



## Independent Review

VTrans State Highway Access and Work Permit (S1111) System Project  
(Project)

For the  
State of Vermont  
Agency of Transportation



**Submitted to the  
State of Vermont, Agency of Digital Services  
September 5, 2023**

**Final Draft**

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## 1.0 Executive Summary

For all Information Technology (IT) activities over \$1 million, State of Vermont (State) statute (or at the discretion of the Chief Information Officer [CIO]) requires an Independent Review by the Office of the CIO before the project can begin. State Agency of Digital Services (ADS) engaged BerryDunn to perform an Independent Review of the State Highway Access and Work Permit S1111 Project (Project). This Independent Review began on June 19, 2023, and the presentation of findings is tentatively planned for the week of August 7, 2023. The extended timeline for this Independent Review was due to some key State interview participants being unavailable during the originally scheduled interview week.

Currently, the Vermont Agency of Transportation (AOT) receives 19 V.S.A. §1111 permit applications by standard mail or PDF submission and accepts only paper checks for those subject to a fee. The current process can be slow, requires several manual steps, including generating receipts, transferring the checks to the business office, database entry, permit generation, and managing queries and spreadsheets for program metrics and compliance.

AOT plans to partner with GEO.works to implement an internally and externally facing online solution whereby these permits may be applied for, reviewed, approved, paid for, issued, and maintained. The new solution is expected to:

- Fulfill 19 V.S.A. §1111 permitting requirements.
- Drive continuous improvements and innovation resulting in the modernization of systems and processes.
- Reduce State staff workloads.
- Improve visibility into applicants' status and email updates.
- Require all appropriate data in applications to help improve data and reporting capabilities.
- Provide real-time metrics and dashboards.
- Improve efficiency in government services and customer service.
- Improve ad hoc reporting capabilities.
- Provide information to help guide applicants through the electronic process.

While these benefits will apply for applications that go through the electronic process, applicants will still be able to use the existing mail-based process if they prefer.

In May 2023, ADS released a Request for Proposals (RFP) on behalf of AOT to establish contracts with one or more vendors that could provide and implement an Access and Work Permit system. ADS received bids from four vendors and selected GEO.works as its preferred vendor.

This report is based on a single point in time and does not include information on progress made on the Project after July 28, 2023. However, there are updates to each risk included in the Risk Register based on discussion during the presentation of this report. While conducting the Independent Review, BerryDunn identified eight risks, with 3 being of either high impact and/or high likelihood of occurrence. This risk is listed in summary form in Section 1.3, and in detail in Attachment 2 – Risk Register.

## 1.1 Cost Summary

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

**Table 0.1: Cost Summary**

IT Activity Life Cycle	Cost and Funding Source
Total Life Cycle Costs (Five Years)	\$1,143,178
Total Implementation Costs	\$633,051
New Annual Operating Costs (Four Years)	\$510,128
Current Annual Operating Costs (Four Years)	\$802,240
Difference Between Current and New Operating Costs (Five Years)	\$292,112
Funding Source(s) and Percentage Breakdown of Multiple Sources	100% State – which remains to be secured

## 1.2 Disposition of Independent Review Deliverables

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

**Table 0.2: Independent Review Deliverables**

Deliverable	Highlights From the Independent Review Include Explanations of Any Significant Concerns
Acquisition Cost Assessment	<p>The proposed solution includes a one-time acquisition cost of \$633,051. These majority acquisition costs on this project are roughly split evenly between implementation deliverables to be paid to GEO.works (totaling \$282,745) and ADS services (e.g., Enterprise Project Management Office [EPMO], Enterprise Architect [EA], and security; totaling \$290,806), as well as BerryDunn’s Independent Review services (totaling \$24,500) and penetration testing (totaling \$35,000) for a total of \$633,051.</p> <p>Based on research that BerryDunn conducted using GovWin—a government contracting intelligence platform from Deltek—to examine what other state government agencies have paid for similar solutions and services. BerryDunn believes the anticipated cost for the new solution is comparable to what peer states agencies have paid for similar systems and those available in the market, although a direct comparison cannot be accurately made given the limited number projects similar in scope.</p>
Technology Architecture and Standards Review	<p>Based on documents reviewed and interviews with GEO.works and VT’s IT staff, BerryDunn learned that the Project will support the State’s efforts to modernizing its IT systems and processes to drive innovation, improved efficiency, and quality customer service. Given GEO.work’s use of a separate instance for storing the State’s data in a data mart, the State will be able to access all information collected and stored in the solution for analysis. GEO.work’s solution is expected to provide the State with more accurate data, process automation, and application tracking capabilities for applicants. This in turn will provide more comprehensive data that can be used to help the State develop GIS data layers. GEO.works’ solution is designed to be used by government agencies similar to the State and as such, the new solution is expected be able to integrate with minimal disruption to the integration points identified by the State in its RFP requirements as well as additional integration requirements that might be identified during the design phase. A disaster recovery plan will be tailored from GEO.works’ standard plan to meet the State’s specific needs and provided to the State during the Project.</p>

Deliverable	Highlights From the Independent Review Include Explanations of Any Significant Concerns
Implementation Plan Assessment	<p>Based on documents reviewed and interviews with VT and GEO.works, BerryDunn learned that GEO.works proposed 7-month implementation plan is preferable to the State in comparison to slower implementation approach options the State considered due to anticipated availability of key State resources during the winter months.</p> <p>GEO.works' proposal states it will use industry best practices for managing the Project, such as A Guide to the Project Management Body of Knowledge® from the Project Management Institute®, as well as use of risk/issue logs and weekly status reports. GEO.works also included its best practices for conducting solution design, testing, training, data conversion, and implementation, all of which will be further developed and tailored to address State-specific needs once the Project begins.</p>
Cost-Benefit Analysis	<p>While BerryDunn's analysis indicated that the Project will result in significant cost-savings based on the information provided in the IT ABC Form, BerryDunn cautions the State on expecting major cost savings by reducing manual labor tasks if the State does not plan to remove positions as a result of the Project, as re-assigning resources might not result in the level of savings initially predicted.</p>
Impact Analysis on Net Operating Costs	<p>There is a net annual decrease in operational costs. However, a break-even point will not occur prior to FY 2028.</p>
Analysis of Alternatives	<p>A team of business and IT representatives from VT evaluated and scored pre-defined criteria of the four bidder's proposals they received. Based on the evaluation scores, the VT representatives recommended GEO.works as the vendor for the State to contract with. GEO.works scored the highest or tied for highest score in all but one of the six rating criteria used by the State and offered a notable advantage to the State compared to other bidders in terms of experience with transportation and GIS, cost, and implementation duration. BerryDunn believes the competitive bid process was a sound approach to understanding VT's options for procuring the new system.</p>
Security Assessment	<p>Based on our assessment of the proposed security plan in GEO.works proposal and information collected during interviews with GEO.works and VT IT, BerryDunn does not have any concerns with GEO.works ability to comply with VT and federal security requirements. GEO.works will include as part of its implementation services a tailored disaster recovery plan and will notify the State within 24 hours of discovering any data breach.</p>



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

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

**Table 0.3: Project Risk Summaries and Ratings**

Risk ID	Risk Description	Risk Likelihood/Probability	Risk Impact	Overall Risk Rating
1	The feasibility of changing the Project schedule from 12 months to 7 months might not be sufficiently determined without reviewing the impact of these changes with State resources that will be involved in the Project.	High	Low	Medium
3	State resources potentially being reassigned to support flooding recovery efforts might result in planned State resources being less available to support the Project.	High	Medium	Medium
8	The State has not allocated funding for the Project.	Medium	High	Medium

### 1.4 Other Key Issues

BerryDunn did not identify any other key issues.

### 1.5 Recommendation

Based on the assessment as provided in this report, and if AOT and ADS execute the mitigation strategies as defined in Attachment 2, BerryDunn recommends the State proceed with contract negotiations.

## 1.6 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 the State made available to BerryDunn.

DocuSigned by:  
*Charlie Leadbetter*  
E0E8D90BAA8541F...

9/27/2023

**Independent Reviewer Signature**

**Date**

## 1.7 Report Acceptance

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

DocuSigned by:  
*Trisha Watson*  
BBD71B0DB03C439...

9/26/2023

**ADS Oversight Project Manager**

**Date**

DocuSigned by:  
*Denise Reilly-Hughes*  
6041A76735A7442...

10/4/2023

**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 State Statute, Title 3, Chapter 56, §3303(d).

The Independent Review Report includes:

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

This Independent Review used the following schedule:

- Week of June 20, 2023: Conduct a project planning meeting, develop a participation memo, schedule interviews, and review documentation
- Week of June 26, 2023: Conduct the first round of interviews and document initial findings, risks, and issues
- Weeks of July 10 and July 17, 2023: Conduct additional research and follow-up interviews and provide a preliminary Independent Review Report to the State
- Weeks of July 24, July 31, August 7, and August 14 2023: Collect feedback, revise, and resubmit the IR Report
- Week of August 28, 2023: Present the IR Report findings, provide an updated report for signature, and facilitate a project closeout meeting (if requested)

### 2.2 Out of Scope

No items from State Statute, Title 3, Chapter 56, §3303(d) are out of scope for this Independent Review.

## 3.0 Sources of Information

### 3.1 Independent Review Participants

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

**Table 3.1: Independent Review Participants**

Name	Employer and Title	Participation Topic(s)
Matthew Lewis	State EPMO Project Manager	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Acquisition Cost</li> <li>• Risk Assessment</li> </ul>
Karen Hango	State EPMO IT Business Analyst, ADS	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Acquisition Cost</li> <li>• Risk Assessment</li> </ul>
Jeff Demers	State Enterprise Business Analyst, ADS	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
Tom Buonomo	AOT IT Director	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
Michael Dente	ADS IT Manager, Technical Lead	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
Chary Scott	ADS Enterprise Architect	<ul style="list-style-type: none"> <li>• General Project Information</li> </ul>

Name	Employer and Title	Participation Topic(s)
		<ul style="list-style-type: none"> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
David Ladouceur	ADS Security Analyst	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
Amy Bell	AOT Project Sponsor	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
Craig Keller	AOT Tech, District Rep (D1)	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
Theresa Gilman	AOT Business Lead	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Technology Architecture and Standards Review</li> <li>• Security Assessment</li> <li>• Risk Assessment</li> </ul>
Richard Manser	CEO, GEO.works	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> <li>• Risk Assessment</li> </ul>
Lapo Cozzutto	Principal Business Analyst, GEO.works	<ul style="list-style-type: none"> <li>• General Project Information</li> <li>• Implementation Plan Review</li> </ul>

Name	Employer and Title	Participation Topic(s)
		<ul style="list-style-type: none"> <li>Risk Assessment</li> </ul>
Ricardo Kligman	Chief Technical Officer, GEO.works	<ul style="list-style-type: none"> <li>General Project Information</li> <li>Implementation Plan Review</li> <li>Risk Assessment</li> </ul>

## 3.2 Independent Review Documentation

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

**Table 3.2: Independent Review Documentation**

Document Name	Description	Source
AOT S1111 RACI Matrix.xlsx	RACI Matrix	AOT's Project SharePoint site: <a href="#">here</a> .
AOT VTrans State Highway Access and Work Permit (S1111) System RFP FINAL 11.21.22.pdf	Project's RFP	AOT's Project SharePoint site: <a href="#">here</a> .
AOT VTrans State Highway Access and Work Permit GEO.works contract 7.7.2023.docx	GEO.works Contract	AOT's Project SharePoint site: <a href="#">here</a> .
AOT VTrans State Highway Access and Work Permit Recommendation of Award.doc	Award Recommendation	AOT's Project SharePoint site: <a href="#">here</a> .
Submittal AOT VTrans State Highway Access and Work Permit System (S1111) – signed.pdf	GEO.works Proposal	AOT's Project SharePoint site: <a href="#">here</a> .
S-1111_Vendor_Proposal_Rating.xlsx	Proposal Comparisons	AOT's Project SharePoint site: <a href="#">here</a> .
S-1111 Contract Exhibit 1 Table 4 - Security Application Requirements.docx	Technical Security Requirements	AOT's Project SharePoint site: <a href="#">here</a> .
S1111_v3_06.28.2022_IT_ABC_Form.pdf	IT ABC Form	AOT's Project SharePoint site: <a href="#">here</a> .
AOT S1111 Charter.pdf	Project Charter	AOT's Project SharePoint site: <a href="#">here</a> .
Govwin.com	Acquisition Information for the Texas Department of	Govwin: <a href="#">here</a> .

Document Name	Description	Source
	Transportation's Enterprise Permitting System	
Govwin.com	Acquisition Information for the Minnesota Department of Transportation's Electronic Acquisition and Land Management System	Govwin: <a href="#">here</a> .
Govwin.com	Acquisition Information for the Florida Department of Transportation's Data Management System	Govwin: <a href="#">here</a> .
Govwin.com	Acquisition Information for the Ohio Department of Transportation's Geographic Information System Application	Govwin: <a href="#">here</a> .

## 4.0 Project Information

### 4.1 Historical Background

19 V.S.A. §1111 requires individuals or corporations to obtain highway right-of-way permits. The State seeks to implement an internally and externally facing online solution whereby these permits may be applied for, reviewed, approved, paid for, issued, and maintained. The desired solution will archive permits using AOT's OnBase system. With the completion of the Project, the State expects to free up its resources, improve the application experience, and enhance data collection and analysis capabilities.

In May 2023, ADS released an RFP on behalf of AOT to establish contracts with one or more vendors that could provide and implement an Access and Work Permit system. ADS received bids from four vendors and selected GEO.works as its preferred vendor.

### 4.2 Project Goals

The successful outcome of the Project is defined by meeting the following goals:

- Fulfill 19 V.S.A. §1111 permitting requirements
- Drive continuous improvements and innovation resulting in the modernization of systems and processes
- Reduce State staff workloads
- Improve visibility into applicants' status and email updates
- Require all appropriate data in applications to help improve data and reporting capabilities
- Provide real-time metrics and dashboards
- Improve efficiency in government and customer service
- Improve ad hoc reporting capabilities
- Provide information to help guide applicants through the electronic process

### 4.3 Project Scope

The State's scope for the Project covers the design, development, testing, training, data migration, and implementation of GEO.works' solution for highway access and work permitting.

The Project's scope is comprised of the following non-functional areas:

- Testing
- Security
- Data Compliance and Hosting



- Integration
- Workflows
- Dashboards and Reporting
- GIS Mapping
- Operational Support and Maintenance

### 4.3.1 Major Deliverables

Table 4.1 provides a summary of the deliverables, descriptions, and frequency, as articulated in the draft contract with GEO.works. BerryDunn assumes that all deliverables in the draft contract will be delivered once on the expected completion date, unless otherwise stated.

**Table 4.1: Project Deliverables and Frequency**

Deliverable	Description	Frequency
Project Kickoff Agenda and Presentation	Contractor shall hold a project kickoff meeting providing an agenda and presentation to the State.	Once – 8/8/2023
Implementation Schedule Detailing Release Plan and Sprint Schedule	Outlines how the Project will go live and includes a detailed plan for the exact tasks that need to occur, assigned to the resources that need to do them, and the time frame for when the tasks need to get done. It is the Contractor's responsibility to provide a preliminary Prioritized Product Backlog to the State.	Once – 8/28/2023
Risk and Issues Log	A log of all risks and issues (opened and closed) that could (risk) or are (issue) impacting the Project. Risks should be outlined by their impact and their potential to occur. All risks and issues should have an owner and a clearly defined response strategy.	Once – 8/28/2023
Action Items	A log of open and resolved/completed action items. Each action item should identify an owner and date needed for completion.	Once – 8/28/2023
Decision Log	A log of all decisions made over the course of the project. Decisions should have a date and name of decider.	Once – 8/28/2023
Project Status Reports	Provides an update on the Project health, accomplishments, upcoming tasks, risks, and significant issues. The Project Status Report and the Project status "color" being report shall be developed in consultation with the State business lead and State Project Manager.	Once – 8/28/2023
Initial Product Backlog	Backlog of all user stories prioritized according to their business value. The backlog is revisited and updated through the project life cycle, typically before each sprint.	Once – 8/28/2023

Deliverable	Description	Frequency
Test Plan	A description of the testing approach, participants, sequence of testing, and testing preparations.	Once – 8/28/2023
Sprint 1 Requirements Elicitation	Contractor performs necessary requirements gathering to finalize user stories and technical requirements and identify gaps between State requirements and solution capabilities for those user stories identified in the prioritized backlog for Sprint 1. It is the Contractor's responsibility to lead the State through discovery sessions. It is the Contractor's responsibility to provide a revised Prioritized Product Backlog to the State.	Once – 11/6/2023
Sprint 1 Requirements Complete (User Stories / Business Rules)	Sprint 1 user stories and business rules verified by the State and approved by the AOT.	Once – 11/6/2023
Sprint 1 Test Case Development Complete	The specific test cases and/or scripts to be tested and the testing results. Test cases must tie back to the Project requirements elicited for Sprint 1.	Once – 11/6/2023
Sprint 1 Development / Configuration Complete	Features developed to meet Sprint 1 user stories completed, deployed to test environment, tested, and verified bug-free during testing.	Once – 11/6/2023
Sprint 2 Requirements Elicitation	Contractor performs necessary requirements gathering to finalize user stories and technical requirements and identify gaps between State requirements and solution capabilities for those user stories identified in the Prioritized backlog for Sprint 2. It is the Contractor's responsibility to lead the State through discovery sessions. It is the Contractor's responsibility to provide a revised Prioritized Product Backlog to the State.	Once – 12/25/2023
Sprint 2 Requirements Complete (User Stories / Business Rules)	Sprint 2 user stories and business rules verified by the State and approved by the AOT.	Once – 12/25/2023
Sprint 2 Test Case Development Complete	The specific test cases and/or scripts to be tested and the testing results. Test cases must tie back to the Project requirements elicited for Sprint 1.	Once – 12/25/2023
Sprint 2 Development / Configuration Complete	Features developed to meet Sprint 2 user stories completed, deployed to test environment, tested, and verified bug-free during testing.	Once – 12/25/2023
Requirements Elicitation	Contractor performs necessary requirements gathering to finalize remaining user stories and technical requirements	Once – 2/5/2024

Deliverable	Description	Frequency
	and identify gaps between State requirements and solution capabilities. It is the Contractor's responsibility to lead the State through discovery sessions.	
Requirements Complete (User Stories / Business Rules)	All user stories and business rules verified by the State and approved by the AOT.	Once – 2/12/2024
Data Model Complete	Completion of an entity relationship diagram (ERD) defining relationships between tables, fields, field definitions, data types, and associated business rules.	Once – 2/12/2024
Data Dictionary Complete	Completion of a data dictionary describing all tables, fields, field definitions, data types, and associated business rules.	Once – 2/12/2024
Test Case Development Complete	The specific test cases and/or scripts to be tested and the testing results. Test cases must tie back to the Project requirements.	Once – 2/12/2024
Sprint 3 Development / Configuration Complete	Features developed to meet remaining user stories completed, deployed to test environment, tested, and verified bug-free during testing.	Once – 2/12/2024
Deployment Plan Complete	Completion of a document that describes step-by-step all activities relating to system deployment.	Once – 2/12/2024
Data Migration Plan Complete	Completion of a document that describes how existing data will be migrated.	Once – 2/5/2024
Data Mapping	Completion of filed-to-field data map including data type and value restrictions in preparation for migration.	Once – 2/5/2024
Completion of Data Migration	Data migrated and migration validated.	Once – 2/5/2024
MuleSoft API Point Integration	Confirmation of functional pass-through of data via MuleSoft integration point.	Once – 1/22/2024
OnBase Integration	Confirmation of functional pass-through of files and associated metadata from solution to OnBase via Mulesoft API.	Once – 1/22/2024
Payment Processing Service Integration	Confirmation of integration with NIC payment processing interface.	Once – 1/22/2024
Other Integrations	Any additional recommended integrations that must be included for successful implementation.	Once – 1/22/2024
Training Complete	Conduct appropriate training with supplied system guidance in the form of User Guides.	Once – 5/17/2024

Deliverable	Description	Frequency
Closure of All Defects Identified During User Acceptance Testing, Successful Completion of All Test Cases by State	State subject matter experts perform solution testing in a test (not live) environment accordance with Contractor-developed Test Plans. The Contractor shall be required to perform testing on the software prior to releasing it to the State.	Once – 3/4/2024
Final Release to Production	Conducted in accordance with State approval and with the Implementation Master Schedule and Deployment Plan.	Once – 3/18/2024
System Admin Manual Complete	A document that provides procedures for performing tasks restricted to system administrators, such as user account control, modification, or development of reports and dashboards.	Once – 3/18/2024
Maintenance and Operations (M&O) Plan Complete	The M&O Plan describes how the State will maintain the system, including provisions for user account management.	Once – 3/18/2024
End-User Documentation (Help Files and Documents) Complete	Procedural documentation for system functions targeted by user role. Includes help files and tutorials specific to the app developed.	Once – 3/18/2024
Commence Upon Expiration of 90-Day Project Implementation Warranty Period	Includes hosting, licensing, and maintenance and support for one calendar year according to the terms in the SLA.	One Year Period – 6/17/2024
Upon One-Year Anniversary of Commencement of Post-Production Support	Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.	One Year Period – 6/17/2025
Upon Two-Year Anniversary of Commencement of Post-Production Support	Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.	One Year Period – 6/17/2026
Upon Three-Year Anniversary of Commencement of Post-Production Support	Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.	One Year Period – 6/17/2027

Deliverable	Description	Frequency
Upon Four-Year Anniversary of Commencement of Post-Production Support	Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.	One Year Period – 6/17/2028

#### 4.4 Project Phases, Milestones, and Schedule

Table 4.2 summarizes the proposed project phases, dates, and phase descriptions as articulated in GEO.works' proposal.

**Table 4.2: Proposed Project Phases, Dates, and Phase Descriptions**

Phase	Expected Completion Date	Description
Kickoff	8/8/2023	Contractor shall hold a project kickoff meeting providing an agenda and presentation to the State.
Planning	8/28/2023	Contractor shall complete all planning activities contained in the contract, including, but not limited to: <ul style="list-style-type: none"> <li>• Implementation Schedule detailing Release Plan and Sprint Schedule</li> <li>• Risk and Issues Log</li> <li>• Action Items</li> <li>• Decision Log</li> <li>• Project Status Reports</li> <li>• Initial Product Backlog</li> <li>• Test Plan</li> </ul>
Configuration, Customization, Development, and Integration (Sprint 1)	11/6/2023	Contractor shall complete all Sprint 1 activities contained in the contract, including, but not limited to: <ul style="list-style-type: none"> <li>• Requirements Elicitation</li> <li>• Requirements Complete</li> <li>• Develop Test Cases</li> <li>• Develop Configuration</li> </ul>
Configuration, Customization, Development, and Integration (Sprint 2)	12/25/2023	Contractor shall complete all Sprint 2 activities contained in the contract, including, but not limited to: <ul style="list-style-type: none"> <li>• Requirements Elicitation</li> <li>• Requirements Complete</li> <li>• Develop Test Cases</li> <li>• Develop Configuration</li> </ul>

Phase	Expected Completion Date	Description
Configuration, Customization, Development, and Integration (Sprint 3)	2/12/2024	Contractor shall complete all Sprint 3 activities contained in the contract, including, but not limited to: <ul style="list-style-type: none"> <li>• Requirements Elicitation</li> <li>• Requirements Complete</li> <li>• Data Model</li> <li>• Data Dictionary</li> <li>• Test Case</li> <li>• Development Configuration</li> <li>• Deployment Plan</li> </ul>
Data Migration	12/25/2024	Contractor shall complete all Data Migration activities contained in the contract, including, but not limited to: <ul style="list-style-type: none"> <li>• Data Migration Plan</li> <li>• Data Mapping</li> <li>• Data Migration</li> </ul>
System Integration Testing	1/22/2024	Contractor shall complete all System Integration Testing activities contained in the contract, including, but not limited to: <ul style="list-style-type: none"> <li>• MuleSoft API Point Integration</li> <li>• OnBase Integration</li> <li>• Payment Processing Service Integration</li> <li>• Other Integrations</li> </ul>
User Training	5/17/2024	Conduct appropriate training with supplied system guidance in the form of User Guides.
User Acceptance Testing	3/4/2024	State subject matter experts perform solution testing in a test (not live) environment accordance with Contractor-developed Test Plans.  The Contractor shall be required to perform testing on the software prior to releasing it to the State.
Development Complete	3/18/2024	Contractor shall complete all System Integration Testing activities contained in the contract, including, but not limited to: <ul style="list-style-type: none"> <li>• Final Release to Production</li> <li>• System Admin Manual</li> <li>• M&amp;O Plan</li> <li>• End-User Documentation</li> </ul>
Year 1 Post-Production Support	6/17/2024	Commence upon expiration of 90-day project implementation warranty period. Includes Hosting, Licensing, and

Phase	Expected Completion Date	Description
		Maintenance and Support for one calendar year according to the terms in the SLA.
Year 2 Post-Production Support	6/17/2025	Upon one-year anniversary of commencement of post-production support. Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.
Year 3 Post-Production Support	6/17/2026	Upon one-year anniversary of commencement of post-production support. Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.
Year 4 Post-Production Support	6/17/2027	Upon two-year anniversary of commencement of post-production support. Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.
Year 5 Post-Production Support	6/17/2028	Upon three-year anniversary of commencement of post-production support. Includes Hosting, Licensing, and Maintenance and Support for one calendar year according to the terms in the SLA.

## 5.0 Acquisition Cost Assessment

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

**Table 0.1: Acquisition Cost Assessment**

Acquisition Costs	Cost	Comments
<b>Implementation Services</b>	\$282,745	This is the total cost of all implementation deliverables from the draft contract
<b>Software</b>	\$0	License fees will begin after completion of the implementation of the new solution
<b>ADS EPMO Project Oversight</b>	\$8,228	93.6 hours (3% full-time equivalent [FTE] over project duration) at \$88 per hour
<b>ADS EPMO Project Manager</b>	\$98,054	1114.25 hours (25% FTE over 18 months) at \$88 per hour
<b>ADS EPMO Business Analyst (BA)</b>	\$129,382	1470.25 hours at \$88 per hour
<b>ADS EA</b>	\$18,898	214.75 hours at \$88 per hour
<b>ADS Security Staff</b>	\$880	10 hours at \$88 per hour
<b>ADS IT Labor</b>	\$35,364	421 hours of ADS Quality Assurance Services at \$84 per hour
<b>Other State Labor</b>	\$0	N/A
<b>Independent Review</b>	\$24,500	This cost was obtained from the BerryDunn Independent Review contract
<b>Other Costs</b>	\$35,000	This cost is for anticipated penetration testing services
<b>Total One-Time Acquisition Costs</b>	<b>\$633,051</b>	

**1. Cost Validation:** Describe how you validated the acquisition costs.

BerryDunn validated acquisition costs during documentation review, an interview with ADS' Project Manager, and follow-up reviews with ADS via email.

**2. Cost Comparison:** How do the acquisition costs of the proposed solution compare to what others have paid for similar solutions? Will VT be paying more, less, or about the same?

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



**Table 5.2: Cost Comparison for Peer State Agencies**

State Agency	Cost / Year	Vendor
Texas Department of Transportation	\$720,986 / 2015	Accela Inc.
Minnesota Department of Transportation	\$1,998,240 / 2004	BearingPoint Inc.
Florida Department of Transportation	\$631,945 / 2019	Midwestern Software Solutions
Ohio Department of Transportation	\$319,930 / 2012	Santec Corporation

Given potential differences in solutions and services procured by other states, this analysis is intended to be informational in nature and should not serve as a basis for what the State should be paying.

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

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

## 6.0 State's Enterprise Architecture Guiding Principles

**1. State's Enterprise Architecture Guiding Principles:** Describe how the proposed solution aligns with each of the State's Enterprise Architecture Guiding Principles.

**a. Assess how well the technology solution aligns with the business direction**

This project aims to satisfy the State's Strategic Plan goals of modernizing its IT systems and processes to drive innovation, improved efficiency, and quality customer service. In particular, this project focuses on providing constituents with an improved, digital experience for applying for, tracking, and receiving 19 V.S.A. §1111 permits.

**b. Assess how well the technology solution maximizes benefits for the State**

Primary benefits the solution provides the State will be those articulated in the IT ABC Form and the RFP, including:

- **Customer Service:** The new solution will provide constituents with an easier-to-use process and interface for obtaining permits. Applicants will have easily accessible information on the status of their application, email notifications, and online payment options, and receive answers to questions regarding the application process.
- **Risk Reduction:** The new solution will reduce risk to the State by requiring all mandatory fields be completed.

**c. Assess how well the information architecture of the technology solution adheres to the principle of Information is an Asset**

The solution GEO.works offers will allow the State to access all data the system stores and collects. GEO.works will develop a data mart where the State's data will be stored and accessible. With this data, the State will be able to have more accurate data, as most data entry processes that are currently manual will be automated in the new solution. This in turn will provide more comprehensive data that can be used to help the State develop GIS data layers.

**d. Assess if the technology solution will optimize process**

The solution GEO.works offers is designed specifically to provide municipal and state governments with a web-based, transportation right-of-way management system. Based on BerryDunn's review of GEO.works' proposal and interviews with GEO.works and State project resources, the new solution will optimize the State's processes by providing a GIS-based interface, digitalize and structure data received from applications, and automate and monitor application workflows.

**e. Assess how well the technology solution supports resilience-driven security**

BerryDunn learned during its interview with GEO.works that GEO.works is ISO certified regarding data security and has never experienced a data breach. To receive and maintain this certification, GEO.works uses third-party security consultants to test the security of the solution, including Distributed Denial of Service (DDoS) testing. The State's data will be hosted on its own secure instance.

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

The proposed solution is a cloud-based, commercial off-the-shelf (COTS) solution that can be configured to meet specific business and technical needs. BerryDunn has learned via document review and its interview with GEO.works that the new solution will be designed to easily integrate with software solutions that are commonly used by state and local government peer agencies, such as payment processing systems and document repositories. Based on conversations with ADS, the amount of effort required from the State to sustain the solution should be minimal given the solution will be hosted in a cloud environment.

- 3. How does the solution comply with the ADS Strategic Goals enumerated in the Agency of Digital Services Strategic Plan 2022 – 2026?**

The GEO.works solution complies with the "Vermont Experience" ADS strategic goal as enumerated in the ADS Strategic Plan. An electronic option to submit and monitor 19 V.S.A. §1111 permitting applications will help build a closer online relationship with Vermonters, allow the partial transitioning of outdated paper processes (while still allowing Vermonters who prefer the paper application process to use that process) and streamline services by increasing online interactions when compared to the current process.

- 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>.

BerryDunn learned during interviews with Project Management and GEO.works as well as reviewing GEO.works' proposal and draft contract that the solution will adhere to all federal and State accessibility requirements, including Section 508 of the Rehabilitation Act.

- 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?

Based on review of the draft contract and BerryDunn's interview with GEO.works, a disaster recovery plan will be tailored from GEO.works' standard plan to meet the State's specific needs and provided to the State during the Project. GEO.works is familiar with working with state transportation agencies and has developed similar plans accordingly. It is BerryDunn's belief that the Disaster Recovery Plan will meet industry best practices and technical standards.

GEO.works' use of a cloud-based system helps prevent loss of data in the instance of a disaster. With a cloud-based approach, GEO.works will duplicate and store a high level of data in case of the need for post-disaster recovery. GEO.works works with customers to identify which environment incident should be recovered and applies this change to the customers' environments quickly. The State will receive a one-hour blackout recovery time in the instance of a disaster scenario.

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

GEO.works retains all data within its solution in Azure SQL, which the State will have complete access to, including for querying and recovery purposes. GEO.works uses Azure SQL for continual backup of all its customers' environments and backs up its server every 12 hours.

- 7. SLA:** What are the post-implementation services and service levels required by the State? Is the vendor-proposed SLA adequate to meet these needs, in your judgment?

The draft SLA is included as an attachment in the draft contract. In BerryDunn's review of draft contract and in the firm's interview with GEO.works, GEO.works confirmed that its SLAs will be ongoing through June 2028 and will satisfy all requested services listed in the RFP. The draft SLA contains information on how GEO.works will work with the State to:

- Address post-go-live issues.
- Provide support for and resolve issues.
- Resolve defects/bugs according to their defined severity level.
- Address questions from the State and/or other user groups during State business hours.
- Categorize and resolve user and technical support requests.
- Manage change requests and releases.
- Maintain application availability.
- Report on KPIs.

The draft SLA contains rules for how service credits will be provided to the State if GEO.works is unable to meet the service level availability agreed upon with the State. It is BerryDunn's expectation that GEO.works' proposed SLA will be adequate to meet the State's needs.

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

The new system is expected to interface with several internal and external systems. While the State has identified during user-story development that the new solution will need to integrate with OnBase, OCTA, MuleSoft, and NIC, the State and GEO.works expect additional integrations will be identified during the design phase. GEO.works has agreed in the draft contract to support up to a total of six integrations with the new solutions. All data the new system uses can be queried and exported from the Azure SQL database by the State for easy consumption.

## 7.0 Assessment of Implementation Plan

### 1. The reality of the implementation timetable.

The draft contract included an implementation timetable, which has since been updated to a more feasible start date as well as consolidated from an approximately twelve-month implementation window to seven months. Below is the current planned implementation schedule:

**Table 7.1: Implementation Timetable by Phase/Milestone**

Key Project Phase/Milestone	Start	Completion	Duration (Business Days)
Kickoff	8/8/2023	8/8/2023	1 day
Planning	8/9/2023	8/28/2023	14 days
Configuration, Customization, Development, and Integration	8/29/2023	2/12/2024	120 days
Data Migration	11/28/2023	2/5/2024	50 days
System Integration Testing	8/29/2023	1/22/2024	105 days
User Acceptance Testing	2/13/2024	3/4/2024	15 days
User Training	3/5/2024	5/17/2024	54 days
Acceptance	3/5/2024	3/18/2024	10 days

BerryDunn identified risks that could impact the feasibility of the new seven-month implementation timeline. More detail on these is provided in Risk 1 in Attachment 2 – Risk Register.

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

BerryDunn learned during its interview with Project Leadership and Project Management resources that staff are excited about the new system and the anticipated benefits, as it will provide improved functionality that will allow State resources to better analyze and report on permitting applications. BerryDunn also learned that the delivery of these benefits has been discussed and expected for multiple years and are positively anticipated. Based on interviews, the firm believes the business case and objectives of the Project are well understood and supported among Project resources.

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

**a. Project Management**

In its proposal, GEO.works notes that its project management approach will be consistent with *A Guide to the Project Management Body of Knowledge*® from the Project Management Institute®. GEO.works will provide regular updates to the Project plan to the State for approval. GEO.works will connect daily with the State to discuss progress and issues, along with weekly status reporting sessions. The project management deliverables (e.g., Project Management Plan; Risk, Issue, and Decision Logs; Project Status Reports) in the draft contract appear sufficient for holding GEO.works accountable in this area.

**b. Training**

GEO.works' training phase focuses on preparing users to use the system through a variety of training methods, including classroom training, computer-based training, on-the-job training, and peer learning. GEO.works stated as an assumption in its proposal that the State will provide a training manager who will lead training activities (please see Risk 6 in Attachment 2 regarding the Project currently not having a Testing Lead). GEO.works will agree upon expectations with the State on how to develop system documentation, training materials, and tutorials when drafting the Training Plan (please see Risk 7 in Attachment 2 regarding BerryDunn's concerns over the level of agreed-upon detail for the training services GEO.works will provide the State).

**c. Testing**

In its proposal, GEO.works notes its testing activities will include unit testing, functional testing, system testing, regression testing, integration testing, acceptance testing, performance testing, load/stress testing, and end-to-end testing. During the Project, GEO.works will prepare the Test Plan, building out a testing environment, and setting up the test environment software and data to validate that the new solution can meet all the user story requirements the State developed. The draft contract includes testing deliverables (e.g., Test Plan, Test Case Development, Internal Testing, System Integration Testing, and User Acceptance Testing) that should be sufficient for holding GEO.works accountable in this area.

**d. Design**

GEO.works' proposal schedules for requirements elicitation to occur over a four-week period, during which GEO.works will lead sessions to finalize the State's user stories, identify technical requirement gaps, develop a mockup of the new solution's user interface, develop tasks for newly identified requirements, and identify test testing and quality assurance results that are needed to validate the new requirements.

#### e. Conversion

GEO.works' proposed implementation methodology includes the following steps as part of data conversion:

- Analysis of existing legacy system data
- Data normalization and dictionary coding
- Geocoding of existing data (if possible)
- Configuration of GEO.works migration tool to convert legacy data into a format managed by GEO.works
- Publication of testing environment
- Test planning with AOT to evaluate data migration for missing information or improper conversion
- Configuration of migration tool modification and publication on the testing environment
- Testing plan with AOT to reevaluation test migration for missing information or improper conversion
- SQL Procedure modification planning of final data migration on live environment
- Publication of live environment

The draft contract contains deliverables (e.g., Data Migration Plan, Data Mapping, Data Migration) that should be sufficient for holding GEO.works accountable in this area.

#### f. Implementation Planning

GEO.works' approach to implementation planning includes developing and testing a cutover plan including planned tasks and results, scheduling training for resources involved in providing hypercare support, establishing logs for bugs/defects and user support requests and methods for escalation, and plans to discuss potential rollback of the new solution if needed.

#### g. Implementation

In its proposal, GEO.works described that its implementation methodology is based on *A Guide to the Project Management Body of Knowledge*® from the Project Management Institute®, along with Agile-related tools and methodologies, including Scrum, extreme programming, the Agile Manifesto, and the 12 Agile Principles. GEO.works will use a hybridized Agile approach, leveraging epics, user stories, and features to manage and validate requirements provided by the State. These



requirements will be managed using Jira®, and GEO.works states its expectations for State resources to be provided to support the Project.

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

Based on BerryDunn's interactions with the Project Manager during this Independent Review, the firm has confidence that the individual has the skills and experience necessary for the role.

## 8.0 Cost Analysis and Model for Benefit Analysis

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

BerryDunn evaluated the costs the State provided in the IT ABC Form and the draft contract. BerryDunn discussed the benefits of the Project during interviews with the State and incorporated that information in this report.

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

The cost-benefit analysis was performed using the following assumptions:

- There is a five-year life cycle, with implementation activities beginning in Fiscal Year (FY) 2024
- The new solution will be operational in FY 2024, but maintenance and licensing payments will begin in FY 2025
- All implementation and payments to GEO.works will be made according to the draft contract
- State labor costs are for implementation only, and not for time spent during previous Project phases before contract execution (e.g., exploration, planning, contracting)

- 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 Project will pay 100% of implementation and operating costs with State funds, which are being secured at the time of this report being drafted (please see Risk 8 in Attachment 2 regarding the Project not having secured funding).

- 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*

- Implementation services: \$282,745 (one-time cost)
- Maintenance, support, hardware, hosting, and licenses costs include:
  - Annual GEO.works maintenance fees: \$99,563.89 (four-year cost)
  - Annual State maintenance costs: \$20,160.00 (four-year cost)
  - Annual hosting services: \$93,725.82 (four-year cost)

- Annual licensing fees: \$212,252.35 (four-year cost)
- State labor costs include:
  - ADS EPMO Project Oversight: \$8,228
  - ADS EPMO Project Manager: \$98,054
  - ADS EPMO BA: \$129,382
  - ADS EA: \$18,889
  - ADS Security Staff: \$880
  - Other ADS Labor: \$35,364

### *Tangible Benefits*

Based on the State's assumptions in the IT ABC Form, the State will eliminate \$195,560 in labor costs per year by improving efficiency and automating processes as a result of implementing the new solution. The State's assumptions for these labor and related overhead savings are as follows:

- A 40% reduction in the workload for a Permitting Administrative Assistant
- A 10% reduction in the workload for each of five Tech IV Permitting Services Coordinators
- A 5% reduction in the workload for each of eight Tech IV District Technicians
- A 5% reduction in the workload for each of three Tech V Utility Coordinators

BerryDunn is unable to assess whether these assumptions are reasonable. While the State is anticipating a decrease in required labor, the State does not have plans to omit any State resource positions because of the Project.

- 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 and benefits for implementing a comprehensive benefits administrative system include:

- Increased work proficiency by reducing manual processes.
- Increased transparency and reporting for applicants by allowing email and website application status updates.
- Improved accessibility for applicants who prefer to apply electronically.
- Improved reporting and analytics capabilities to allow State staff to make informed permitting decisions.

- 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.

BerryDunn's analysis is that, based on the State's labor-saving assumptions, the tangible benefits outweigh the costs. The Project will also deliver on intangible benefits that closely align with the State's strategic initiatives and will help enable AOT better comply with 19 V.S.A §11111.

- 7. IT ABC Form Review:** Review the IT ABC Form (Business Case/Cost Analysis) created by the State 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 draft IT ABC form largely reflects BerryDunn's findings, and BerryDunn used it to inform the financial analysis. However, BerryDunn recommends the Project update the "NEW IT Activity Cost Supply" table within the IT ABC form to reflect the planned start of the Project occurring in FY 2024 instead of FY 2022.

BerryDunn understands changes were being made to the IT ABC Form at the time of this report and recommends the State finalize once the contract with GEO.works has been updated before it is routed for review and approval.

## 9.0 Analysis of Alternatives

### 1. Provide a brief analysis of alternative solutions that were deemed financially unfeasible.

BerryDunn has learned from documentation reviews that four vendors submitted proposals for this Project.

### 2. Provide a brief analysis of alternative technical solutions that were deemed unsustainable.

BerryDunn has learned from documentation reviews that alternative technical solution analysis had previously been conducted prior to the requirements gathering and RFP drafting process.

### 3. Provide a brief analysis of alternative technical solutions where the costs for operations and maintenance were unfeasible.

The evaluation team reviewed and scored various aspects of the vendors' proposals. Table 9.1 below shows the evaluated vendors' weighted scores with totals.

**Table 9.1: Summary of Proposal Scores**

Proposal Evaluation				
Rating Criteria	Brite Systems, Inc.	Delasoft, Inc.	GEO.works	Tech Mahindra Ltd.
Vendor Profile: Experience, References	68.33	15.00	75.83	73.33
Vendor Profile: Financial Strength	32.50	3.33	26.67	34.17
Vendor Proposal/Solution and Ability to Meet the State's Functional and Non-Functional Requirements	90.63	18.75	97.92	93.75
Professional Implementation Services: Project Management and Technical Services	52.50	12.50	56.25	47.50
Maintenance and Support Services	35.83	7.50	35.83	32.08
Pricing, Includes Licensing, Maintenance, and Warranty	47.50	26.67	80.83	58.33
<b>Total</b>	<b>327.29</b>	<b>83.75</b>	<b>373.33</b>	<b>339.17</b>

Four (4) bids were received, from Brite Systems, Inc.; Delasoft, Inc.; GEO.works; and Tech Mahindra Ltd. The evaluation team reviewed proposals and rejected the proposal from Delasoft, as it was incomplete and scored the remaining three.

After initial review of bids, the evaluation team requested a demonstration to support decision-making from the three companies that received scored responses that appeared to be viable options: Brite Systems, GEO.works, and Tech Mahindra.

The GEO.works proposal received the highest cumulative score due to the company's superior offering relating to geospatial data collection in line with the needs of the business, in addition to meeting all ADS needs and requirements and providing the most competitive implementation and total life cycle cost to the State. The subsequent demonstration by the three scored bidders validated the scoring.

The evaluation team recommends the State pursue a contract with GEO.works for the State Highway Access and Work Permit solution.

BerryDunn believes the competitive bid process (e.g., proposal evaluations and vendor demonstrations) was a sound approach to understanding the State's options for procuring a new solution and applicable services.

## 10.0 Impact on Analysis of Net Operating Costs

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

Table 10.1, on the following page, illustrates the impact on net operating costs over five years. Please note, BerryDunn used the IT ABC form that was approved at the time of our fact-finding activities and might not reflect the currently anticipated costs based on changes made to the Project's estimates since. Later versions of the IT ABC form and/or the draft contract with GEO.works might have more current information.

Table 10.1: Life Cycle Costs by Year

Impact on Operating Costs	FY24	FY25	FY26	FY27	FY28	5-Year Totals
<b>Professional Services (Non-Software Costs)</b>						
Current Costs	\$0	\$0	\$0	\$0	\$0	\$0
Projected Costs	\$342,245	\$0	\$0	\$0	\$0	\$342,245
<b>Maintenance, Support, Hardware, Hosting, and License Costs</b>						
Current Costs	\$200,560	\$200,560	\$200,560	\$200,560	\$200,560	\$1,002,800
Projected Costs	\$200,560	\$122,492	\$122,492	\$122,492	\$122,492	\$690,528
<b>Other Costs (State Labor)</b>						
Current Costs	\$0	\$0	\$0	\$0	\$0	\$0
Projected Costs	\$290,806	\$5,040	\$5,040	\$5,040	\$5,040	\$310,966
<b>Baseline Current Cost</b>	\$200,560	\$200,560	\$200,560	\$200,560	\$200,560	\$1,002,800
<b>Baseline Projected Costs</b>	\$833,611	\$127,532	\$127,532	\$127,532	\$127,532	\$1,343,738.52
<b>Cumulative Current Costs</b>	\$200,560	\$401,120	\$601,680	\$802,240	\$1,002,800	\$1,002,800
<b>Cumulative Projected Costs</b>	\$833,611	\$961,143	\$1,088,675	\$1,216,207	\$1,343,739	\$1,343,739
<b>Net Impact on Professional Services</b>	(\$342,245)	\$0	\$0	\$0	\$0	(\$342,245)
<b>Net Impact on Software Acquisition, Maintenance, Support, Licenses Costs, and Other</b>	(\$290,806)	\$73,028	\$73,028	\$73,028	\$73,028	\$1,306
<b>Net Impact on Operating Costs:</b>	(\$633,051)	\$73,028	\$73,028	\$73,028	\$73,028	(\$340,939)



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

BerryDunn conducted an impact analysis on net operating costs using the costs validated and verified in the acquisition cost assessment and cost-benefit analysis sections in this report. The following assumption was used during this analysis:

- There is a five-year life cycle, with implementation activities occurring during the first year (FY 2024).

The calculations used in performing the analysis include the following:

- The projected costs for FY 2024 Professional Services (Non-Software Costs) include:
  - GEO.works' Implementation Services: \$282,745
  - Independent Review Services: \$24,500
- The projected cost for Other Costs (State Labor) includes the following for each year of implementation (i.e., FY 2024 and FY 2025):
  - ADS EPMO Project Oversight: \$8,228
  - ADS EPMO Project Manager: \$98,054
  - ADS EPMO BA: \$129,382
  - ADS EA: \$18,889
  - ADS Security Staff: \$880
  - Other ADS Labor: \$35,364
- The projected annual costs from FY 2025 through FY 2028 for Maintenance, Support, Hardware, Hosting, and Licenses Costs include:
  - GEO.works' Maintenance Services: \$25,528.42
  - ADS's Solution Maintenance Costs: \$5,040
  - GEO.works' Licensing Fees: \$72,931.94
  - GEO.works' Hosting Fees: \$24,031.52

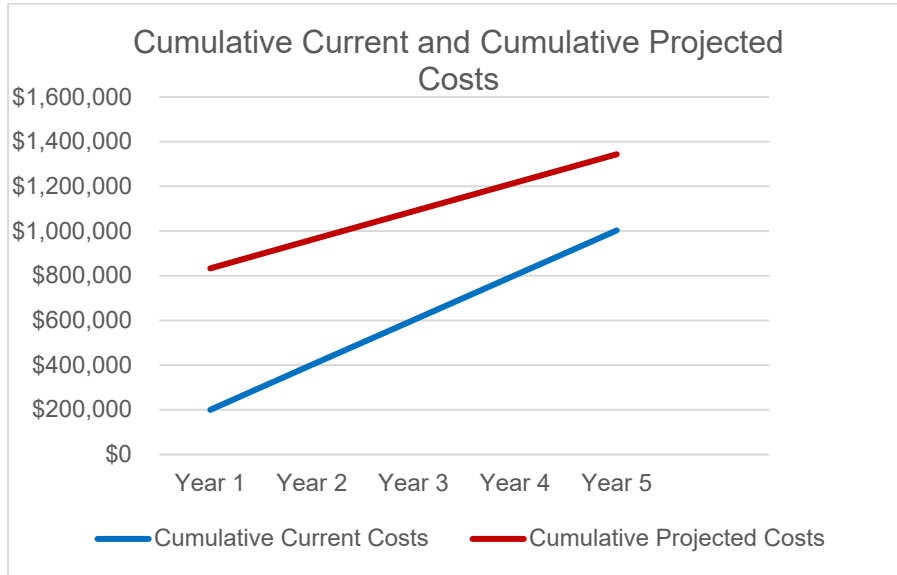
**3. Explain any net operating increases that will be covered by federal funding. Will this funding cover the entire life cycle? If not, please provide the breakouts by year.**

100% of all net operating costs will be covered by State funding.

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

Based on the costs in the draft contract and IT ABC form, there is not a break-even point prior to the end of FY 2028, as shown in Figure 10.1 below.

**Figure 10.1: Baseline Current and Baseline Projected Costs**



## 11.0 Security Assessment

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

GEO.works will control information security. The company has the ability to continuously provide reports on the status of the deployment environment. GEO.works is ISO certified regarding data breaches and is certified to clear procedures as a Software as a Service (SaaS) provider. GEO.works is able to grant view-only access to the State for any of its data. The State's solution will be deployed on its own instance, and the State can pull any type of custom reports it would like. GEO.works uses security consultants and internal staff to test security and DOS attacks.

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

No personal data is in use for the proposed system. Most data is not high-risk (GEO.works does not typically work with high-risk data). GEO.works will review each data field and decide whether to use the field and whether the field is sensitive.

### 3. What is the vendor's breach notification and incident response process?

The draft contract states that in the event of any actual security breach or reasonable belief of an actual security breach GEO.works either suffers or learns of that either compromises or could compromise State data (a "security breach"), GEO.works shall notify the State within 24 hours of its discovery.

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

GEO.works' proposal states that the solutions will comply with Federal Information Security Management Act (FISMA) of 2002. GEO.works implements strong security controls and policies, such as encryption and access controls, and regularly tests and monitors the security of the system. By being ISO 27001 certified, GEO.works has developed and implemented incident response plans and procedures to help ensure that the system is able to recover from any security breaches or incidents.

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

GEO.works' solution uses Azure Storage to store and encrypt files via 256-bit Advanced Encryption Standard (AES) encryption. While transferring data from the new solution for data warehousing, only encrypted channels will be used. In its proposal, GEO.works confirmed its solution will support the State's Secure Socket Layer (SSL) encryption needs.

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

GEO.works' proposal states that database security audit is performed via "Microsoft Defender for Azure SQL." Vulnerability assessment includes actionable steps to resolve

security issues and enhance the database. Risk assessment practices include but are not limited to vulnerability assessment and pen testing security. Vulnerability assessment and pen test have been developed for ISO certification.

**7. How does the vendor determine their compliance model and how is their compliance assessed?**

The RFP identifies a non-functional requirement for the vendor to conduct an annual risk assessment of ePHI environments against the HIPAA controls to ensure compliance and provide findings to Vermont. GEO.works does not anticipate handling any data covered by this law. The GEO.works proposal states that GEO.works conducts potential risks and vulnerabilities to the confidentiality and integrity of the data every year. This includes identifying and documenting potential risks and vulnerabilities, assessing the likelihood and impact of those risks, determining the level of risk, and implementing appropriate controls to mitigate those risks.

## 12.0 Risk Assessment and Risk Register

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

## Attachment 1 – Life Cycle Cost-Benefit Analysis

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

**Table A.1: Life Cycle Analysis**

Description	Implementation	Maintenance	Maintenance	Maintenance	Maintenance	Total
	FY24	FY25	FY26	FY27	FY28	
<b>Maintenance, Support, Hardware, Hosting, and License Costs</b>						
Enterprise Application – License Fees	\$0.00	\$72,931.94	\$72,931.94	\$72,931.94	\$72,931.94	<b>\$291,727.76</b>
Operating System – Hosting	\$0.00	\$24,031.52	\$24,031.52	\$24,031.52	\$24,031.52	<b>\$96,126.08</b>
Support and Maintenance	\$0.00	\$25,528.42	\$25,528.42	\$25,528.42	\$25,528.42	<b>\$102,113.68</b>
<b>Other Professional Services</b>						
Vendor Implementation/ Installation/ Configuration	\$282,745.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$282,745.00</b>
Implementation	\$35,000.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$35,000.00</b>
Independent Review	\$24,500.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$24,500.00</b>
<b>State Labor Costs</b>						
ADS EPMO Project Oversight	\$8,228.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$8,228.00</b>
ADS EPMO Project Manager	\$98,054.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$98,054.00</b>
ADS EPMO BA	\$129,382.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$129,382.00</b>
ADS EA	\$18,898.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$18,898.00</b>
ADS Security Staff	\$880.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$880.00</b>
Other ADS Labor	\$35,364.00	\$5,040.00	\$5,040.00	\$5,040.00	\$5,040.00	<b>\$55,524.00</b>
Other Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$0.00</b>
<b>Operating Costs</b>	\$0.00	\$127,531.88	\$127,531.88	\$127,531.88	\$127,531.88	<b>\$510,127.52</b>
<b>Total Implementation</b>	<b>\$633,051.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$633,051.00</b>

Description	Implementation	Maintenance	Maintenance	Maintenance	Maintenance	Total
	FY24	FY25	FY26	FY27	FY28	
<b>Total Life Cycle Costs to be Paid with State Funds</b>	<b>\$633,051.00</b>	<b>\$127,531.88</b>	<b>\$127,531.88</b>	<b>\$127,531.88</b>	<b>\$127,531.88</b>	<b>\$1,143,178.52</b>
<b>Total Life Cycle Costs to be Paid with Federal Funds</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>



## Attachment 2 – Risk Register

Data Element	Description
<b>Risk #</b>	Sequential number assigned to a risk to be used when referring to the risk.
<b>Risk Likelihood/ Probability, Impact, Overall Rating</b>	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.
<b>Source of Risk</b>	Source of the risk, which might be interviews with the State, project documentation review, or vendor interview.
<b>Risk Description</b>	Brief narrative description of the identified risk.
<b>State’s Planned Risk Strategy</b>	Strategy the State plans to take to address the risk. Assigned values are Avoid, Mitigate, Transfer, or Accept.
<b>State’s Planned Risk Response</b>	Risk response the State plans to adopt based on discussions between State staff and BerryDunn reviewers.
<b>Timing of Risk Response</b>	Planned timing for carrying out the risk response, which might be prior to contract execution or subsequent to contract execution.
<b>Reviewer’s Assessment of State’s Planned Response</b>	Indication of whether BerryDunn reviewers think the planned response is adequate and appropriate, and recommendations if not.

Risk Rating Criteria			
Scale	Low	Medium	High
<b>Impact</b>	Condition does not impact quality and is unlikely to impact achievement of project objectives. -OR- Condition might be mitigated through adjustment in effort to avoid impacts to project objectives.	Condition might be mitigated through reduction or deferral of baseline scope to avoid impact to quality and/or moving date of key milestone. -OR- Condition might be mitigated by focused corrective actions to help ensure achievement of project objectives.	Condition might require acceptance of agreed-upon modifications to avoid impact(s) to key project objectives. -OR- Conditions might introduce risk to project scope, quality of work products, system solution, and/or user experience.
<b>Likelihood</b>	1 – 39%	40 – 89%	90 – 100%

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
1	High	Low	Medium
<b>Source of Risk:</b> Interview with Project Management and Project Leadership			
<b>Risk Description:</b> The feasibility of changing the Project schedule from 12 months to 7 months might not be sufficiently determined without reviewing the impact of these changes with State resources that will be involved in the Project.			
<p>During contract negotiations, the State and GEO.works condensed the planned Project schedule from 12 months to 7 months to conduct key activities when more AOT resources are available (i.e., during winter months to help avoid busy operational periods that constrain State resources). This will also condense the hours required from State resources to support the Project into a shorter period.</p> <p>BerryDunn learned during its interview with Project Leadership and Project Management that these changes had not yet been discussed and agreed upon with Project resources in order to help ensure their availability in accordance with and feasibility of the new Project schedule. It will be important to discuss and agree upon these changes with Project resources prior to contract signature in order to help avoid Project resources not being available at the anticipated times and resulting project delays, quality issues, and/or change requests.</p>			
<b>State's Planned Risk Strategy: Mitigation</b>			
<p><b>State's Planned Risk Response:</b> The State's key interested parties have previously been involved in developing the requirements for the Project as part of the RFP drafting process. Interested parties prior to releasing the RFP generally agreed that an implementation timeline closer to 6 months would be the most feasible duration as this would allow for resources to be more closely involved during periods in which they are less busy with operational tasks.</p> <p>The State will agree upon these changes with Project resources prior to contract signature in order to help avoid Project resources not being available at the anticipated times and resulting project delays, quality issues, and/or change requests.</p>			
<b>Timing of Risk Response:</b> Prior to contract signature			
<b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response			
<b>Updates Discussed During Presentation of Findings:</b> When the State went out to RFP, GEO.works proposed either 12 or 6 months. During contract negotiations, GEO.works adjusted the timeline to 7 months after additional review of the requirements. This change is beneficial to the State as project activities will happen during the winter when staff are more available to participate in the project.			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
2	Medium	Medium	Medium
<b>Source of Risk:</b> Interview with Project Leadership and Project Management			
<b>Risk Description:</b> The State has not yet made plans to help define which Standard Operating Procedures (SOPs) will need to be updated and how they will be updated, which might prevent Project resources from being unavailable or State resources from effectively/consistently executing business processes.			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
2	Medium	Medium	Medium
<p>BerryDunn learned during its interview with the Project Leadership and Project Management that the Project has not yet made plans to help define which SOPs will need to be updated to reflect new business processes (resulting from the new solution), roles and responsibilities for who will make updates to SOPs, and when the SOPs will be updated. Without plans to determine this information prior to contract signature, the State might not have an accurate assessment of the amount of work these updates will require and whether State resources will be available to make these updates, who might have other Project and operational tasks to perform during this timeframe. It will be important to determine the level of effort required and resource expectations involved with updating SOPs to help avoid assigned Project resources not being available and State resources not effectively/consistently executing business processes that involve steps that occur both within and outside of the new solution.</p>			
<p><b>State's Planned Risk Strategy: Mitigate</b></p>			
<p><b>State's Planned Risk Response:</b> The State will identify the staff responsible for maintaining the SOPs relating to S-1111 permitting processes and procedures. The State will incorporate these updating resources and tasks within the Project Schedule and conduct working sessions with Project resources to stay informed on Project activities and how the updating efforts relate to the overall Project.</p>			
<p><b>Timing of Risk Response:</b> The State will identify resources responsible for updating SOPs during Project Kickoff to help avoid assigned Project resources not being available and State resources not effectively/consistently executing business processes that involve steps that occur both within and outside of the new solution. These resources will then be responsible for updating the SOPs during User Acceptance Testing.</p>			
<p><b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response</p>			
<p><b>Updates Discussed During Presentation of Findings:</b> No Updates</p>			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
3	High	Medium	Medium
<p><b>Source of Risk:</b> Interview with Project Leadership and Project Management</p>			
<p><b>Risk Description: State resources potentially being reassigned to support flooding recovery efforts might result in planned State resources being less available to support the Project.</b></p> <p>BerryDunn learned during its interview with Project Leadership and Project Management that the State has recently experienced historic flooding, which might result in planned Project resources being assigned to support recovery efforts. If this were to occur, these State resources might be less available to execute the planned Project schedule which might result in Project schedule delays and/or changes requests. It will be important for the State to attempt to anticipate how Project resources' availability to support the Project might be impacted by recent flooding and planned recovery efforts prior to contract signature, to help assess the availability of State resourcing and the feasibility of the Project schedule.</p>			
<p><b>State's Planned Risk Strategy:</b> Accept</p>			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
3	High	Medium	Medium
<b>State's Planned Risk Response:</b> The State will extend the Project duration if needed as a result of State resources being unavailable for the originally planned amount of effort as a result of prioritizing flooding-related disaster recovery efforts.			
<b>Timing of Risk Response:</b> The State anticipated having a better understanding of to what extent State resources will be reallocated to support flood recovery efforts.			
<b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response.			
<b>Updates Discussed During Presentation of Findings:</b> To date, the Project has not experienced any impact as a result of this risk, but will continue to monitor the situation.			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
4	Medium	Medium	Medium
<b>Source of Risk:</b> Interview with Project Leadership and Project Management			
<b>Risk Description: Not having a plan to increase State resources available to provide helpdesk support directly after the new solution is implemented and/or during any key permit due dates might result in the State not being able to effectively address all applicant support requests.</b> The State currently provides applicant support via phone primarily through a single State resource. The State might need substantially more support for applicants directly after the new solution is implemented and/or during any key permit due dates, as applicants will be using an electronic interface for applying for a permit for the first time. While the new solution will have a user support wizard to guide applications through the new solution, the State might experience a high volume of requests for support to navigate the application process from the State. BerryDunn learned through its interview with Project Leadership and Project Management as well as its document review that the Project does not appear to have plans to change its approach to providing helpdesk support. Without temporarily increasing resources involved in providing helpdesk support directly after the new solution is implemented and/or during any key permit due dates, the Project might not be able to effectively address all applicant support requests. Not being able to support all applicant support requests could result in long wait times for and poor quality of applicant support, as well as decreased adoption of the new solution among applicants.			
<b>State's Planned Risk Strategy:</b> Accept and Mitigate			
<b>State's Planned Risk Response:</b> The State will not be able to allocate additional resources to provide support during the hypercare period. The State's testing process will include representatives from individuals not familiar with the application process to help ensure the usability and accessibility of the solution and user support wizard. The State's training approach will include common applicants to help educate them on the process for applying for S-1111 applications online. The State will use these measures to help prevent long wait times and poor quality of applicant support, as well as decreased adoption of the new solution among applicants once the new solution is live.			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
4	Medium	Medium	Medium
<b>Timing of Risk Response:</b> These measures have already been incorporated into the State's Project Plan.			
<b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response			
<b>Updates Discussed During Presentation of Findings:</b> No changes in planned response from the State. AOT and ADS will be responsible for OCM activities.			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
5	Low	Medium	Low
<b>Source of Risk:</b> Interview with GEO.works			
<b>Risk Description: Not receiving all needed info in a timely manner from each of the State's 3<sup>rd</sup> party software vendors (that will integrate with the new solution) might result in the Project being unable to complete integration activities.</b>			
<p>The State has identified software integrations that will be required for the new solution, with an understanding that additional integrations might be identified during the Project. To complete these integrations, either the State or GEO.works will need to contact the vendors of each software system that will integrate with the new solution and gather required information needed to complete the integration. BerryDunn learned in its interview with GEO.works that this is a common challenge on their implementation projects, as they are dependent upon 3<sup>rd</sup> party software vendors to provide this information in a timely manner. While GEO.works' proposal recommends outreach tasks beginning early in the Project because of this risk, BerryDunn did not find mention in the Project Plan or other Project files for how these outreach tasks will be planned or executed and how mitigation plans will be implemented if the Project does not receive this information when needed. Without these plans, the Project might not be able to complete integration activities which might result in Project delays.</p>			
<b>State's Planned Risk Strategy:</b> Mitigate			
<b>State's Planned Risk Response:</b> The State is working to identify SMEs that are familiar with integrating each software solution that will be integrating with the new solution and incorporate them into the Project team to help support integration efforts as planned in the Project Schedule.			
<b>Timing of Risk Response:</b> Prior to contract signature.			
<b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response.			
<b>Updates Discussed During Presentation of Findings:</b> No additional discussion or changes.			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
6	Low	Low	Low
<b>Source of Risk:</b> Interview with Project Leadership and Project Management			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
6	Low	Low	Low
<p><b>Risk Description: The State does not have a documented approach for identifying a Project Test Lead prior to the start of test activities, which might result in Project schedule delays, quality issues, and/or increased responsibilities for current Project resources.</b></p> <p>The Project has lost its previously assigned testing lead and has not yet identified a replacement. While this risk has been logged in the Project's Risk Register, there is not a detailed plan for how to mitigate or remediate this resourcing gap. If a Project Test Lead is not identified prior to the start of Project test planning activities, this might result in Project schedule delays, testing-related quality issues, and/or increased testing-related responsibilities of current Project resources.</p>			
<p><b>State's Planned Risk Strategy:</b> Accept and Mitigate</p>			
<p><b>State's Planned Risk Response:</b> The State will not fill the Project Test Lead role with another resource with a comparable level of testing expertise. Instead, the Project will use a business analyst to help make sure requirements from user stories are being satisfied to help ensure the new solution is fit for purpose.</p>			
<p><b>Timing of Risk Response:</b> Prior to completion of the Planning phase.</p>			
<p><b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response</p>			
<p><b>Updates Discussed During Presentation of Findings:</b> No additional discussion or changes.</p>			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
7	Low	Medium	Low
<p><b>Source of Risk:</b> Interview with Project Leadership and Project Management</p>			
<p><b>Risk Description: The State and GEO.works might have differing expectations regarding how GEO.works will provide training services and materials, which might result in disagreement on or requests to change the scope of work, Project schedule delays, or a lack of correct use of the new solution.</b></p> <p>Based on BerryDunn's review of the draft contract, it appears the State and GEO.works' planned approach for developing details on how training will be completed will be determined when GEO.works develops the Training Plan for the State to approve. However, BerryDunn believes there is potential risk that GEO.works and the State might have differing expectations on GEO.works' training deliverable. For example, BerryDunn learned in its interview with Project Leadership and Project Management that the State expects GEO.works to provide training materials, including videos, which will be created based on the State's version of the new solution and to help guide external and internal end-users through State business processes within the new solution. However, while GEO.works' proposal mentions WalkMe online training modules as a potential training material to be provided, the draft contract with GEO.works only mentions GEO.works conducting "appropriate training with supplied system guidance in the form of User Guides." While GEO.works might plan to provide the tailored training documents that Project Leadership and Project Management expects, not having this expectation clearly written and agreed-upon in the draft contract (as opposed to waiting to finalize these expectations during Training Plan drafting) might result in: disagreement on or requests to change the scope of work (e.g., need for additional training materials); Project schedule delays; and/or</p>			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
7	Low	Medium	Low
misuse, ineffective use, or lack of use of the new solution as a result of knowledge gaps in training provided to end-users.			
<b>State's Planned Risk Strategy:</b> Mitigate			
<b>State's Planned Risk Response:</b> The State is currently working with GEO.works to help make sure the State's expectations and requirement for training materials are agreed upon. The State recognizes this might result in a change in scope, timing, and/or cost.			
<b>Timing of Risk Response:</b> Prior to contract signature			
<b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response			
<b>Updates Discussed During Presentation of Findings:</b> The State has had weekly meetings to discuss the contract. The contract language is not specific for the scope of training. GEO.works intends to provide training for the heavy user groups, and the State does not anticipate that there will be a change in scope after additional language is included and agreed upon in the final contract. In the draft contract there is a user training line item that requires sign-off by the State.			

Risk #:	Risk Likelihood/Probability:	Risk Impact:	Overall Risk Rating:
8	Medium	High	Medium
<b>Source of Risk:</b> Interview with Project Management			
<b>Risk Description: The State has not allocated funding for the Project.</b> Based on BerryDunn's interview with Project Management, the Project does not have funding allocated for FY 2024, as the Project was not included as part of AOT's approved budget. To date, Project planning activities have been funded using funding from vacant AOT positions, but this will not be enough funding for the Project. The Project Manager is in conversations with State officials to secure funding for the Project but does not yet have a clear indication on whether or when this funding will be approved and to what extent. If the Project is unable to acquire funding in the coming weeks, this could result in a delay in the Project schedule and, if this delay pushed the schedule out by multiple months, could impact the Project's ability to leverage State resources during the winter period in when they are more available to support Project tasks.			
<b>State's Planned Risk Strategy:</b> Mitigate			
<b>State's Planned Risk Response:</b> The State is currently working to secure funding for the Project.			
<b>Timing of Risk Response:</b> Prior to contract signature			
<b>Reviewer's Assessment of State's Planned Response:</b> BerryDunn accepts the State's planned response			
<b>Updates Discussed During Presentation of Findings:</b> AOT is working to determine which department is going to fund the project. There is a meeting on September 6 to finalize the decision and then a budget adjustment will be needed. ADS is targeting to complete the contract by September 18.			