600,000	$78,000 $60,000 $11,950 * 3	$78,000 $60,000	$78,000 $60,000 $11,950 * 2	$78,000 $60,000	**$2,608,500**
Baseline Current Cost[1]	$227,299	$227,299	$227,299	$227,299	$227,299	$227,299	$227,299	$227,299	$227,299	$227,299	
Baseline Projected Costs	$719,168	$141,300	$177,150	$141,300	$165,200	$741,300	$177,150	$141,300	$165,200	$141,300	
Cumulative Current Costs[1]	$227,299	$454,598	$681,897	$909,196	$1,136,495	$1,363,794	$1,591,093	$1,818,392	$2,045,691	$2,272,990	**$2,272,990**

Estimated Net Impact on Operating Costs											
Impact on Operating Costs	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**	**10-Year Totals**
Cumulative Projected Costs	$719,168	$860,468	$1,037,618	$1,178,918	$1,344,118	$2,085,418	$2,262,568	$2,403,868	$2,569,068	$2,710,368	**$2,710,368**
Net Impact on Professional Services	$71,068	$2,200	$2,200	$2,200	$2,200	$2,200	$2,200	$2,200	$2,200	$2,200	**$90,868**
Net Impact on Software Acquisition, Maintenance, Support, and Licenses Costs	$420,801	($88,199)	($52,349)	($88,199)	($64,299)	$511,801	($52,349)	($88,199)	($64,299)	($88,199)	**$346,510**
Net Impact on Operating Costs:	$491,869.00	($85,999)	($50,149)	($85,999)	($62,099)	$514,001	($50,149)	($85,999)	($62,099)	($85,999)	**$437,378**

Sources and Assumptions (Please see Section 8.2 for additional assumptions used in the analysis of net impact on operating costs).

1 All current system costs were found using the IT Activity Business Case & Cost Analysis (IT ABC Form)

2 Projected costs for Professional Services were found using the IT Reporting form and the IT ABC Form, which include the projection of $28,600 for State projected management labor in FY 2018, the projection of $20,268 for a 3% DII estimated charge for EA & project management, and a $3,300 State staff labor cost for years 1 – 10. Additionally, a $20,000 cost for this IR has been included.

3 Projected costs for Software Acquisition, Maintenance, Support, and Licenses Costs were found using the IT Reporting Form and Democracy Live's RFP response. In FY 2018, $569,000 represents the cost of OmniBallot Tablet Voter Station (310 @ $1,835.50 per station), and $78,000 represents implementation services for OmniBallot Online: Accessible VBM and Sample Ballot, OmniBallot Tablet Voter Stations, and Democracy Live training sessions. In all additional years, the $78,000 represents the annual subscription cost for OmniBallot Online, and the $60,000 represents the annual software subscription for OmniBallot Tablet Stations (310 @ $194.00 per station). For fiscal years that include the fee of $11,950, this represents an optional configuration fee per election. This optional fee was included in this analysis because the VT SOS included it in calculations on the IT Reporting Form. Please note that after meeting with the vendor, it was determined that the $11,950 configuration would not be necessary in FY 2018, as configuration is already covered in the $78,000 implementation fee. Finally, in FY 2023, a fee estimated at $600,000 was included to represent cost of hardware for an additional five years.

Note: In projected costs for Software Acquisition, Maintenance, Support, and Licenses Costs, the $78,000 annual subscription cost for OmniBallot Online, and the $60,000 annual software license costs for OmniBallot Tablet Stations will most likely increase after year 5. However, this is not reflected in the above table.

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

For the purpose of impact analysis of net operating costs, BerryDunn applied the following assumptions:

- BerryDunn assumes that this table compares current and projected costs to determine a net difference. Therefore, the projected costs for remaining the same are placed against projected costs for a new solution.
- BerryDunn assumes that financials in the table are still considered operating costs, even though HAVA grant funding will be used to pay for the five-year life cycle of the voter accessibility project.
- BerryDunn assumes that the $20,268 DII estimated charge for EA & project oversight cost, and the $20,000 Independent Review cost, are Professional Services operating costs in FY 2018.
- BerryDunn assumes that the optional configuration fee of $11,950 per election will be included in FY 2020, FY 2022, FY 2024, and FY 2026. This assumption reflects the calculations from the IT Reporting Form. However, it was verbally stated during BerryDunn's interview with the vendor, Democracy Live, that the $11,950 will not be necessary in FY 2018, because the $78,000 implementation services fee will cover configuration costs. Therefore, BerryDunn assumes that the $11,950 fee will not be included in FY 2018.
- BerryDunn assumes that after the five-year life cycle of the voter accessibility project, OmniBallot Tablet Voter Stations will need to be refreshed, resulting in an additional hardware cost estimated at $600,000 in FY 2023.

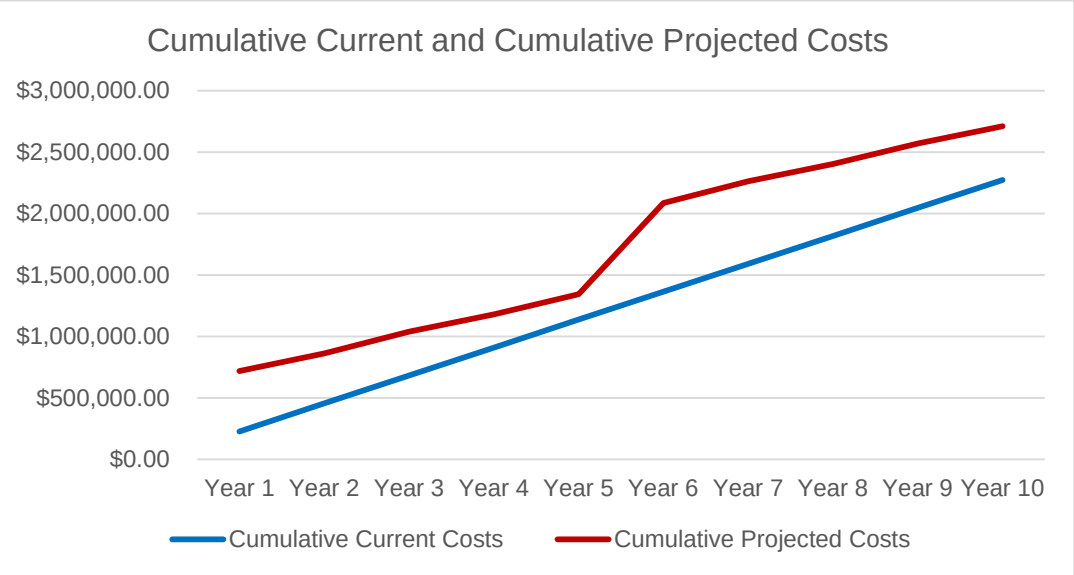
This analysis determines that the SOS will pay an additional $437,378 in operating costs for the proposed Democracy Live voter accessibility system, over a 10-year period. This is largely due the large up-front hardware costs of $569,000 in FY 2018, and $600,000 in FY 2023. In all other years, operating costs are lower than the current system, which is reflected in the last row of the table, *Net Impact on Operating Costs*. Additionally, it is important to note that the net impact on professional services of $71,068 in year 1, and $2,200 years 2 – 10, does not include additional costs of staff time for system training. This calculation is currently being considered by the SOS and will be included in the final contract. Therefore, the total net impact on operating costs may be higher than $437,378 when training costs are determined and added to financial statements.

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.

The SOS has preserved sufficient HAVA grant funding to cover the cost of project operation through at least year 5 (FY 2022), or the total contracted life cycle of the project. However, not enough information was given to BerryDunn to determine if HAVA grant funding will cover project costs past FY 2022.

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

There is no break-even point for this IT Activity, which is largely due to the $600,000 cost in FY 2023, which was included to represent the cost of hardware for an additional five years. See table titled *Cumulative Current and Cumulative Projected Costs* below:



10.0 Risk Assessment and Risk Register

Perform an independent risk assessment and complete a Risk Register. The assessment process will include performing 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.)

1. 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 the Risk Register in Section 12 of this report. The timing of the provided risks is either "prior to contract execution" or "subsequent to contract execution." For those for which a "prior to contract execution" timing is recommended, BerryDunn suggests that the entire contract be reviewed by a team of professionals with experience in reviewing contracts. This review can be multi-facetted: one team could focus on the legal components of the contract (i.e., the terms and conditions); a separate team could be engaged to review the statement of work, schedule, milestones and

deliverables described within the contract. These reviews could be accommodated using SOS staff with contract experience, by engaging ADS, or by leveraging an external firm.

11.0 Attachment 1 – Life Cycle Cost Benefit Analysis

Independent Review of the SOS Voter Accessibility System						
Description	**Initial Implementation**	**Maintenance**	**Maintenance**	**Maintenance**	**Maintenance**	
Fiscal Year	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Total**
Hardware						
OmniBallot Tablet Voter Stations ($1,835.50/station)[1]	$569,000	$ -	$ -	$ -	$ -	
Hardware Total	$569,000	$ -	$ -	$ -	$ -	**$569,000**
Software						
OmniBallot Online annual subscription[2]	$ -	$78,000	$78,000	$78,000	$78,000	
OmniBallot Tablet Station annual subscription[3]	$ -	$60,000	$60,000	$60,000	$60,000	
Optional configuration fee per election[4]	$ -		$11,950 * 3		$11,950 * 2	
Software Total	$ -	$138,000	$173,850	$138,000	$161,900	**$611,750**
Training Total[5]	$ -	$ -	$ -	$ -	$ -	**$ -**
Other						
Implementation Services Cost Includes: OmniBallot Online: Accessible VBM and Sample Ballot, Configuration of OmniBallot Tablet Voter Stations, six to eight in-	$78,000	$ -	$ -	$ -	$ -	

Independent Review of the SOS Voter Accessibility System						
Description	**Initial Implementation**	**Maintenance**	**Maintenance**	**Maintenance**	**Maintenance**	
Fiscal Year	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Total**
person training sessions conducted by the vendor[6]						
Other Total	$78,000	$ -	$ -	$ -	$ -	**$78,000**
Personnel – Additional						
Technical Staff/State Labor for Project Management[7]	$28,600	$ -	$ -	$ -	$ -	
Staffing Cost[8]	$3,300	$3,300	$3,300	$3,300	$3,300	
3% DII Estimated Charge for EA & Project Oversight[9]	$20,268	$ -	$ -	$ -	$ -	
Independent Review	$20,000	$ -	$ -	$ -	$ -	
Personnel Total	$72,168	$3,300	$3,300	$3,300	$3,300	**$85,368**
Total	**$719,168**	**$141,300**	**$177,150**	**$141,300**	**$162,200**	**$1,344,118**

Sources and Assumptions

1 OmniBallot Tablet Voter Stations hardware cost was found using the IT Reporting Form and Democracy Live's RFP response.

2 OmniBallot Online annual subscription cost was found using the IT Reporting Form and Democracy Live's RFP response.

3 OmniBallot Tablet Station annual subscription cost was found using the IT Reporting Form and Democracy Live's RFP response.

4 Optional configuration fee per election was found using the IT Reporting Form and Democracy Live's RFP response.

5 Training costs have not yet been calculated by the SOS and are therefore not included in this analysis.

6 Implementation Services Cost was found using the IT Reporting Form and Democracy Live's RFP response. This fee covers configuration services for FY 2018.

7 Technical Staff/State Labor for Project Management cost was found using the IT Reporting Form.

8 Staffing Cost was found using the IT Reporting Form.

9 3% DII Estimated Charge for EA & Project Management Oversight was found using the IT ABC Form.

12.0 Attachment 2 – Risk Register

Data Element	Description
Risk #	Sequential number assigned to each 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 may be the Project, Proposed Solution, Vendor, or Other.
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 may 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 #: R1	Risk Likelihood/Probability: Low	Risk Impact: Low	Overall Risk Rating: Low
Source of Risk: Interviews with the Vermont Secretary of State's Staff			
Risk Description: There is a risk of project delay, resulting in the OmniBallot Online system function being unavailable for use by military members and overseas voters, during the absentee voting period from July 1, 2018, to July 14, 2018. The Vermont SOS has ambitions for the selected Voter Accessibility System to be operational prior to July 1, 2018, in order to enable absentee voting 45 days prior to the primary election, scheduled to be held on August 14, 2017. Any delay to the project that results in the replacement system being unavailable by July 1, 2018, would result in military members and overseas voters not being able to use the OmniBallot Online system function to process their respective absentee ballots. Reasons that the system may not be operational on time may include, but are not limited to, the following: Delay in contract execution with the selected vendor; delay in configuring the system to meet the needs of the Vermont SOS; delayed training; identification of critical defects during configuration testing; delay in the Democracy Live supply-chain. However, if the project is delayed, there is no risk of federal implication, as it is only mandated to have a voter accessibility solution (e.g., OmniBallot Tablet) on polling day, or August 14, 2017.			
State's Planned Risk Strategy: Mitigate			

State's Planned Risk Response: In order to mitigate the risk of project delay, the State plans to require the vendor to develop a project management plan based on PMI standards in order to ensure the OmniBallot Online system function is available for the absentee voting period from July 1, 2018, to August 14, 2018. However, if the project management plan fails due to unforeseen circumstances, the State has provided the alternative mitigation option of continuing to use their current balloting process for all early ballots.
Timing of Risk Response: Prior to and subsequent to contract execution
Reviewer's Assessment of State's Planned Response: The State's response is based on industry best practices. Development and management of a project management plan and schedule, developed using the guidelines provided by PMI, should help to reduce or eliminated the likelihood of this risk occurring. The State's mitigation strategy should the risk occur is to use the current paper-based or telephone-based balloting process. The impact to voters is low, since this is the process currently in place and working. However, the voters would not benefit from the increased ease and efficiency that the OmniBallot Online system is expected to provide. Because this is a low probability and low-impact risk, the State's mitigation strategy seems reasonable.

Risk #: R2	Risk Likelihood/Probability: Low	Risk Impact: High	Overall Risk Rating: Medium
Source of Risk: Interviews with the Vermont SOS's Staff			
Risk Description: There is a risk of project delay, resulting in voter accessibility solution tablets being unavailable for use during the August 14, 2018 (and possibly November 6, 2018) voting period(s). If the Democracy Live solution were not available for patron use during voting on August 14, 2018, impaired voters may be required to utilize the services of local clerk staff to process their ballots. Reasons that the system may not be operational on time may include, but are not limited to, the following: Delay in contract execution with the selected vendor; delay in configuring the system to meet the needs of the Vermont SOS; delayed training; identification of critical defects during configuration testing. The impact of the Democracy Live solution not being available on August 14, 2018 may result in sanctions by the federal government. Alternatively, the SOS may incur significant expenses in implementing an alternate solution (e.g., the current telephone-based option).			
State's Planned Risk Strategy: Mitigate			
State's Planned Risk Response: In order to mitigate the risk of project delay, the State plans to require the vendor to develop a project management plan based on Project Management Institute (PMI) standards in order to ensure the full voter accessibility solution tablets are available for use during the August 14, 2018 (and possibly November 6, 2018) voting period(s). However, if the project management plan fails due to unforeseen circumstances, the State has provided the mitigation option of contracting with the current telephone-based provider to use their balloting process during these elections. Or if this is not a possibility, the State will knowingly be non-compliant with federal statute, resulting in the need to develop a corrective action plan to provide this capability for future elections.			
Timing of Risk Response: Prior to and subsequent to contract execution			
Reviewer's Assessment of State's Planned Response: The State's response is based on industry best practices. Development and management of a project management plan and schedule, developed			

using the guidelines provided by PMI, should help to reduce or eliminate the likelihood of this risk occurring. Should the risk occur, the State's mitigation strategy might result in increased support required of local clerks on election day. Because the current telephone-based system has inherent flaws (i.e., the voter does not receive a paper copy of their ballot), and experiences a current low level of utilization, leveraging local clerks is also the current model for assisting impaired voters. Because of this, the State's mitigation strategy seems reasonable.

Risk #: R3	Risk Likelihood/Probability: Low	Risk Impact: Low	Overall Risk Rating: Low
Source of Risk: Interviews with the Vermont SOS's Staff			
Risk Description: There is a risk that not all voter accessibility solution tablets will be at the same version level, resulting in possible inconsistencies in use while voting. If Democracy Live does not configure all tablets at the same version level, then tablets with lower-level versions may be compromised. This is largely because tablets with lower-level versions may not accept upgrades (i.e., be upward compatible), possibly resulting in inconsistent balloting; if not all tablets are at the same version level on election day, the possibility exists that they may not process the ballots consistently.			
State's Planned Risk Strategy: There are currently three risk strategy options for Risk # R3: Transfer, Mitigate, or Avoid. One of these risk strategies will need to be decided upon prior to contract execution.			
State's Planned Risk Response: 1. Transfer: The vendor, Democracy Live, has an option of leasing tablets, and the State is currently pursuing more information regarding this. If the leasing of tablets were decided upon prior to contract execution, then the risk of tablet version control would be transferred to the vendor. In this scenario, Democracy Live would reconfigure the leased tablets before every election as necessary. 2. Mitigate: The vendor, Democracy Live, has an option of purchasing tablets, which is the pricing model outlined by the current contract version. If the purchasing of tablets were decided upon prior to contract execution, the risk of tablet version control would be addressed through mitigation strategies deployed by the State. This could include the use of thumb drives, patching, or alternative methods to ensure tablets are at the same version level for every election. 3. Avoid: The State could also avoid the risk of tablet version variance by never updating the versions on the tablets. This option would need to be decided upon and noted within the contract before execution. (Note: ADS has provided feedback regarding the potential dangers of simply not patching, or upgrading software versions, on the tablets. If the SOS acquires the tablets, ADS recommends determining an alternate method for appropriately applying patches to them.)			
Timing of Risk Response: Prior to contract execution			
Reviewer's Assessment of State's Planned Response: Due to the timing of this independent review, it remains unclear whether the State will purchase or lease the OmniBallot Table hardware. If the State decides to lease the hardware, then Risk Response #1 (Transfer) is a clear and reasonable mitigation strategy. If the State decides to purchase the hardware, then Risk Response #3 (Avoid) seems to be a more reasonable response, since it would eliminate any need for the local clerks or centralized SOS staff to update the operating system software on the tables; thus eliminating this risk. However, as ADS suggests, this strategy may result in tablets that are not fully patched, which could have an impact on their security or ability to run the most up-to-date OmniBallot software.			

Risk #: R4	Risk Likelihood/Probability: Low	Risk Impact: High	Overall Risk Rating: Medium
Source of Risk: BerryDunn			
Risk Description: There is a risk that the voter accessibility solution tablets will stop working at any particular polling station, resulting in delayed voting for impaired persons. If all tablets deployed at a polling station fail, then there will be no immediate ability for impaired persons to vote without the help of a town clerk. If a person refuses the latter option due to confidentiality concerns, they could wait hours before a replacement system is received.			
State's Planned Risk Strategy: There are currently two risk strategy options for Risk # R4: Mitigate, and Accept. Both risk strategies can be utilized on election day.			
State's Planned Risk Response: 1. Mitigate: To mitigate the risk of tablet failure on election day, the State plans to utilize vendor resources. Democracy Live has verbally stated they plan to have staff stationed throughout the State in order to help with system malfunctions, should they occur. However, this should be noted within the contract before execution. 2. Accept: To accept the risk of tablet failure on election day, the State plans to acquire a surplus of tablet inventory in order to account for potential system malfunction. Replacement systems will be strategically positioned throughout the State, so that they can be easily distributed, if need be.			
Timing of Risk Response: Prior to contract execution			
Reviewer's Assessment of State's Planned Response: Of the two possible mitigation options described by the State, the SOS should select the one that results in the most significant reduction (or elimination) of any downtime at any given polling station throughout the State. Both options seem reasonable, though cost may differ. Deciding on the specific approach to addressing this risk must be done prior to finalizing the contract with the vendor, since acquisition of additional devices, or engagement of the vendor's staff (or subcontracted staff) may be required to fully mitigate this risk.			

Risk #: R5	Risk Likelihood/Probability: Medium	Risk Impact: Medium	Overall Risk Rating: Medium
Source of Risk: BerryDunn			
Risk Description: There is a risk to project scope, schedule, and cost around lack of defined deliverables and payment milestones. The RFP did not specifically allocate payments with deliverables, resulting in a contract that is unclear on the schedule of payments and their association with deliverables. Payment and schedule should incentivize the vendor to provide working hardware and configured software, and minimize payments for non-software-related deliverables (such as project management deliverables).			
State's Planned Risk Strategy: Mitigate			
State's Planned Risk Response: The State currently has plans to develop a deliverables-based payment milestones structure, which will be outlined within the final contract. From a deliverables perspective, this payment milestones structure will primarily involve the $78,000 initial configuration fee.			

Timing of Risk Response: Prior to contract execution
Reviewer's Assessment of State's Planned Response: The State's mitigation strategy seems sound, although it impacts only a small amount of the total cost of ownership of the OmniBallot solution. Additionally, to reduce cost exposure during the implementation of the OmniBallot solution, the State may also consider delaying the acquisition of (and paying for) the OmniBallot tablet hardware until closer to when the hardware will be required at polling stations.

Risk #: R6	Risk Likelihood/Probability: High	Risk Impact: Medium	Overall Risk Rating: Medium
Source of Risk: BerryDunn			
Risk Description: There is a risk of varying technical aptitude among town personnel who will be using the voter accessibility system. Especially among town clerks, technical aptitude varies widely. This could result in a range of understanding of the voter accessibility system functionality throughout the State. The range of understanding would be especially widened if training of town personnel were not consistent (see Risk #:R7 below). For those who especially lack technical aptitude, resentment and frustration of the system could occur, resulting in a lack of ease for disabled voters to receive assistance on election day. It is important to note that this is an inherent risk that applies to all projects and services within the scope of the Elections Division within the SOS's Office.			
State's Planned Risk Strategy: There are currently two risk response options: Mitigate or Transfer. One of these risk strategies will need to be decided upon prior to contract execution.			
State's Planned Risk Response: Risk responses for both strategies—mitigate risk or transfer risk—include providing training from the Elections Division and the vendor, Democracy Live. The Elections Division currently provides ongoing, targeted training to ensure that all town clerks have similar technical aptitude surrounding elections related technology. Therefore, the level of support that the Elections Division currently provides to the clerk's office for all election related functions, will also be applied to this project. Additionally, Democracy Live has instructional materials, including video guides, which can be leveraged as training resources for town clerks throughout the State. However, if tablets are purchased, and the risk strategy is to mitigate, the response to tablet version control in terms of town clerk technical aptitude is different than if tablets are leased and the risk strategy is to transfer: 1. Mitigate Risk (Response for Purchasing of Tablets): In order to mitigate risk surrounding the need for town clerks to update tablet versions, the State would use of thumb drives, patching, or alternative methods to ensure tablets are at the same version level for every election, without needing to leverage the town clerks' technical capabilities. 2. Transfer Risk (Response for Leasing of Tablets): In order to transfer risk surrounding the need for town clerks to update tablet versions, Democracy Live would be responsible for the reconfiguration of the leased tablets before every election necessary, therefore excluding the need to leverage the town clerks' technical capabilities.			
Timing of Risk Response: Prior to contract execution			
Reviewer's Assessment of State's Planned Response: The State's mitigation strategy regarding the ongoing training of staff in the local offices seems reasonable and is aligned with a strategy that has worked for other local technology deployments. In terms of configuring the tablets for use for each			

election, Risk Response #2 (Transfer) results in eliminating this risk, while Risk Response #1 (Mitigate), combined with the training strategy, should result in minimizing the risk.

Risk #: R7	Risk Likelihood/Probability: High	Risk Impact: Medium	Overall Risk Rating: Medium
Source of Risk: Interviews with the Vermont SOS's Staff			
Risk Description: There is a risk of inconsistent training due to high levels of turnover at the town clerk offices. Democracy Live currently plans to hold only six to eight training sessions throughout the State to orient employees to the voter accessibility system. However, since the system has a lifetime of five years, this would not allow all town clerks to attend the in-depth training sessions due to yearly turnover rates. A lack of proper training could cause for system malfunction, frustration among State personnel, and ultimately prevent disabled voters from being able to use the voter accessibility system on election day. It is important to note that this is an inherent risk that applies to all projects within the scope of the Elections Division within the SOS's Office.			
State's Planned Risk Strategy: Mitigate			
State's Planned Risk Response: The Elections Division currently provides ongoing, targeted training to ensure that all town clerks have a standardized understanding surrounding elections-related technology. These current methods will be applied to the voter accessibility system training strategy in order to help ensure every clerk receives the same level of training regardless of their year of hire. Additionally, in order to help ensure consistent training throughout the five-year contract period, Democracy Live has instructional materials, including video guides, which can be leveraged as resources for town clerks throughout the State.			
Timing of Risk Response: Subsequent to contract execution			
Reviewer's Assessment of State's Planned Response: The State's mitigation strategy regarding the ongoing training of staff in the local offices seems reasonable and is aligned with a strategy that has worked for other local technology deployments.			