STATE OF VERMONT

AGENCY OF DIGITAL SERVICES

Independent Review (IR)

VT SOS Business Filing System Project

for the

Secretary of States Office for the State of Vermont
February 2, 2024

FINAL

Submitted to the
State of Vermont, Office of the CIO

Prepared by:
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1. Executive Summary

For all Information Technology (IT) activities over $1 million, Vermont Statute (or at the discretion of the Chief Information Officer [CIO]) requires an Independent Review by the Office of the CIO before the project can begin. The State of Vermont (State) Agency of Digital Services (ADS) engaged Desai Management Consulting to conduct an Independent Review of the Secretary of State's Office (SOS) Business Filing System Project. This Independent Review began on September 1, 2023, and the presentation of the finding took place on February 2, 2024.

The SOS has chosen the ReFrame Solutions platform as the replacement system for the current Business Filing System from Civix. The State issued the RFP on, March 17, 2023, for the comprehensive solutions that includes the implementation, development, testing, training, hosting, deployment, and post implementation support. The State received responses from four vendors including a best and final offer from each.

Each of the responses was scored along with a product demonstration, vendor interviews and reference checks culminating in the evaluation team recommending the State pursue a contract with ReFrame Solutions to implement their Business Filing System platform, which was approved by the Secretary of State on August 22, 2023.

While conducting this Independent Review, Desai Management Consulting identified five risks, with one risk being very high impact and/or high likelihood of occurrence. These risks are listed in summary form in Section 1.3, and in detail in Attachment 2 – Risk Register.

It is important to note that this report is based on a single point in time. However, there are updates to each risk based on discussions with the State during the presentation of findings on February 2, 2024.

1.1 Cost Summary

The table below 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 1: Cost Summary

IT Activity Lifecycle:	5 Year Costs
Total Lifecycle Costs:	$ 5,264,203.78
Total Implementation Costs:	$ 3,483,272.33
New Annual Operating Costs:	$ 356,186.29
Current Annual Operating Costs:	$ 443,436.00
Difference Between Current and New Operating Costs:	$ 87,249.71
Funding Source(s) and Percentage Breakdown if Multiple Sources:	100% Secretary of State's Funds

1.2 Disposition of Independent Review Deliverables

Table 2: Independent Review Deliverables

Deliverable	Highlights from the Review *Include explanations of any significant concerns*
Acquisition Cost Assessment	The ReFrame solution includes an acquisition cost of $ 3,483,272.33 to cover their implementation services, hosting, software license during implementation and the cost of the ADS services (e.g., Enterprise Project Management Office, Enterprise Architect, Business Analyst, Enterprise Security and ADS IT Labor for Implementation System Integration). Based on Desai Management's experience with providing system procurement and implementation services on similar projects, the State is paying comparable costs for the ReFrame technical services.
Technology Architecture Review	Based on Desai Management Consulting's assessment of ReFrame Solutions proposal and information collected during interviews with the State, Desai Management consulting believes the ReFrame solutions will provide better technical alignment to the states strategic plan for Government Modernization, reduce security risks, reduce the effort to accommodate future statutory requirements, improve the effectiveness of the SOS staff by reducing manual workarounds and improve the end users experience with a better, more intuitive, user interface.
Implementation Plan Assessment	The implementation project has a 12-month timeline. The implementation will follow a hybrid waterfall/agile methodology where the requirements, design, user acceptance testing, training and deployment will follow the waterfall methodology and the build and testing phases will follow the agile sprint methodology. Desai Management consulting has identified risks associated with staffing and scope that could impact the overall timeline. They are described in Attachment 2 – Risk Register in this report.
Cost Analysis and Model for Benefit Analysis	The tangible benefits are related to the upside financial benefit of $87,249.71 per year implementing the ReFrame solution over the current Civix solution. This saving is related to the lower cost of the annual license and maintenance fees. The intangible benefits for the state are relative to improved customer service, reduced manual workaround burden for the staff and a platform that is more secure and utilizes recent technologies and standards that align with State requirements.
Impact Analysis on Net Operating Costs	Upon completion of the implementation and final payment is made to the vendor in FY 2025 the State should see a positive financial impact over the current solution of about $87,249.71 per year starting in FY 2026.
Analysis of Alternatives	A team of technical and business representatives from the State evaluated and scored various aspects of the four vendor proposals received. Based on the scores, the State's proposal evaluation team recommended the State pursue a contract with ReFrame Solutions to build and implement the Business Filing System.

	Desai Management Consulting believes the competitive bid process was a sound approach to understanding the State's options for procuring and implementing the ReFrame Solutions Business Filing System.
Security Assessment	Based on Desai Management Consulting assessment of ReFrame Solutions proposal and information collected during interviews with the State, Desai Management Consulting believes the ReFrame solution will comply with all the State's security requirements.

1.3 Identified High Impact &/or High Likelihood of Occurrence Risks

Below is a summary of the high likelihood risks, including severity, probability, impact, and mitigation steps to avoid or reduce each risk. The mitigation steps were reviewed with the ADS and SOS staff prior to this report. A complete Risk Register is included in Attachment 2.

Risk ID	Original Risk	Severity	Probability	Impact	Mitigation Steps
1	Data migration is delayed by Civix who may not agree to handing over the source code to ReFrame to support the product and data migration activities	Critical	Probable	Very High	Have ReFrame provide another option for data migration if Civix doesn't agree to the transfer of source code.
3	SOS staff assigned to the project are challenged to support the needs of this project and perform their daily duties.	Major	Unlikely	High	Work with the project managers to understand the level of effort needed by each member and balance those needs with the demands of their jobs. Establish % allocation for each staff member that then can be used for resource scheduling in the project plan.
5	SOS replaces experienced staff on the project by requiring experienced project team members to onboard and train the new team members thus impacting the project schedule	Major	Unlikely	High	Limit the staff changes and build contingency time into the project schedule to accommodate these changes

1.3 Other Key Issues

The following list of issues was reviewed with the ADS and SOS Staff assigned to this IR. Each issue was assigned an owner and should be closed prior to the contract being finalized.

Issue Description	Owner
SOS and ADS require a 90-day warranty period. The vendor has included 60 days in their proposal	Jon Welch

1.4 Recommendation

Desai Management Consulting recommends that the State continue contract negotiations with ReFrame Solutions and monitor and mitigate the risks outlined above and in Attachment 2 – Risk Register.

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 made available to me by the State.

DocuSigned by:

Vijay Desai

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2/2/2024

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Independent Reviewer Signature   **Date**

1.7 Report Acceptance

The electronic signatures below represent the acceptance of this document as the final completed Independent Review Report.

DocuSigned by:

Trisha Watson

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2/2/2024

_____   _____

ADS Oversight Project Manager   **Date**

DocuSigned by:

Denise Reilly-Hughes

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2/6/2024

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State of Vermont Chief Information Officer   **Date**

2. Scope of this Independent Review

2.1 In-Scope

The scope of this document is fulfilling the requirements of Vermont Statute, Title 3, Chapter 056, §3303(d):

(1) The Agency shall obtain independent expert review of any new information technology projects with a total cost of $1,000,000.00 or greater or when required by the Chief Information Officer.

(2) The independent review shall include:

    (A) an acquisition cost assessment.
    (B) a technology architecture and standards review.
    (C) an implementation plan assessment.
    (D) a cost analysis and a model for benefit analysis.
    (E) an analysis of alternatives
    (F) an impact analysis on net operating costs for the agency carrying out the activity; and (G) a security assessment.

This Independent Review used the following schedule:

- September 1, 2023: Conducted IR Kickoff meeting.
- Week of September 3, 2023: Conduct Project Initiation, review documentation, schedule interviews.
- Weeks of September 10 – September 24, 2023: Conduct the first round of Vermont ADS and SOS staff interviews and document initial findings, risks, and issues.
- Week of October 2, 2023 – Conduct the first round of vendor interviews and updated initial findings, risks and issues.
- Weeks of October 9 – October 23, 2023: Review initial list of Risks and Issues with VT ADS and SOS staff and provide a preliminary Independent Review Report to the State.
- Week of October 23, 2023: Collect feedback, revise and resubmit the Independent Review Report
- February 2nd, 2024: Present the Independent Review Report findings to the CIO.
- Week of February 5th, 2024: Complete follow-up work and updates to the IR report; Obtain sign-off via the State Project Manager of the IR report and facilitate a project closeout meeting (if requested).

2.2 Out-of-Scope

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

3. Sources of Information

3.1 Independent Review Participants

Table 3: Independent Review Participants

Name	Employer and Title	Participation Topic(s)
Amanda Pelizer, Kelly Nolan	ADS, Project Manager	Project Management, Project Requirements, Risks, Issues, Business KPIs, UAT, User Training, Financials
Lauren S. Hibbert	SOS, Asst. Secretary of State, Executive Sponsor	Project Management, Risks, Issues, Project Requirements, Financials, Business KPIs

David Hall	SOS, Business Lead, Product Owner	Project Management, Risks, Issues, Project Requirements, Financials, Business KPIs
Trisha Watson	ADS, Portfolio Manager	Project Management, Risks, Issues
Jon Welch	SOS Agency IT Lead	Information Technology. Project Management, Risks, Issues
John Hunt	ADS, Enterprise Architect	Information Technology
Rashmi Gupta	ADS, Business Analyst	Project Requirements, Business KPIs, Project Management, UAT, User Training
Michelle Bean	SOS, SME	Project Requirements, Business KPIs, UAT, User Training
Kim Choquette	SOS, SME	Project Requirements, Business KPIs, UAT, User Training
Ashley Sherman	SOS, SME	Project Requirements, Business KPIs, UAT, User Training
Neal Rhodes	SOS, SME	Project Requirements, Business KPIs, UAT, User Training
Koren Steventon	SOS, SME	Project Requirements, Business KPIs, UAT, User Training
Anand Balasubramanian	ReFrame, Project Executive	Vendor Interview
Greg Amato	ReFrame, Account/Contract Manager	Vendor Interview
Alohita Nandagiri	ReFrame, Subject Matter Expert	Vendor Interview
Isabel Burgos-Dumani	ReFrame Project Manager	Vendor Interview
Vaidy Sreenivasan	ReFrame, Technical Manager	Vendor Interview
Bhanu Nagalla	ReFrame, Data Lead	Vendor Interview
Ganesh Veerabathiran	Infrastructure Lead	Vendor Interview
Sanjita Khadka	Business Analyst	Vendor Interview

3.2 Independent Review Documentation

Table 4: Independent Review Documentation

Document Name	Description	Source
Project Charter SOS Business Filing	Project Charter	ADS SharePoint site here
Business Filing System Project Vendor Proposal Scoring	Proposal Vendor Scoring by Key Stakeholders	ADS SharePoint site here

Business Filing System Contract Final	Contract Draft for Business Services	ADS SharePoint site here
Exhibit 1 State Technical Functional Requirements Final	The functional and technical requirements for the solution	ADS SharePoint site here
Exhibit 2 Preliminary Implementation Master Schedule Draft	The Implementation schedule – Proposed	ADS SharePoint site here
Exhibit 3 Project Management Plan Final	The project governance procedures	ADS SharePoint site here
Exhibit 5 Key Performance Indicators Application Final	Application performance measures for the end solution	ADS SharePoint site here
Exhibit 6 Key Performance Indicators Security Operations Incident Reporting Final	Security performance measures for the end solution	ADS SharePoint site here
Exhibit 7 Pricing Breakout Implementation Operating Costs Annually Final	The final implementation and 5 year costs	ADS SharePoint site here
VT SOS Business Filing System IT ABC Form V2	IT ABC Form	ADS SharePoint site here
ReFrame Solutions Business Filing System Proposal	ReFrame Proposal Response	ADS SharePoint site here
ReFrame Pricing Adjusted BAFO	ReFrame BAFO	ADS SharePoint site here
Business Filling System Project Vendor Selection Memo	SOS Business Justification for Selection ReFrame	ADS SharePoint site here

4. Project Information

4.1 Historical Background

The SOS is seeking full replacement of Vermont Secretary of State's business services application (Document Management and Electronic Filing System) and all its current functions, which include all filings delegated to the Business Services Division.

The current Document Management and Electronic Filing application was developed and implemented on October 1, 2012. The contract ended on September 30, 2022, and has been extended twice by 1 year. These extensions are affording SOS the opportunity (and time) to select a replacement system.

The goal of replacing the Vermont Secretary of State's business services platform (including uniform commercial code and temporary officiant processing), is to position the business services application (Document Management and Electronic Filing System) towards software modernization and incorporate cyber security compliance that addresses today's security risks.

On March 17, 2023, VT SOS released an RFP to establish a contract with a vendor who provide a business services platform to Vermont businesses. In response to the RFP, VT SOS received four (4) bid proposals prior to the close of the competitive bid process on April 28, 2023. SOS evaluation team scored the proposals based on the following criteria:

- Vendor Profile/Solution
- Functional Requirements
- Non-Functional Requirements
- Implementation/Project Management Approach
- Technical Services
- Maintenance/Support Services
- Pricing
- Vendor Experience/Reference
- Vendor Demonstration

The State selected ReFrame Solutions and requested that they provide a Best and Final Offer (BAFO) in response to the Business Filling System proposal.

4.2 Project Goal

The State's project objectives include:

- Adopt a business services platform that can adjust and accommodate statutory changes with minimal effort and lower cost while being more user friendly.
- Build cyber security compliance into the application development, operations, and hosting environment.
- Improve operations by reducing the effort to accommodate future statutory requirements and reduce administrative and financially costly workarounds, manual notice generation and manual document fixes.

4.3 Project Scope

The State's Project Scope is comprised of the following requirements:
- Project Management Plan / Schedule and Work Breakdown Structure (WBS)
- Project Resource Management Plan
- Project Communication Plan
- Project System Configuration Plan
- Project Change Control Plan
- Transition/Implementation Plan
- Migration/Conversion Plan
- Implementation Plan
- System Security Plan
- System Security Plan
- System Testing Plan
- Training Plan
- Deliverable Management Plan

4.3.1 Major Deliverables

Table 5: Project Deliverables

The list of deliverables, as defined in the draft contract:

DELIVERABLE	DESCRIPTION	UPDATE FREQUENCY
Project Management Plan	The Project Management Plan will dictate specifics on how the Contractor Project Manager will administer the project. See Exhibit 3 for details.	Created initially, then updated as needed
Formal Acceptance Sign Off	Obtain sign-off at the completion of each project deliverable as defined by the formal acceptance criteria.	Once
Change Requests	Formal document which outlines any changes to the Contract scope, schedule, budget, and resources.	On going
Change Requests Log	Tracks the specific change requests approved and their impact to the project scope, budget, and schedule.	On going
Risk Log	A log of all risks (opened or closed) that could impact the project. Risks should be outlined by their impact and their potential to occur. All risks should have an owner.	On going
Issue/Action Items	A Log of open and resolved/completed Issues. Issues should be outlined by their impact, owner, date of occurrence, and remediation strategy.	On going
Decision Log	A log of all decisions made over the course of the project. Decisions should have a date and name of decider.	On going
Business Analysis Plan	A roadmap for all business analysis tasks. It describes the approach and strategy of the analysis, and the scope of the analysis work, which should include a Work Breakdown Structure, and contain an Activity/Deliverables List and estimates for these activities.	Once
Requirements Documents	Finalized list of the project Requirements to be approved by the State. The approach is dictated by the Business Analysis Plan and can include: • The State will provide all Current State Analysis documents including but not limited to, business Requirements, context diagrams, current state process flows, data dictionaries, data flows, user stories, and business rules. *State templates will be used when available • The Contractor will create in collaboration with the State, all Future State Analysis documents including but not limited to, context diagrams, future state process flows, data dictionaries, data flows, user stories, and business rules as needed to further elucidate the Requirements from the RFP. *State templates will be used when available. • The Contractor will provide Gap Analysis sessions with recorded notes and the creation of User Stories to document the changes needed for the new solution to meet the RFP/Future State Requirements.	As needed and required by the State

	• The Contractor will provide a Requirements Traceability Matrix (RTM): The RTM is a tool that helps identify and maintain the status of the project's Requirements and deliverables. An RTM allows a given requirement to be traced through its Documentation to the relative code set released into PROD. *State templates will be used when available	
Test Plans	A description of the testing approach, participants, sequence of testing and testing preparations	Once
Test Cases & Results	The specific test cases to be tested and the testing results. Test Cases tie back to the project Requirements (to ensure each one has been met).	Create once then update with Results
Implementation Master Schedule	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 when they need to get done. (See Section 4.4 for more detail.)	Once per implementation
Project Status Reports	Provides an update on the project health, accomplishments, upcoming tasks, risks, and significant issues. The Status Report and the project color being report shall be developed in consultation with the State business lead and State project manager, as set forth in greater detail in Section 4.2.2.	Weekly
Meeting Agenda/ Minutes	All scheduled meetings will have an agenda and minutes. The minutes shall contain risk issues, action items, and decision logs. Minutes shall be transcribed over to the main logs.	Per occurrence
Lessons Learned	A compilation of the lessons learned having 20/20 hindsight. Lessons learned shall be delivered in an Excel template and collected from each of the State and the 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

Table 6: Project Phases, Milestones and Schedule

PHASE	ESTIMATED DATES	PHASE DESCRIPTION
Initiation and Planning	Feb 2024	Kick-off meeting, Planning, and preparation of project management planning documentation.
Requirements Validation and Initial Configuration	Mar – May 2024	Contractor performs necessary requirements gathering to finalize functional and technical requirements and identify gaps between State requirements and Solution capabilities. In this phase, at a minimum, the Contractor will complete outstanding current state analysis including data dictionary, data flows, transcribing functional requirements (found in Exhibit 1) into User Stories, business rules, process flows, reporting inventory, notices inventory and completion of the same for the future state.

Sprint Development	Mar – May 2024	The user stories are prioritized into fixed duration sprints. For each sprint the developers will build and QA the functionality according to the user stories. At the end of each sprint the team will demonstrate the new functionality to key stakeholders.
Testing & User Acceptance	Mar – Nov 2024	State subject matter experts perform Solution testing in a test User Acceptance Testing (UAT) environment in accordance with Contractor-developed Test plans.
Training	Oct – Nov 2024	Contractor performs training of State personnel (train the trainer or train the user).
Legacy Data Migration	Mar – Nov 2024	Contractor shall perform all necessary legacy data migrations using State-approved migration plan and data mapping templates.
Go-Live	Nov 2024	The contractor implements the tested and State approved solution in the production environment for additional State testing and Go-Live
Post-Implementation Support/Warranty	Nov 2024 – Jan 2025	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.

5. Acquisition Cost Assessment

Table 7: Acquisition Costs

Acquisition Costs	Cost	Comments
Implementation Services	$ **2,908,239**	ReFrame Implementation Services from the Draft Contract
Software and Hosting (Year 0)	**$ 101,133.33**	Cost of Solution and hosting during implementation
ADS EPMO Project Oversight & Reporting	$17,600.00	For 12 Months. Provided on the IT ABC Form.
ADS EPMO Project Manager for Implementation	$187,500.00	For 12 Months. Provided on the IT ABC Form
ADS EPMO Business Analyst for Implementation	$150,000.00	For 12 Months. Provided on the IT ABC Form
ADS Enterprise Architect Staff for Implementation	$17,600.00	For 12 Months. Provided on the IT ABC Form
ADS Enterprise Security Staff for Implementation	$66,000.00	For 12 Months. Provided on the IT ABC Form
Other ADS IT Labor for Implementation System Integration	$35,200.00	For 12 Months. Provided on the IT ABC Form
Total Acquisition Costs	**$ 3,483,282.33**	

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

   Desai Management Consulting validate the acquisition costs during documentation review and interviews with the State's project manager, ADS staff involved in the review and selection process and representatives from the Secretary of States office.

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?

   Due to the State's requirements and the fact that the solution will be customized to meet the State's needs, it is difficult to find a comparable solution. Therefore, we used the proposed costs from the other vendors that submitted proposal responses as a measure of a fair market value of the solution and the associated acquisition costs.

   Table 8: Cost Comparison Analysis

Vendor	Evaluation Score	5 Year Cost	Proposed Implementation Cost (excluding staff)
ReFrame Solutions	**86.63**	**$4,790,303**	**$3,009,372***
Civix	**81.84**	**$5,072,053**	**$2,233,453**
All Star Software Systems	62.76	$2,491,397	$1,660,932
Tyler Technologies Inc.	65.39	$1,802,228	$1,432,697

   excluding labor costs from table 7

   Of the four vendors listed above, ReFrame and Civix scored higher than the other two vendors as ranked by the staff in the vendor selection process. According to the vendor selection team, both All Star Software Systems and Tyler Technologies scored the lowest in nearly every category, appeared to have the least amount of experience. As a result, our acquisition cost analysis focused on Reframe and Civix.

   As you can see in the table above, ReFrame has a higher cost to implement than Civix but when put into the context of the overall 5-year cost of ownership, the ReFrame solution is $281,750 lower.

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

   As outlined above, the State appears to be paying a higher acquisition cost but will end up paying a lower cost over the 5-year term. Based on Desai Managements experience with providing system procurement and implementation services on similar projects, the State is paying comparable costs for the ReFrame technical services.

Additional Comments on Acquisition Costs:

   The current migration strategy is to have ReFrame take over the ownership of the current vendors (Civix) code and support the product and data during the execution of this project. Should there be any costs associated with the transfer of ownership they are not accounted for in this Assessment.

6. Technology Architecture and Standards Review

1. State's Enterprise Architecture Guiding Principles

A. Assess how well the technology solution aligns with the business direction.

Table 9: Technology Alignment with Business Direction

Business Value	Description
Enterprise Alignment and Readiness	The ReFrame solution, overall, is more user friendly and intuitive, offers a significant improvement over the current system, allows for document uploads, notifications via posts, email, expiration times, and online fillable form-based templates. It also aligns with the strategic plan for Government Modernization and Efficiency: Data and Cyber Security.
Customer Service Improvement	The ReFrame solution is a significant improvement over the current system in that it is more user friendly and intuitive, ability to upload docs for end users, notifications via posts, email, expiration times, and form-based templates for filling online.
Risk Reduction	The ReFrame solution is hosted in the Azure Gov Cloud which has cyber security built into its systems, reducing the security risk that exists today with the current system which is hosted in a non-government AWS cloud.
Compliance	The ReFrame solution will reduce the effort to accommodate future statutory requirements.
Operational Improvement	The ReFrame solution will reduce the operational burden of having to address costly workarounds, manual notice generation, and manual document fixes.

B. Assess how well the technology solution maximizes benefits for the State.

Table 10: Technology Benefits for the State

Business Value	Description
Enterprise Alignment and Readiness	The ReFrame solution will support the goals of the Governor and the Agency of Digital Services.
Financial	The ReFrame solution will provide a net decrease to State costs resulting from: a reduction in operating costs, state labor costs and infrastructure costs.
Customer Service Improvement	The ReFrame solution is a significant improvement over the current system in that it is more user friendly and intuitive. It will better support the needs of the citizens of Vermont.
Risk Reduction	The ReFrame solution will reduce the risk to the State by replacing an unstable system, improving security, and providing a more modern and sustainable business filing system.
Compliance	The ReFrame solution will reduce the effort to accommodate future statutory requirements.
Reduces Technical Debt	The ReFrame solution will replace a costly, soon to be, unsupported system with a solution that is technically superior. ReFrame will assume maintenance and operations responsibilities

	over the life of the contact thus reducing technical debt on the State.
Equity	The ReFrame solution will provide the ability to capture the data elements needed to identify equity issues. This is a capability that doesn't exist today.

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

The ReFrame Solution platform will better support the data needs of the State by providing a robust reporting platform and tools to support the ability of the State to access needed data to support the future needs of the Secretary of States office and the needs of their stakeholders.

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

The ReFrame solution will provide a better end user experience and will reduce the manual steps the SOS employees currently have to undertake to address costly workarounds, manual notice generation, and manual document fixes.

E. **Assess how well the technology solution supports resilience-driven security.**
The ReFrame solution manages security in all the layers and tiers of the system. At the application level, all user interfaces, processes, and entities are designed to be accessed through the Authorization module which provides access based on configurable roles. Routing logic ensures unauthorized users are directed away from protected pages. Multi-factor authentication is used to ensure access to critical components. Tokens ensure API level security allowing access to only authorized resources to the authenticated users. Database is accessible only to the administrator and entity privileges are defined in the database such that only authorized accounts can view/update the records. Sensitive data is encrypted while stored in the database and decrypted on the fly. All layers and tiers run under different security contexts and are secured using a "default deny" approach. Network services and their ports are secured, and only designated IPs are allowed access.

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

The ReFrame solution is a modular technology that uses a cloud first strategy in its design and implementation. It also satisfies the reuse of existing technology (OnBase, Azure, AD and Okta). They also have a services-oriented architecture leveraging RESTful API Web Services. This approach makes the solution configurable, flexible, and scalable and should be viable for many years.

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

Based on Desai Management Consulting's assessment, the proposed solution will satisfy the following strategic objectives:

- Strategy 1 – <u>IT Modernization</u> – Strengthen our digital foundation by replacing legacy IT Systems with Integrated preferred enterprise platforms, thereby reducing technical debt. Deploying new systems by utilizing cloud-based technologies thus reducing infrastructure footprint and total cost of ownership.
- Strategy 2 – <u>Vermonter Experience</u> – Increase the number of simple, low-cost, online interactions that Vermonters have with their government. Better user interface and faster, more simplified filing process.
- Strategy 3 – <u>Cyber Security & Data Privacy</u> – Grow the layers of cyber defense and analysis to proactively prevent threats and recover from attacks.

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

The ReFrame solution complies with the WCAG2.1 standard which supersedes and is inclusive of all provisions and requirements in Section 508 Amendment to the Rehabilitation Act of 1973, as amended in 1998.

5. **Disaster Recovery:** What is your assessment of the proposed solution's disaster recovery plan; do you think it is adequate? How might it be improved? Are there specific actions that you would recommend to improve the plan?

The ReFrame solution utilizes the Azure Gov Cloud and offers a redundant node architecture that enables the ability to fail-over to backup systems located in another region (data center). The data centers are synced in real-time to limit the amount of time to recover should there be a need to recover.

It is Desai Management Consulting belief that the ReFrame solutions disaster recovery plan meets industry best practices and technical standards.

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

ReFrame Solutions will support and implement the State of Vermont's data retention requirements.

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?

Desai Management Consulting believes that the SLA described in the ReFrame Solutions proposal response meets the State's SLA requirements.

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 ReFrame solution is API-based and should support integration with any modern DMS/CMS. Their resources have extensive experience with many platforms including OnBase and SharePoint.

It is Desai Management Consulting belief that they will be able to integrate to the current systems in use today.

7. Assessment of Implementation Plan

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

   The project has a 11-month implementation timeline with sufficient time to define requirements, design, develop, test, train and implement the solution. The implementation will utilize a hybrid software development methodology, meaning it will utilize the waterfall approach for the requirements, design, test, train, and implementation phases and agile for the build phase of the project.

   Based on Desai Management consulting's assessment and interviews with State and ReFrame individuals regarding the proposed timeline, we have identified risks that require mitigation otherwise the project may experience delays in execution. See Attachment 2 - Risk Register for more information on the risks and the mitigation plan.

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

   Based on Desai Management Consulting assessment and interviews with State individuals, there should be no impact to other divisions/departments beyond the Secretary of State's staff. The SOS staff is fully engaged and supports this change as it should reduce their level of effort to support the system and the users of the system.

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**

      Both the State and ReFrame solutions will assign project managers to this project. The ReFrame project manager will provide the overall project planning activities with the State's project manager supporting and driving those project tasks assigned to state resources. The ReFrame project manager will generate the required project artifacts (project plan, change management plan, communication plan, etc.) as described in the draft contract. The ReFrame proposal outlines the project management approach they take, and that approach is in alignment with the draft contract requirements. The state will have final approval of all project artifacts and processes generated by ReFrame.

   B. **Training**

      Training will be provided by ReFrame to the SOS staff that will be using and supporting the system. The training will be done in the production environment just prior to go-live on a copy of Civix production data. It is Desai Management Consulting's belief that the training plan outlined in the proposal should be sufficient to meet the needs of the State.

C. **Testing**

The ReFrame testing approach covers all aspects of the development process (unit, code review, integrated, automated) and is supplemented with system level testing including system integration testing, scalability testing, vulnerability, and penetration testing. The final test and product signoff by the State will be the user acceptance test (UAT). The test plan that governs the testing and the test cases that are used during UAT are developed by ReFrame with input and support from SOS and ADS staff.

D. **Design**

The design phase will include the requirements gathering phase as described in the draft contract. In this phase, ReFrame will gather the necessary requirements to finalize functional and technical requirements to identify gaps between their products capabilities and the State's requirements. From that analysis, ReFrame will close the identified gaps and translate the requirements into user stories, business rules, process flows, reporting inventory and notices inventory that will make up a future state target system.

Once this phase is complete, ReFrame when then work with the state to prioritize the user stories into sprints and follow the agile methodology to build the system in a series of sprints, culminating in user acceptance testing.

E. **Conversion (if applicable)**

ReFrame will stand up a separate team to focus on converting the data from the current system to the new solution. The data conversion approach assumes that the current vendor will provide the source code and full access to ReFrame, allowing them to take over support of the current product and have full access to the data dictionary to support the conversion of data. It should be noted that members of the ReFrame team built and supported the current system prior to leaving and starting Reframe. Assuming the current vendor agrees to this arrangement, this would afford the state the ability to have a richer data conversion as the ReFrame team will have full access to the current data set and will be able to map it more accurately to the target dataset in the new system.

Based on Desai Management consulting's assessment and interviews with State and ReFrame individuals regarding the conversion, we have identified risks that require mitigation otherwise the project may experience delays in execution. See Attachment 2 - Risk Register for more information on the risks and the mitigation plan.

F. **Implementation planning**

ReFrame solutions will provide a test environment for the testing of interim releases during the execution of the sprints and will migrate a copy of the converted production data to production for UAT testing and training. Once testing and training are completed, they will wipe the production data from the system in preparation for the redeployment of the production data and go-live.

G. **Implementation**

In preparation for the implementation of the solution in production, ReFrame will leverage the Azure DevOps technology to deploy the solution to the production environment, convert the data from the current system to the new ReFrame solution production environment. The data conversion will occur over a weekend and access to the Civix system will be limited to read-only until the data is fully converted to the new production environment and tested by ReFrame to determine it is ready for go-live. At that time, all network traffic and connections to the Civix system will be diverted to the new system.

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.**

   The project manager assigned to this project by the ADS is a certified project management professional (PMP) and has experience with software development and the agile methodology. Based on our interactions with the assigned project manager during the review and the interactions we observed with other State and ReFrame staff, Desai Management Consulting is confident that the project manager has the necessary skills and experience.

Additional Comments on Implementation Plan:

We would suggest that the supporting State staff that doesn't have experience working on agile projects, are trained on the basic agile methodology and what will be expected of them so that the project manager has alignment with the staff when it comes their role and expectations during the execution of the project.

As a result, we have identified risks related to agile inexperience that require mitigation otherwise the project may experience delays in execution. See Attachment 2 - Risk Register for more information on the risks and the mitigation plan.

8. 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.

   Desai Management Consulting reviewed the financial information from the IT ABC Form, the draft contract, the best and final offer by ReFrame. These costs were verified by the SOS Business Lead, the ADS Portfolio Manager and the ADS Agency IT Lead.

   During the interview process, Desai Management consulting discussed the benefits of the proposed ReFrame solution in the context of the costs and those conversations are incorporated in this report.

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

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

   - Costs for the ReFrame licenses for the implementation of the solution will span FY2024 and FY2025.
   - There is a five-year life cycle, with the implementation activities beginning in February 2024 and ending in November 2024.
   - There will be no additional fees from the current vendor for the conversion of the data, nor the transfer of the source code to ReFrame.

- Post implementation support and maintenance are included in the annual license fee.

3. **Funding:** Provide the funding source(s). If multiple sources, indicate the percentage of each source for both Acquisition Costs and on-going Operational costs over the duration of the system/service lifecycle.

   The Secretary of State funds will be used to pay for 100% of the cost for the period of the software license.

4. **Tangible Costs & Benefits:** Provide a list and description of the tangible costs and benefits of this project. Its "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** – A one-time cost of $2,903,239, plus $60,000 for the software license and $41,133 for hosting during the implementation
   - **Hosting costs over the 5-year term** – $823,133
   - **ADS EMPO Project Management, Business Analyst, Other ADS Labor and Other State Labor** – These one-time costs total $473.900.
   - **Annual License and Support & Maintenance -** $199,786
   - **Annual Hosting Fee** - $156,400

   Tangible Benefits

   Based on interviews with the State, and an analysis of the costs of the current system versus the new system, there will estimated be annual savings of approximately $87,249.71/year in the fiscal years following the completion of the implementation.

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

   Based on documentation review and interviews with the State, Desai Management Consulting identified the following intangible benefits:

   - **Customer Service** – The benefit of a system that it is more user friendly and intuitive and will better support the needs of the citizens of Vermont.
   - **Compliance** - Meets the previously unmet State and Federal compliance requirements.
   - **Productivity** – The elimination of the operational burden of having to address costly workarounds, manual notice generation and manual document fixes.
   - **Risk** – a more modern system that provides current cyber security techniques thus reducing the risk to the state of a data breach, denial of service, system penetration and other technical vulnerabilities that might be exploited by outside entities.

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.

While the tangible benefits appear negligible, Desai Management Consulting's opinion is that the intangible benefits for the State outweigh the one-time costs for implementation and ongoing operating costs.

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 lifecycle that was used appropriate for the technology being proposed? If not, please explain.

At the time of this Independent Review, the State project manager completed the final updates to the IT ABC form with the most recent cost information. The information in the IT ABC form is consistent with the financial components within this Independent Review Report.

9. Analysis of Alternatives

1. **Provide a brief analysis of alternate technical solutions that were deemed financially unfeasible.**

2. **Provide a brief analysis of alternate technical solutions that were deemed unsustainable.**

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

A team of technical and business representatives from the State evaluated and scored various aspects of the vendors' proposals, with the total score comprising of the following:

- **Vendor Profile/Solution** – 5%
- **Function Requirements** – 35%
- **Non-Function Requirements** – 15%
- **Implementation/Project Management Approach** – 5%
- **Technical Services** – 5%
- **Maintenance/Support Services** – 10%
- **Pricing** – 10%
- **Vendor Demonstration** – 5%
- **Vendor Experience/Reference** – 10%

Table 11: Vendor Assessment Scores

Four proposals were received. Below shows the evaluated vendors' weighted scores with totals.

Rating Criteria	Weight Factor	All Star	Civix	Reframe	Tyler Tech
Vendor Profile/Solution	5	2.00	4.33	4.33	2.44
Functional Requirements	35	28.90	33.15	34.49	26.65
Non-Functional Requirements	15	11.76	14.41	14.40	13.73
Implementation/Project Management Approach	5	2.85	4.10	4.20	3.40
Technical Services	5	2.89	4.22	4.33	2.89
Maintenance/Support Services	10	4.83	6.78	6.22	5.94
Pricing (Project cost estimates $5.1M)	10	7.40	3.60	5.10	8.20
Vendor Experience/Reference	10	0.00	6.50	9.17	0.00
Vendor Demonstration	5	2.13	4.75	4.38	2.13
Total Weighted Points Average	100	**62.76**	**81.84**	**86.63**	**65.39**

The State conducted interviews with each of the vendors. Upon completion of the interviews, the State finalized is proposal scoring. The state determined that All Star and Tyler Tech were less experienced, were not able to or didn't answer questions sufficiently and therefore would not be a viable solution. After which the State performed reference checks and requested updated Best and Final Offers (BAFO) from Civix and ReFrame solutions.

The proposal evaluation team recommended the State pursue a contact with ReFrame Solutions based on the following:

> *"All members of the selection committee scored ReFrame Solutions proposal the highest overall, and all agreed that the ReFrame Solutions bid represented the best value for demonstrating a superior ability to meet the functional and non-functional requirements, for their cutting-edge security measures and third-party security testing, along with their dedication to customer service."*

Desai Management Consulting believes the competitive bid process (e.g., proposal evaluations, vendor interviews, and reference checks) was a sound approach to understanding the State's options for procuring and implementing the ReFrame Solutions Business Filing System.

10. Impact Analysis on Net Operating Costs

Table 12: Life Cycle Costs by Year

Projected Impact on Operating Costs	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Five Year Total
Implementation Costs							
Current Costs	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
Projected Costs	$872,471.70	$2,035,767.30	$0.00	$0.00	$0.00	$0.00	**$2,908,239.00**
License & Maintenance Costs							
Current Costs	$364,092.00	$364,092.00	$364,092.00	$364,092.00	$364,092.00	$364,092.00	**$2,184,552.00**
Projected Costs	$60,000.00	$199,786.29	$199,786.29	$199,786.29	$199,786.29	$199,786.29	**$1,058,931.45**
Hosting Costs							
Current Costs	$79,344.00	$79,344.00	$79,344.00	$79,344.00	$79,344.00	$79,344.00	**$476,064.00**
Projected Costs	$41,133.33	$156,400.00	$156,400.00	$156,400.00	$156,400.00	$156,400.00	**$823,133.33**
Other Costs (State Labor)							
Current Costs	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**
Projected Costs	$112,833.33	$157,966.67	$0.00	$0.00	$0.00	$0.00	**$270,800.00**
Baseline Annual Current Costs	$364,092.00	$364,092.00	$364,092.00	$364,092.00	$364,092.00	$364,092.00	**$2,184,552.00**
Baseline Annual Projected Costs	$1,086,438.36	$2,549,920.26	$356,186.29	$356,186.29	$356,186.29	$356,186.29	**$5,061,103.78**
Cumulative Current Costs	$364,092.00	$728,184.00	$1,092,276.00	$1,456,368.00	$1,820,460.00	$2,184,552.00	**$2,184,552.00**
Cumulative Projected Costs	$1,086,438.36	$3,636,358.62	$3,992,544.91	$4,348,731.20	$4,704,917.49	$5,061,103.78	**$5,061,103.78**
Net Impact on Implementation Costs	($872,471.70)	($2,035,767.30)	$0.00	$0.00	$0.00	$0.00	(\$2,908,239.00)
Net Impact on License & Maintenance Costs	($424,092.00)	$164,305.71	$164,305.71	$164,305.71	$164,305.71	$164,305.71	$397,436.55
Net Impact on Hosting Costs	$38,210.67	($77,056.00)	($77,056.00)	($77,056.00)	($77,056.00)	($77,056.00)	($347,069.33)
Net Impact on Other Costs	($112,833.33)	($157,966.67)	$0.00	$0.00	$0.00	$0.00	($270,800.00)
Net Impact on Operating Costs	($1,371,186.36)	($2,106,484.26)	$87,249.71	$87,249.71	$87,249.71	$87,249.71	**($3,128,671.78)**

Narrative summary of the analysis conducted.

- This analysis assumes that the cost of the current system will be incurred while also incurring the costs of the implementation in FY 2024 and FY 2025.
- This analysis shows six years as the solution costs are incurred in FY 2024, but the system isn't live until FY 2025 thus the five-year analysis goes out to FY 2029.
- This analysis assumes that the duration of the implementation will take 12 months as described in the draft contract.

- This analysis assumes that the project will kick off in February 2024 (month 7 of FY 2024), leaving 10 full months of execution finishing in month 5 of FY 2025
- The implementation project timeline spans 2 fiscal years from kick off to post implementation warranty. Based on the contract payment milestones, there is projected to be 5 months in FY 2024 ($872,471.70), 5 months in FY 2025 ($2,035,767.30).
- With a project kick off in February of 2024, we assume that the hosting cost will start late March prior to the start of the first sprint. For the remaining 4 months in FY 2024 the hosting cost will be $41,133.33 for the remaining term of the fiscal year, as stated in the draft contract. Starting in FY 2025 the annual hosting fee will be $156,400.
- License & Maintenance Cost for the ReFrame solution will be $199,786.29 annually and will be billed on the anniversary date of the first bill.
- For the Other Costs, we utilized the estimates provided in the IT ABC Form. The following roles and costs for the 12-month implementation are reflected below:
  - $17,600 - ADS EPMO Project Oversight & Reporting
  - $187,500 - ADS EPMO Project Manager for Implementation
  - $ 150,000 - ADS EPMO Business Analyst for Implementation
  - $17,600 - ADS Enterprise Architect Staff for Implementation
  - $66,000 – ADS Enterprise Security Staff for Implementation
  - $ 35,200 - Other ADS IT Labor for Implementation System Integration
- The projected costs for the Other Costs are aligned with the 10-month duration of the implementation. Without a detailed project plan to accurately see the level of effort for each of the ADS staffing roles we assumed the costs for each role would be evenly distributed over the duration of the implementation.

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

   SOS will use Secretary of State funds to pay for the costs of the implementation and all future hosting, license, and support fees.

2. What is the break-even point for this IT Activity (considering implementation and on-going operating costs)?
   As you can see from the cost impact table above, after the implementation completes in mid FY 2025 the State should see a positive financial impact over the current solution of about $87,249.71 starting in FY 2026 and every year thereafter.

Current vs Projected Annual Baseline Costs
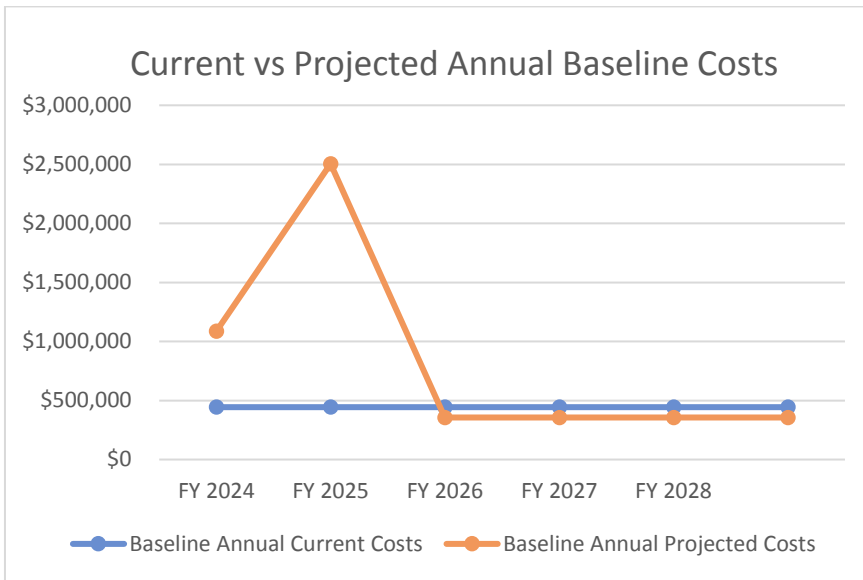
11. Security Assessment

Assess Information Security alignment with State expectations. ADS-Security Division will support reviewer and provide guidance on assessment.

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

   There will be a hybrid approach. Like the current system, they will utilize State-managed security solutions: Web Application Firewall (Imperva); Endpoint Detection & Response (CrowdStrike) and centralized event monitoring (Splunk). ReFrame Solutions will partner with a 3rd party vendor (Ingalls) for static code review, vulnerability, and penetration testing. In addition, the State & ReFrame Solutions will partner in implementing the CIS Critical Security Controls (version 8) to meet industry standard security.

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

   The ReFrame Solution classifies the data into four categories, Public, Internal, Confidential and Restricted. Access to the data is controlled by role-based access and security. All access is audited to track who have accessed the data.

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

   ReFrame Solutions has agreed to the terms outlined by the State and their expectations for security breach reporting and incident response process.

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

   Reframe Solutions has risk management monitoring responsibilities incorporated as a key component of its charter and capabilities. This supplements other processes such as a comprehensive risk assessment, IT controls and compliance programs, business continuity planning, physical security programs, internal audits and legal review.

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

   Per the State's data protection requirements, ReFrame Solutions has agreed to comply with FIPS PUB 140-3 - Security Requirements for Cryptographic Modules as described in the Contract, Attachment A, Section 6.1.1.4. Data Protection.

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?

   Attachment D in the draft contract requires ReFrame Solutions to run quarterly vulnerability assessments and promptly report the results to the State and remediate all critical vulnerabilities within 90 days, all medium vulnerabilities within 120 days and low vulnerabilities within 180 days. Once remediate is complete. Contractor shall re-preform the test.

   In the ReFrame Solutions proposal response they provide extensive detail on how they provide continuous vulnerability management during code development through to live system detection, mitigation, and reporting. The also work with a third party (Ingalls) for static code review, vulnerability, and penetration testing.

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

   The ReFrame Solution utilizes the Azure Government cloud platform which has implemented the NIST SP 800-53 Rev 5 controls as part of its regulatory compliance framework. ReFrame Solutions intends to utilize this security feature to ensure compliance is continuously assessed through an automated process. In addition to this the following language will be added to section 6.1.1.3. of Attachment A: "The Contractor shall utilize the Azure Government cloud platform security compliance toolset that enforces NIST SP 800-53 Rev 5 controls. This toolset will ensure the Solution environment remains within expected security and privacy controls."

12. Risk Assessment & Risk Register

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

Attachment 1 – Lifecycle Cost Benefit Analysis

Table 13: Lifecycle Cost Benefit Analysis

Lifecycle Analysis	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Five Year Total
Implementation Months	5	7	0				
Implementation Costs	$872,471.70	$2,035,767.30	$0.00	$0.00	$0.00	$0.00	**$2,908,239.00**
License & Maintenance Costs	$60,000.00	$199,786.29	$199,786.29	$199,786.29	$199,786.29	$199,786.29	**$1,058,931.45**
Hosting Costs	$41,133.33	$156,400.00	$156,400.00	$156,400.00	$156,400.00	$156,400.00	**$823,133.33**
State Labor							
ADS EPMO Project Oversight & Reporting	$7,333.33	$10,266.67	$0.00	$0.00	$0.00	$0.00	**$17,600.00**
ADS EPMO Project Manager for Implementation	$78,125.00	$109,375.00	$0.00	$0.00	$0.00	$0.00	**$187,500.00**
ADS EPMO Business Analyst for Implementation	$62,500.00	$87,500.00	$0.00	$0.00	$0.00	$0.00	**$150,000.00**
ADS Enterprise Architect Staff for Implementation	$7,333.33	$10,266.67	$0.00	$0.00	$0.00	$0.00	**$17,600.00**
ADS Enterprise Security Staff for Implementation	$27,500.00	$38,500.00	$0.00	$0.00	$0.00	$0.00	**$66,000.00**
Other ADS IT Labor for Implementation System Integration	$14,666.67	$20,533.33	$0.00	$0.00	$0.00	$0.00	**$35,200.00**
Totals to be paid with SOS funds	**$1,171,063.36**	**$2,668,395.26**	**$356,186.29**	**$356,186.29**	**$356,186.29**	**$356,186.29**	**$5,264,203.78**
Implementation Costs & State Labor	**$3,483,272.33**						**$3,483,272.33**
Desai Management Consulting IR	**$22,500.00**						**$22,500.00**
Total Implementation	**$3,505,772.33**						**$3,505,772.33**

Current vs Projected Annual Baseline Costs
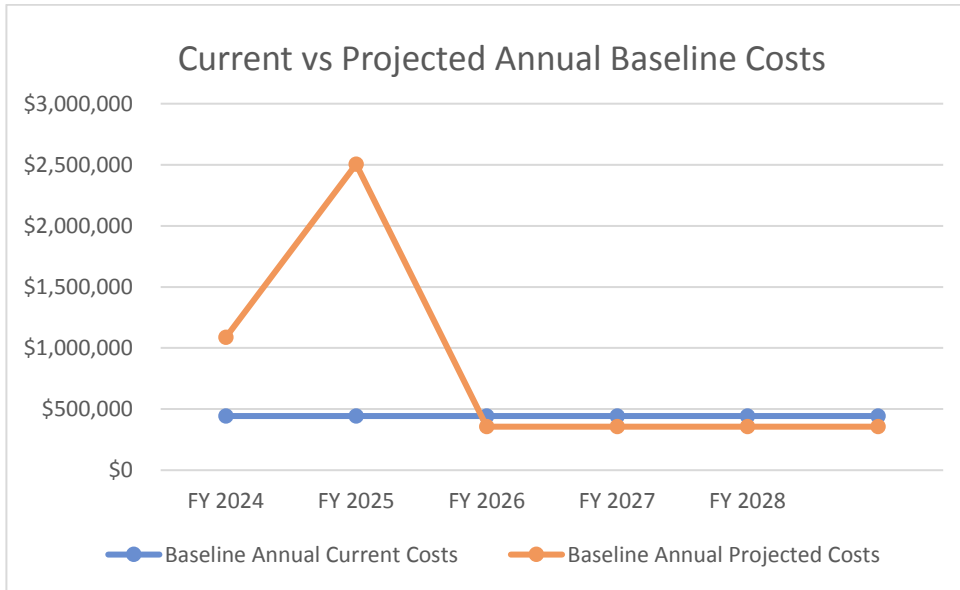
Attachment 2 - Risk Register

Table 14: Risk Register

Risk ID	Original Risk	Severity	Probability	Impact	Owner	Risk Response	Status	Mitigation Steps
1	Data migration is delayed by Civix who may not agree to handing over the source code to ReFrame to support the product and data migration activities	Critical	Probable	Very High	Jon Welch	Mitigate	Open	Have ReFrame provide another option for data migration if Civix doesn't agree to the transfer of source code.
2	Civix charges SOS for the transfer of the source code and/or their costs to assist with data migration.	Major	Possible	Low	David Hall	Mitigate	Open	Build in budget contingency for any unforeseen costs
3	SOS staff assigned to the project are challenged to support the needs of this project and perform their daily duties.	Major	Unlikely	High	David Hall	Mitigate	Open	Work with the project managers to understand the level of effort needed by each member and balance those needs with the demands of their jobs. Us this to establish an allocation amount for each staff member that then can be used for task scheduling in the project plan.
4	SOS staff (subject matter experts and product owner) are not familiar with working on an IT project that follows the Agile methodology thus not familiar with the role they will need to play in defining user stories and setting their priority.	Major	Probable	Moderate	David Hall	Mitigate	Open	Provide Agile training to those without experience. Provide each with the time and tools to be effective.

5	SOS replaces experienced staff on the project by requiring experienced project team members to onboard and train the new team members thus impacting the project schedule	Major	Unlikely	High	David Hall	Mitigate	Open	Limit the staff changes and build contingency time into the project schedule to accommodate these changes