

**State of Vermont
Joint Fiscal Office**

**Independent Review
of
State Information Technology Projects,
Operations, and Organizations
(Act 74 of 2021, Sec. E.127.1)**

**Enterprise Resource
Planning (ERP) Project**

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A. Executive Summary

The State has initiated a plan to implement an Enterprise Resource Planning (ERP) technology solution to integrate a wide range of business processes under a single cloud-based system. The business case for this project is justified because the existing systems are outdated, in some cases unsupported, and new systems offer benefits and efficiencies that are in line with the State's technology goals. This new system will be critical to ensure core government functions are met including making sure employees are paid correctly, reporting for federal grants is done accurately, making sure the budget is constructed and presented for review by the General Assembly, and meeting Government Accounting Standards. Many states have similar projects underway. Projects of this size and scope are complicated and can take years to implement. The costs of these systems for states ranges from tens to hundreds of millions of dollars, such as a current project in Washington estimated to cost \$500 million.¹

In May 2022, the State procured WorkDay ERP to provide a Software as a Service (SaaS) solution to replace the State's Human Resource system (HRS/VTHR), accounting and finance system (VISION), the budget system (VANTAGE), and legacy finance systems at the Department of Labor (FARS) and Agency of Transportation (STARS). This project is a significant financial and human capital undertaking. If not done correctly, it could result in a significant loss in State time and taxpayer dollars.

The purpose of this IT Project review is to identify strengths and weaknesses of IT projects for the purpose of oversight and/or advising appropriations.² After examining the initial stages of this project, including planning, procurement, and contract development, challenges driven by an unconventional procurement approach have been identified. These challenges are rooted in the lack of high-level business analysis used to document business needs for systems that are being replaced. These needs are normally evaluated as part of the bid/vendor selection process. This documentation is typically used to identify alignment and gaps between business needs and replacement solutions, in this case, WorkDay ERP. However, the State did not conduct this gap analysis, and thus does not know which required functions can be met by WorkDay ERP and which cannot. The State has

indicated the Preferred Implementation Vendor (PIV) and the Business Process Re-engineering vendor will conduct the gap analysis during the early phases of each contract. The State believes this will lead to a successful project, despite the divergence from best practice.

The focus of this review is to outline the most significant challenges with the State's approach to this project, identify possible paths toward success, and provide recommendations for oversight. Without addressing these challenges, it is impossible to know what the final cost of this project will be or how to know if the project is successful. It is critical that the General Assembly develop an approach to oversight and ensure that a clear path to success is outlined at the end of the requirements phases of the PIV and the Business Process Re-engineering contracts.

Currently, the Joint Information Technology Committee (JITOC) has the authority to release \$11.8 million appropriated for the Finance Management Module to begin the implementation of WorkDay. Ultimately, the General Assembly will need to decide how and when this project moves forward, through the appropriation of additional dollars, and ensure the Administration is utilizing the dollars to complete the project successfully.

The State indicates the appropriation JITOC is charged with releasing will fund the gap analysis phase of the project. Upon completion, the Administration should report back to the General Assembly regarding the ability of WorkDay to meet system replacement requirements and possibly request additional appropriations. Once the gap analysis is completed, this report will be updated to reflect the change in project status. In the event the gap analysis determines there are unresolvable differences between the business requirements and the system capabilities and insufficient funds, standard State contract provisions allow for termination. **Should JITOC choose to release the appropriation, as outlined in the fiscal year 2023 Budget Adjustment Act (Act 3), for this project, this report recommends it develop plans to implement the oversight provisions described in this report.** This will help inform the General Assembly on the project's progress when additional appropriations are requested.

¹ [Audit: Half-billion-dollar Washington financial system upgrade 'at risk' | Washington | thecentersquare.com](#)

² JFO IT Review Process, Version 3.0 Jan 1, 2024

B. Ratings by Review Area

Overall status:



The Implementation Vendor (PIV) is qualified, but the deferment of a gap analysis until the requirements phases of the PIV and Business Process Re-engineering contracts means the total cost of the project is unknown and the clarity of purpose is undefined, and there are concerns in the technical approach for this project.

1. **Project Justification:** (Why are we doing this? Is the project necessary and beneficial?)



This project is justified because the existing systems are outdated, in some cases unsupported, and new systems offer benefits and efficiencies that are in line with the State's goals.

2. **Clarity of Purpose:** (Is the definition of success established?)



The State deferred the gap analysis and is thus unable to define which business needs can be met by WorkDay. This means a successful outcome cannot be defined at this time. An update will be provided when requirements are complete.

3. **Organizational support:** (Does the business fully support the project?)



AOA and ADS strongly support this project, however the resource planning is incomplete. The Judiciary, General Assembly, and Independent Agencies/Departments have not been included in planning to date, and engagement of other Executive Agencies/Departments (beyond AOT/DOL) appears limited. This limited engagement of stakeholders adds risk to the project.

4. **Project Leadership:** (Does the project have strong and effective leadership?)



Project leadership within AOA and ADS are very supportive. However, representation from other branches of government and other areas of the enterprise have not been engaged.

5. **Project Management:** (Is the project management staff appropriate and will they conform to State standards?)



The project approach conflicts with PM strategies related to defined objectives, cost management, and stakeholder engagement but the State indicates the requirements phases of the contracts will address these misalignments.

6. **Financial Considerations:** (Is funding secure and sufficient for the anticipated life of the system?)



Funding for known project costs of \$71 million exceeds current appropriations. Required additional funds have not been identified. There is a significant risk for additional costs.

7. **Technical Approach:** (Are the proposed technical solutions achievable, realistic, and appropriate for this project?)



The current approach results in risks related to chart of accounts confirmation/redesign, managing integrations and testing changes post go-live, misalignment to WorkDay recommendations for testing, and the business needs for accessing historic data.

C. Report Overview

Note: This report is NOT a review of any vendor or software solution associated with this project. This is a review of the State’s plan for implementing the Enterprise Resource Planning (ERP) IT solution.

The State is working to implement an Enterprise Resource Planning (ERP) IT solution to integrate a wide range of business processes under a single IT system. This report seeks to provide the Joint Information Technology Committee (JITOC) with information to guide its decision to release \$11.8 million appropriated for the Financial Management (FM) Module in Act 185 (2022), Sec. E.105.2(a)(1), the fiscal year 2023 Appropriations Act.

Based on information provided by the State, the Joint Fiscal Office (JFO) has identified *known* ten-year project costs of at least \$71 million.

This review examined all components of the ERP project and identified the following **major challenges**:

1. Unusual Selection Process and Premature Subscription Purchase

The ERP selection was not based on a typical State bid process where ERP vendors and solutions were compared and contrasted against defined business needs. Instead, the bid process was completed by a third party designed to evaluate many types of solutions against technical cloud services standards. A core IT principle is that *business* needs should inform projects. Because of the atypical procurement process used for this project, there are risks that functional gaps between WorkDay ERP and business needs will be identified during the implementation. Typically, these gaps would be identified during the bid process and they can be managed and considered during the bid evaluation process. The gaps could result in excess change orders or require unanticipated integrations or third-party software solutions. Due to the lack of business documentation, the State underestimated the time required to select a Preferred Implementation Vendor (PIV) and develop a contract (completed October 2024). Because of the extended PIV contracting time, the State has been paying for the ERP subscriptions it acquired even though they are not being utilized.

2. Lack of Documented Business Requirements

Stemming from the unconventional procurement process described above, the lack of a gap analysis and documentation of high-level business requirements contribute to the lack of clarity in project definition and risks associated with the technical approach to this project. This analysis will not be conducted until after the PIV/Business Process Re-engineering contracts are executed, committing the State to \$71 million in *known* project costs and additional costs related to unknown gaps. The State anticipates it will complete this work on a short timeline. Lack of clarity surrounding the plan for archiving data, and how it will be accessible by business staff is a significant concern. It's important to note that the State Project Team has identified risks related to lack of thorough requirements in project risk logs, but there are few options for mitigation available to them as the product has already been chosen.

3. Lack of Adherence to WorkDay Recommendations for Post-Go-Live Testing

After “go-live”, the ERP subscription purchased by the State includes three tenants: the Production tenant, a Sandbox tenant that can be used to develop and test minor configuration changes, and a Preview tenant, which is used to view the changes in the next release. The changes to the Sandbox are not backed up and

can only support a three-week development project.³ WorkDay guidance recommends purchasing an implementation tenant for solutions with multiple integrations. There are 150 known integrations within the current HR and VISION system, and changes to their configurations are likely required when policy and technology requirements change.^{4,5} The State's current plan does not include purchase of a separate implementation tenant. This decision should be reviewed to make sure it does not violate cloud security standards and policies that govern the use of the ACH automated payment services used by the State.

³ After three weeks, the sandbox is refreshed and any development changes will be overwritten.

⁴ Because a thorough business needs assessment was not completed prior to the purchase of the ERP, there may be additional integrations or system requirements that have yet to be identified.

⁵ When laws, both State and federal, change, the State may need to modify its accounting or payroll practices, requiring modifications to the financial and accounting systems. Additionally, if there are changes to systems that integrate with the HR or financial systems the State needs to test the changes to ensure that the data is transferred correctly.

D. Recommended Oversight Activities

Given the approach to procurement and requirements gathering, this report recommends JITOC receive written status updates from ADS throughout project implementation to help guide decisions about the appropriation of additional funding. The recommendations are organized by project review areas for clarity, but some oversight activities cross project review areas.

Recommended Oversight: the following should be provided by the State to JITOC in writing at the end of requirements activities for the PIV and Business Process Re-engineering contract.

1. Project Justification

- a. State provides updates to JITOC on the ability of WorkDay ERP to replace the systems originally targeted for replacement.

2. Clarity of Purpose:

- a. State provides a list of gaps between WorkDay ERP and the following existing systems:
 - i. Human Resource System (VTHR)
 - ii. Budget system (Vantage)
 - iii. Statewide accounting and financial system (VISION)
 - iv. Department of Labor Finance System (FARS)
 - v. Department of Transportation Finance System (STARS)
 - vi. Other systems identified during the gap analysis
- b. JITOC receives feedback on project implementation from business staff of representative stakeholder groups outside of the Executive Branch, to assess opinions related to inclusion, project trajectory, and concerns
- c. As part of written status reports, the State provide JITOC with a list of anticipated major change orders for PIV, Business Process Re-engineering Contracts

3. Organizational Support:

- a. State provides updated list of Project Team(s) as appropriate
- b. State provides information on the inclusion of stakeholders from the following groups: State and Independent Agencies/Departments, Judiciary, General Assembly
- c. JITOC solicits feedback from business staff of representative stakeholder groups to confirm inclusion in requirements process
 - i. Response should include questions related to:
 - (1) understanding on plans for chart of accounts;
 - (2) migration of data into WorkDay and if this enables stakeholders to meet reporting requirements; and
 - (3) comfort with plans and access to historical data that will not be migrated to WorkDay

4. Project Leadership

- a. State provides notification to JITOC when there are changes in Project Sponsorship or to the leadership team

5. Project Management

- a. State provides an updated project management strategy pertaining to defined project objects, cost management, stakeholder engagement, and other related topics

6. Financial Considerations:

- a. State provides updated project cost information when it is available and prior to executing contract amendments or change orders
- b. State confirms if items listed in Section E6, Assessment of Financial Considerations, as potential additional costs have been confirmed or dismissed as unnecessary via the requirements process (This is to confirm the State has considered each risk)
- c. State provides an update on how it will communicate changes to integration specifications throughout State government and report on any anticipated additional costs associated with modifying existing system integrations

7. Technical Approach:

- a. State provides an update on how Chart of Accounts was confirmed/redesigned prior to start of WorkDay implementation
- b. State provides an update on the plan to mitigate risks associated with the lack of a post-go live test environment and the plan for testing that is aligned with WorkDay recommendations
- c. State provides progress reports on the implementation of the plan to ensure access to current and historical data for reporting

E. Review Process

This analysis was conducted using the existing methodology for an IT project review on behalf of the JFO and the General Assembly. The project review focused on seven key subject areas:

1. Project Justification
 - Does the project need to be done?
2. Clarity of Purpose
 - Is there a clear definition of success so all participants know when the project is completed correctly?
3. Organizational Support
 - Is the affected organizational entity ("the business") fully supportive of the project, and is the business willing and able to adapt where required?
4. Project Leadership
 - Will there be strong and effective leadership to guide the project?
5. Project Management
 - Will there be qualified and effective project management to assist leadership?
6. Financial Considerations
 - Are costs through the system lifecycle adequately estimated and is there funding?
7. Technical Approach
 - Are the proposed technical solutions achievable, realistic, and appropriate?

The information used for this review was gathered from the following sources:

- Documentation from the ADS Enterprise Project Management Office
- Conversations, emails, documents, and testimony from:
 - Secretary of Administration Clark
 - Secretary of Digital Services Reilly-Hughes
 - former ADS Secretaries Quinn and Nailor
 - WorkDay ERP Staff
 - PIV Staff
 - ADS Staff (conversations and emails)
 - ADS Chief Technology Office (CTO)
 - Consultation with the Cloud Security Alliance
- RFPs and Contracts from the National Association of Chief Procurement Officials
- Standards developed by the Cloud Security Alliance and conversations with their staff
- The CIO's independent review⁶
- Review of public documents and legislative testimony regarding ERP projects in other states
- Additional technical and standards sources cited in this report

⁶ In this report, the term "independent review" refers to a review as described in 3 VSA § 3303(d). This is a requirement for ADS to obtain an independent expert review of any new information technology projects with a total cost of \$1,000,000 or greater or when required by the Chief Information Officer. This independent review has a different scope than the JFO IT Review and is conducted by an ADS-selected vendor.

F. Project Description

What is Vermont's Enterprise Resource Planning (ERP) project?

Enterprise Resource Planning (ERP) IT solutions integrate a wide range of business processes, typically core financial and human resource functions, under a single platform. The State selected WorkDay to provide this solution. The WorkDay ERP solution selected by the State is designed to be used "as-is" with minimal customizations, promoting a standardized approach to business processes while providing the capability to integrate additional solutions.

The State plans to replace the following systems with the new ERP:

- Human Resource System (VTHR)
- Budget system (Vantage)
- Statewide accounting and financial system (VISION)
- Department of Labor Finance System (FARS)
- Department of Transportation Finance System (STARS)

To understand the total cost and impact of the project, this analysis examined the broad business and information technology areas required to replace the necessary components of the existing systems. Based on the information currently available, the scope of the ERP project includes the following:

- Purchase of initial WorkDay subscription
- Ongoing WorkDay subscription costs
- Assessment/possible redesign of the chart of accounts⁷
- Contracted services needed for the implementation of WorkDay.
- Hosting and system support
- Cost of ADS staff
- Contract work required to fill gaps not met by WorkDay
- Data archiving and mechanisms for state business staff to access archived data
- Other costs including business processes redesign⁸, change management, staff augmentation, and other unidentified services

⁷ The Chart of Accounts in accounting is used to record and report financial transactions. It is used to meet specific reporting and accounting requirements for the public sector. The Chart of Accounts underwent a redesign during the initial VISION implementation. Currently it is unclear if all Agencies and Departments are using the Chart of Accounts similarly – and if the legacy data will require recode when moved into the new system and to the data lake. Of note, the functionality of the STARS and FARS systems has remained separate from VISION because federal reporting requirements require data tracking at a more granular level than VISION allowed at the time of implementation. The Administration plans to use the requirements phase of the Business Process Reengineering project to determine whether or not WorkDay can accommodate the accounting requirements of STARS and FARS.

⁸ Business Process Redesign refers to the effort required to align employees' steps in their day-to-day work to take advantage of streamlined operations provided using the new system. This process mitigates the risk that employees unintentionally build inefficient processes required by the old system into the new system. These beneficial changes are not always apparent to new users, and the best way to streamline operations is to bring in experts skilled in this area.

The Preferred Implementation Vendor (PIV) will implement the ERP System in two phases over approximately forty-five months.

- Phase 1: Human Capital Management, Adaptive Planning, and People Analytics
 - Part A: Human Capital Management (Benefits, Payroll, Time Tracking, Foundational Data Model, PRISM Analytics, Performance, Talent)
 - Part B: Adaptive Planning (Budget Replacement)
 - Part C: People Analytics⁹
- Phase 2: Financials (includes Accounting)¹⁰

The ERP project includes additional work not included in the PIV scope of work but which must be completed before the new system can “go-live.” This includes:

- Data Lake Design, Build, Interface for Employees, Training, Data Migration¹¹
 - How data is stored and accessed by stakeholders
- Business Process Reengineering
 - Redesigning how State employees work to be more efficient and leverage efficiencies and functionality of the new system
- Report Development
 - How information is reported out of the system for auditing and other operational needs
- Required functionality not met by WorkDay.
 - Other required functions not met by WorkDay but needed by the State.

The PIV contract identifies approximately 150 integrations in the current VTHR and VISION systems, where data is exchanged with third-party systems. These integrations may include one or more separate systems using the integration.

Other States' Experience

At the time of the initial fiscal year 2023 appropriation, portions of the WorkDay Human Capital Management (HCM) module were live in eight states; no states were using the full enterprise platform which includes the Finance Management (FM) module. The FM Module is currently in use at the Maryland Environmental Service and the Department of Transportation in Iowa. The State of Iowa canceled the project for a statewide implementation of the FM modules in 2023.¹² Also, according to WorkDay, the Iowa Department of Transportation kept their legacy STARS system and linked it to their financial WorkDay solution.

⁹ People Analytics for WorkDay is a tool that leverages artificial intelligence, machine learning to uncover insights in human resource data. <https://www.workday.com/en-us/products/analytics-reporting/augmented-analytics.html#:~:text=Workday%20People%20Analytics%20is%20an,meaningful%20insights%20about%20your%20people>

¹⁰ Financials refers to the phase of the project where the WorkDay FM module is implemented.

¹¹ Data Migration refers to loading data not moved into WorkDay into the Data Lake.

¹²The Governor's office issued a press release stating, "After delaying the project last year for additional review, the Department of Management and Office of the Chief Information Officer (OCIO) has determined the platform will not meet some of the state's unique needs." Link to press release announcing cancellation of Iowa/Workday Finance Management implementation: <https://governor.iowa.gov/press-release/2023-03-24/state-iowa-ends-agreement-workday-update-financial-management-system-will>

In addition, WorkDay provided the following information to inform this review:

The Finance Module is about to go live at the following agencies/departments in other states:

- *Kentucky Department of Health went live on Financials on 6/16/24*
- *Mississippi Medicaid is scheduled to go live on Financials on 7/22/24*
- *Pennsylvania Housing Finance Agency is scheduled to go live on Financials on 9/24*

The following states and related entities have Workday Financials implementations underway:

- *State of Washington*
- *State of Rhode Island*
- *State of Georgia*
- *Pennsylvania General Assembly*

“Based on their work with state and state agency clients, WorkDay has enhanced its product to support government customers, including multi-basis accounting, revenue-based budgets, and allocations.

This work has been informed through work with Design Partner Groups (DPGs), which partner with the WorkDay product team to design and develop new features. Through DPGs, the product team collects customer's unique business needs and translates them into functional requirements, shaping the product designs and prototypes to improve the customer experience.”¹³

History of Appropriations and WorkDay Contract

In May of 2022, the State signed a contract with WorkDay, totaling \$28.875 million over ten years. This contract was signed before the implementation vendor RFP was released. This decision is unusual because software licenses/subscriptions are usually not purchased until the implementation is ready to begin.¹⁴

To date, the General Assembly has appropriated \$24.6 million for the ERP project¹⁵. In addition, the Agency of Administration requested \$3 million in the fiscal year 2024 Budget Adjustment Act for staff augmentation and business process redesign, but the money was not appropriated. Instead, prior appropriations were amended to allow for this work to proceed. JITOC is currently considering the release of the \$11.8 million appropriated for the Financial Management (FM) Module in the fiscal year 2023 budget.

¹³ Email from WorkDay's Melissa D'Andrea to Lisa Gauvin on July 22, 2024.

¹⁴ See section 5 for additional information about project management best practices

¹⁵ See section 6 for details of appropriations to date

G. Assessment by Project Review Area

1. Project Justification

The current DHR, VISION, STARS and FARS systems were implemented approximately 30 years ago. The current budget system is at the end of life, meaning updates to the system are no longer available. The State's goal is to move to a Software as a Service (SaaS) solution rather than hosted by the State and consolidate systems.

The CIO's Independent Review by Plante Moran states that PeopleSoft HCM and the PeopleSoft FM are at the end of life, and there will be expensive costs of extended support (over \$10 million per year). The information needed to confirm this cost has not been provided and cannot be replicated.

This assessment that PeopleSoft HCM and FM are at end of life is not technically accurate. The HR system has been upgraded to the current version that is supported through 2034. The VISION system upgrade is underway and expected to be completed in December 2024.

The current PeopleSoft contract lists an annual support cost of \$1.4 million for fiscal years 2024, 2025, and 2026. Additionally, the CIO's Independent Review lists the costs of internal staff to support PeopleSoft in fiscal years 2024-2025 at \$7.1 million and \$8 million in fiscal years 2026-2027. The information needed to replicate this has not been provided in a way that can allow for these assumptions to be confirmed or disputed.

Assessment of Project Justification

Regarding the justification for this project, the age of the system, the age of the existing systems, the fact that the budget system is at the end-of-life, and the State's goal of moving to a SaaS solution is sufficient justification.

The reason this area was assessed as a "strong" and not "excellent" is that the State included in the justification that the PeopleSoft HR and Finance system was not supported, and this is not the case. The HR system is currently supported and the Finance system upgrades are scheduled to be completed by the end of the year. Oracle has not stopped supporting this platform. This is a review of the State's stated justification.

Recommended Oversight Activities by JITOC to confirm Project Justification

- a. State provides updates to JITOC on the ability of WorkDay ERP to replace the systems originally targeted for replacement

2. Clarity of Purpose

The Project Description states that the State seeks to replace the current VTHR (HRS), Vantage (budget), VISION (financials), FARS (DOL financials), and STARS (AOT financials) system with the WorkDay ERP, which aligns with the State goal of moving to SaaS systems and replacing antiquated/end-of-life systems.

A strong clarity of purpose would have a clear definition of success, so all participants know when the project is completed. This project involves implementing an ERP system and replacing existing systems. A key step in this work will be to:

1. Analyze the functions performed by the existing systems (Current State or “As-Is” Analysis)
2. Determine if the functions are still required or obsolete
3. Determine if the required functions align with the capabilities of the new ERP (“Gap Analysis”)
 - a. If not, develop an added integration or replacement system for these functions

The documentation of functional requirements are foundational activities necessary to provide a clear understanding of what activities will be included in the system and allow the formulation of a budget for the project.

Stakeholder engagement during the project's planning stage helps develop priorities and prepare stakeholders for participating in the project. The project scope, budget, goals, and timeline together provide measures of success that reflect the clarity of purpose.

Assessment of Clarity of Purpose

The State has deferred the work necessary to understand the gap between WorkDay ERP and the required functions of the systems being replaced until the requirements phases of the PIV contract and the Business Process Reengineering contract. This deferment means the full scope of the project and the resulting clarity of purpose will not be understood until this work is completed

Recommended Oversight Activities by JITOC to Confirm Clarity of Purpose is Achieved

- a. State provides a list of gaps between WorkDay ERP and the following existing systems:
 - i. Human Resource System (VTHR)
 - ii. Budget system (Vantage)
 - iii. Statewide accounting and financial system (VISION)
 - iv. Department of Labor Finance System (FARS)
 - v. Department of Transportation Finance System (STARS)
 - vi. Other systems identified during the gap analysis
- b. JITOC receives feedback on project implementation from business staff of representative stakeholder groups outside of the Executive Branch, to assess opinions related to inclusion, project trajectory, and concerns
- c. As part of written status reports, the State provide JITOC with a list of anticipated major change orders for PIV, Business Process Re-engineering Contracts

Additional Outreach Activities will be identified after analyzing these findings.

3. Organizational Support

Organizational support is assessed by examining key indicators that communicate that leadership in the organization supports the project. This support is reflected by assigning qualified staff, supporting change management, understanding the need for business process redesign, and providing appropriate training. The contract for the Business Process Re-engineering was not available for review and analysis of this work and how it reflects organizational support is not included in this analysis.

Both Secretary of Administration Clark and Secretary of Digital Services Reilly-Hughes fully support the project. They have identified a leadership structure that brings in expertise from across State government to serve on the Executive Steering Committee and on the program and project subcommittees.¹⁶ However, the mechanism for soliciting input in the requirements phase from Executive Branch Departments and Agencies, Independent Departments and Agencies, the Judiciary, and the General Assembly is unknown. Leadership across State government needs to buy into this project for it to be successful.

Note: The Judiciary, General Assembly, and independent agencies are not included in any of the resource plans. The Judiciary and General Assembly have not been consulted when considering the project timeline, vendor scope/contract, or plan for the data lake. These branches of government will likely utilize the ERP system for their financial and HR functions when VISION and VTDR are retired.

Assessment of Organizational Support

While the State has a dedicated leadership team for this project, there is a need to engage all areas of the organization to make sure the project is successful. There are representatives on the leadership team from VDOL (FARS), AOT (STARS), AHS, and AOA and ADS on the leadership team, but every Agency, Department, and branch has evolved their own business processes, sometimes driven by specific federal or State requirements. Additionally, many Agencies and Departments have third party systems that integrate with one of the systems being replaced. Engagement with business offices across State government will be critical to ensure that implementation of the system and the Chart of Accounts meets business functions and requirements. This includes engagement with the other two branches of government and independent agencies and departments.

In summary, the resource planning for this project is incomplete. The Judiciary, General Assembly, and independent departments have not been included in any resource planning to date, which raises the question of whether or not there will be organization support from these entities. Additionally, despite staffing support for the project at the highest level, the work that needs to be completed by State staff, who have multiple competing priorities and staff turnover challenges, may be difficult.

Recommended Oversight Activities of JITOC to Confirm Organizational Support

- a. State provides updated list of Project Team(s) as appropriate
- b. State provides information on the inclusion of stakeholders from the following groups: State and Independent Agencies/Departments, Judiciary, General Assembly
- c. JITOC solicits feedback from business staff of representative stakeholder groups to confirm inclusion in requirements process
 - i. Response should include questions related to:
 - (1) understanding on plans for chart of accounts;

¹⁶ SOV Program Resource Management Plan 5/10/2024. Note, since this table was published, some members have changed roles in state government or have left state government. This Table is presented in the next section.

- (2) migration of data into WorkDay and if this enables stakeholders to meet reporting requirements; and
comfort with plans and access to historical data that will not be migrated to WorkDay

Additional Outreach Activities will be identified after analyzing these findings.

4. Project Leadership

This area is an assessment of the strength and effectiveness of the project's leadership. Secretary of Administration Clark and Secretary of Digital Services Reilly-Hughes are co-sponsors of this project. Project sponsors approve and support the project goals, appropriate resources, and monitor progress. Project leaders and managers assume active responsibility and accountability for success.

Table 1, at the top of the next page, provides an overview of the project management team which includes:

- Executive Steering
- Program Leadership Team
- Program Budget Sub-Committee
- Project Management Team – HCM/Budget
- Project Management Team – Financials – Phase I

Table 1: Project Leadership Team

(from: State of Vermont Project Documentation)

State of Vermont - ERP Implementation Project Resource Management Plan - Program Leadership and Governance					
Governance Role	Department		Resource Name	SOV Estimated Resource %	FTE%
Executive Sponsorship					
Executive Sponsor	AOA		Deputy Secretary Sarah Clark	5%	5%
Executive Sponsor	ADS		Secretary Denise Reilly-Hughes	5%	5%
Executive Steering Committee					
Chair	AOA		Deputy Secretary Sarah Clark	1%	1%
Member	AOA		Sean Brown, COO	1%	1%
Member	AOA		Commissioner Beth Fastiggi	1%	1%
Member	AOA		Commissioner Adam Greshin	1%	1%
Member	ADS		Secretary Denise Reilly-Hughes	1%	1%
Member	AHS		Deputy Secretary Todd Daloz	1%	1%
Member	ADS		Mark Combs, Chief Technical	1%	1%
Program Leadership Team					
Member	AOA		Melissa Butryman	25%	25%
Member	AOA		Hardy Merrill	25%	25%
Member	AOA		Justin Kenney	25%	25%
Member	ADS		Kevin Viani	25%	25%
Member	ADS		Alex Ibey	25%	25%
Program Budget Sub-Committee					
Member	AOA		Hardy Merrill	1%	1%
Member	AOA		John Becker	1%	1%
Member	ADS		Kate Slocum	1%	1%
Member	VDOL		Chad Wawrzyniak	1%	1%
Member	AOT		Bradley Kukenberger	1%	1%
Member	AOA		Joe Harris	1%	1%
Member	AOA		Holly Ferrant	1%	1%
Member	AOT		Lindsay Gillette	1%	1%
Member	AOA			1%	1%
Project Management Team - HCM/Budget					
Member	AOA		Keri Toolen	40%	40%
Member	AOA		Melissa Butryman	40%	40%
Member	AOA		Tim Metayr	40%	40%
Member	ADS		Trudy Marineau	40%	40%
Project Management Team - Financials - Phase I Only					
Member	DFM		Joe Harris	1%	1%
Member	DFM - Reporting		John Becker	1%	1%

Assessment of Project Leadership

There has been considerable change in project sponsors over the last three years. There were two CIOs before Secretary Reilly-Hughes and one other AOA sponsor before Secretary Clark.

The project leaders are empowered to make day-to-day business decisions during implementation. Project sponsors will set the tone and provide an example of both how staff support and respond to the project team. It should be noted that the membership of the leadership team is limited and does not contain representation from all stakeholder groups. Specifically, there is no representation from the Judiciary, the General Assembly, Independent Departments/Agencies, or extended State Agencies/Departments (beyond AOA, DOL (FARS), and AOT (STARS)).

In summary, project leadership is qualified but limited in its representation. This increases the risk of change orders when requirements are discovered to be incorrect during project implementation. It is important to recognize that turnover in leadership may have exacerbated the challenges facing this project.

Recommended Oversight Activities by JITOC related to Project Leadership

- a. State provides notification to JITOC when there are changes in Project Sponsorship or to the leadership team

5. Project Management

Project Management is assigned to the ADS' Enterprise Project Management Office (EPMO) and contractor BarryDunn.

EPMO utilizes a hybrid Waterfall-Agile process and Project Management Body of Knowledge (PMBOK) approach to Project Management.¹⁷

Assessment of Project Management

PMBOK was developed, in part, to provide a comprehensive and proven framework that could be universally applied to improve the likelihood of project success. ADS used this standard to guide the processes used by EMPO.

The information received regarding Project Management from the State focuses on the implementation contract, but the project is replacing five major systems and will include a major data archiving effort. For each of the five systems that are being replaced, the State will need project management and coordination with the ERP implementation because it is unknown if all required functions will be met using WorkDay ERP. For each gap, the State must track and manage a solution and possible integration with WorkDay ERP. There are two such systems identified as being out of scope with the PIV contract: CornerStone on Demand Learning Management (LMS) and the SAP Success Factors for a Talent Acquisition Management solution.

The unusual procurement approach used by the State conflicts with some core principles of PMBOK pertaining to defined project scope and objectives, cost management, and stakeholder engagement. However, the State indicates that the requirements phase of the PIV and Business Process Re-engineering contracts will address these misalignments.

Recommended Oversight Activities related to Project Management

- a. State provides an updated project management strategy pertaining to defined project objects, cost management, stakeholder engagement, and other related topics

¹⁷ Link to "Project Process" page on ADS webpage. [Project Process | Agency of Digital Services \(vermont.gov\)](https://www.vermont.gov/ads/project-process)

6. Financial Considerations

This section of the review considers whether the costs through the system lifecycle were adequately estimated and if funding has been identified.

ERP Project Costs FY22-FY31

	Cost Area	Costs Prior To Project Start	HCM Implementation FY24-FY25	FM Implementation FY26-FY27	Annual Costs FY28-FY31	Total Costs FY22-FY31
1	Software					
2	WorkDay subscription	2,350,000 ¹⁸	2,846,429 ¹⁹	7,892,857 ²⁰	15,785,714 ²¹	28,875,000
3	Training Cost	-	197,994	-	-	197,994
4	Delivery Assurance Cost	-	350,000	350,000	-	700,000
5	Other-Annual AWS Fees	-	-	-	80,000	80,000
6	Software Total	2,350,000	3,394,423	8,242,857	15,865,714	29,852,994
7	Consulting					
8	System Implementer	-	10,643,565	10,748,771	-	21,392,336
9	Business Analyst (1 FTE)	-	1,040,000	-	-	1,040,000
10	Project Management	-	1,651,950	1,080,000	-	2,731,950
11	Business Transformation ²²	-	1,025,350	1,025,350	-	2,050,700
12	Risk Assessment	-	50,000	-	-	50,000
13	Other-Contingency	-	3,069,816	2,138,150	-	5,207,966
14	Consulting Total	-	17,480,681	4,992,271	-	32,472,952
15	ADS Support Total	-	3,148,288	1,574,144	3,595,696	8,318,128
16	Business Staff Total	-	450,000	450,000	-	900,000
17	Total	2,350,000	24,473,392	25,259,272	19,461,410	71,544,074
18	Annual costs post go live				4,983,924	

¹⁸ Includes June 2022 and June 2023 Payments.

¹⁹ Includes June 2024 and June 2025 Payments

²⁰ Includes June 2026 and June 2027 Payments

²¹ Includes June 2028-June 2031 Payments

²² The source of this information is the original bid documents from the State's preferred business process re-engineering vendor

Assessment of Financial Considerations

Inquiries regarding discrepancies and requests for updated financial information were deferred by the State until after project approval in order to prevent rework for State staff.

Although the cost table has \$5.2 million in contingency funding, it is likely the amount of funding identified for this project is insufficient. As discussed in earlier sections of this report, the lack of a gap analysis presents a risk of additional costs. The deferment of requirements until the execution of the PIV and Business Process Re-engineering also contributes to the likelihood of additional costs. In addition to these risks, other areas that could contribute to additional costs include the following:

1. Additional WorkDay subscription FTEs
 - When the contract with WorkDay was executed, subscription costs were based on a State employee FTE count of 8,325. This does not appear sufficient to cover all State permanent and temporary employees who would need to access the system.
2. WorkDay Training Credits
 - The State's Workday training credits are set to expire on January 29, 2026 (according to the Workday training amendment). Delays in the start of implementation could impact the availability of these credits, particularly because the expiration date is before the estimated project completion date.²³ Additional costs will be incurred if more training credits need to be purchased.
3. Costs related to the Creation of Data Lake or Data Warehouse
 - The current plan is to implement a Data Lake using ADS staff to store historical data that will not be migrated into WorkDay. This is a complex project requiring a significant effort. A project like this hasn't been attempted by ADS, so costs are difficult to estimate. It isn't clear if the internal costs of this storage solution are part of the estimated total project costs presented thus far.
4. Costs related to the Purchase of an Implementation Tenant (Post Go-Live)
 - The need to make changes in the configuration of the WorkDay ERP tool is likely and the current State plan to operate without an implementation tenant is in conflict with cloud security standards and is likely in conflict with the policies surrounding the use of the ACH system for automated payment. The State will likely purchase an implementation tenant post-go live.
5. Costs incurred to ensure integration of external and internal software owned and operated by Agencies and Departments throughout State government (estimated at 150 integrations)
 - State Agencies and Departments have systems that currently integrate with VISION. It is unknown what costs will be incurred to update and test the integrations into VISION. Some changes may be small and could be made by current staff, but if the system is a legacy system it may need to be replaced. Costs associated with additional integrations have not been identified.
6. Level of ongoing State support post-go live.
 - Currently ADS has internal staff that support existing systems. It is unclear to what extent those costs will continue with a new system.

²³ Source – SOV SI Risks and Issues log.xls, R19-Expiration of Training Credits

Additionally, one of the greatest risks to excess costs would be if STARS or FARS cannot be replaced with WorkDay ERP. In the CIO's independent review, it was noted that projects in other states that replaced STARS and FARS cost between \$25 million and \$35 million to implement.²⁴

In summary, the lack of gap analysis during the initial project planning stage means there is considerable risk for additional costs. Oversight is key for determining if these costs are identified after the requirements phases of the contracts are completed. Additional costs may continue to emerge over the course of the project in an unpredictable manner.

Recommended Oversight Activities by JITOC related to Financial Considerations

- a. State provides updated project cost information when it is available and prior to executing contract amendments or change orders
- b. State confirms if items listed in Section E6, Assessment of Financial Considerations, as potential additional costs have been confirmed or dismissed as unnecessary via the requirements process (This is to confirm the State has considered each risk)
- c. State provides an update on how it will communicate changes to integration specifications throughout State government and report on any anticipated additional costs associated with modifying existing system integrations

²⁴ Reference bullet item 4 page 18 of IR

7. Technical Approach

Although the selection of a cloud-based ERP system is aligned with the State's goals of moving towards SaaS, there are specific areas of concern regarding this approach for this project.

In this section, four additional areas of concern within the technical approach of the project are described and an analysis of each area is provided. These include:

- A. Chart of Accounts Confirmation/Redesign not reflected in current plans
- B. Tenant Purchase and Use:
 - a. "Tenant" is a unique instance of WorkDay ERP for which Vermont subscription allows access²⁵
- C. Testing releases, modifications, and new reports
- D. Data migration and archiving

A. Chart of Accounts Confirmation/Redesign not reflected in current plans

A Chart of Accounts (CoA) is used to record and report financial transactions in a consistent manner across an enterprise. It is used to meet specific reporting and accounting requirements for the public sector. The Chart of Accounts underwent a redesign during the initial VISION implementation. Currently it is unclear if all State agencies and departments are using the CoA similarly – and if the legacy data will require recode when moved into the new system and to the data lake. The functionality of the STARS and FARS systems has remained separate from VISION because federal reporting requirements require data tracking at a more granular level than the VISION chart of accounts allowed at the time of implementation.

Analysis of Chart of Accounts Confirmation/Redesign not reflected in the current plans

The Administration indicated it plans to use the requirements phase of the Business Process Re-engineering project to determine if WorkDay can accommodate the CoA requirements of STARS and FARS. This work, however, was not part of the RFP and the Business Process Re-engineering contract was not provided to the General Assembly to inform this review because it was under development. It is unclear if this analysis is planned and will inform the configuration of WorkDay. This increases the risk that STARS and FARS will not be replaced by Workday or that rework will be required to replace STARS and FARS with WorkDay. The CoA is in essence that foundation of the WorkDay configuration and changes to the CoA after the HR configurations are completed would be costly.

B. Tenant Purchase and Use

This project will replace five major systems with WorkDay ERP. For this project, the State purchased one tenant subscription from WorkDay. The State also subscribes to WorkDay Prism, an analytics and data integration tool that allows organizations to bring together and analyze data from different systems. According to WorkDay, the subscription allows the State access to the following supporting tenants during the implementation.

- *Phase 1 HCM/PAY/PRISM – Seven deployment tenants for the Phase 1 WorkDay deployment (includes a PRISM tenant for historical data use case)*

²⁵ In cloud services, this is shared with other WorkDay clients, but Vermont data can be accessed only by State-authorized users.

- *Phase 2 FINS/Procurement – Six deployment tenants for the Phase 2 WorkDay deployment since PRISM is already live in Phase 1*
- *WorkDay Adaptive Planning – One adaptive implementation instance (post-go-live production and non-production instances)*
- *WorkDay Extend is an option that was purchased by the State and includes two additional tenants (outside the normal Production, Sandbox, and Preview). One is an implementation tenant that is used to test Extend applications and one is a developer tenant that is the same thing, except it has dummy data vs customer data.*

According to WorkDay, once the State goes live, it will have access to the following tenants:

- Production – this is the live production tenant in use by the State.
- Preview Tenant – the Preview Tenant is a copy of the Production Tenant, but it contains the functionality that is planned for the future release. The Preview Tenant allows the State to view and test new features. The Preview Tenant environment is not recommended for new configuration or testing because of the inability to move objects off of the environment²⁶.
- Sandbox – this is a copy of the Production Tenant. WorkDay recommends the Sandbox be used for "the testing of light configuration changes by the State." There is an option to move light configurations off of the Sandbox and into the Production Tenant. WorkDay recommends users have a contingency plan for work because it is not "backed up." The Sandbox is updated weekly. Any configuration changes in progress and when the update occurs it will be overwritten. The State cannot request an update to the Sandbox Tenant outside of the weekly update. WorkDay recommends major testing and configuration changes be made on an implementation tenant.²⁷.

Analysis of Tenant Purchase and Use

The current VTNR and VISION systems use system integrations to move data from one system into or out of VISION or VTNR. These integrations require ongoing maintenance as the external systems are updated or modified to meet technical, federal, or State requirements. There are currently 150 identified integrations included within the PIV scope of work that will either need to be integrated with WorkDay or the process absorbed into the WorkDay system.

On occasion, there are changes in State or federal policy that require modification to the processes within the state VTNR or VISION systems. When these changes occur, it is best practice to implement changes in a non-production environment to ensure that they are executed properly. Examples of these types of changes include those required after a new State employee contract is negotiated. These changes could impact a wide range of areas, such as classification changes, overtime provisions, or other benefits. If contractual changes aren't tested outside of the production environment, the State risks paying an employee incorrectly or recording overtime incorrectly.

Similarly, with integrations, when a change to an Agency or Department's third-party system occurs, it is important to test the integration of data with the ERP to ensure that the correct information is uploaded so that all transactions are recorded, or that a correct payment file is generated. Without an environment to test the integration between systems, there is a possibility that incorrect information

²⁶ Document "Tenant Management" provided to JFO by WorkDay on 7/19/2024

²⁷ Document "Tenant Management" provided to JFO by WorkDay on 7/19/2024

will be loaded. An example of this type of integration is the link between VISION and the State Park Reservation system, where financial data is captured in the reservation system and then automatically loaded into VISION on a semi-regular basis so that it doesn't have to be entered manually. When new systems are brought online or existing systems are upgraded or replaced, the State must be prepared to test the integration between the external and financial systems to ensure that correct data is loaded into the production environment.

The current WorkDay subscription purchased by the State does not include an implementation tenant after the initial go-live. WorkDay recommends implementation tenants for all configurations that will take over three weeks to deploy (an entity can defer weekly updates to the Sandbox environment only twice). WorkDay recommends implementation environments for clients with multiple integrations. The PIV contracts include approximately 150 integrations. State plans are currently out of alignment with WorkDay recommendations.

After consultation with the Cloud Security Alliance (CSA) on the general issue of tenant use in cloud environments, CSA indicated that not having separate implementation/testing and production environments is unaligned with cloud security standards.²⁸ CSA indicated the requirement was overarching and set into standards that require logical separation of environments and the requirement for segregation of duties.²⁹ When the National Institute of Standards and Technology (NIST) was developing cloud standards, it contacted CSA for input.

In addition, the State ERP is subject to the National Automated Clearing House Association (NACHA) policies, which govern electronic payments and secure processing within the ACH network. Like CSA standards, NACHA does not have explicit mandates for a separate environment, but it implies the need for separation to ensure data security and integrity. For example, it discusses the segregation of environments. Violations of policies could result in legal penalties and regulatory actions.³⁰

Not having separate implementation/testing environments implies that the plan is to either allow State developers or business staff the right to deploy untested scripts/changes in a production environment where an error could change, delete, or add incorrect payments or other bad records. Alternatively, the State assumes that all integrations could be tested in the Sandbox environment in the allowed three-week time span. It appears that the State does not have a contingency plan for testing integration or configuration changes that will take longer than three weeks, presenting a significant technical and financial risk.

C. Testing Releases, Modifications, and New Objects (Reports, Queries)

One of the benefits of a SaaS product is that the vendor can provide updates to the system with increased frequency and the responsibility to apply security patches or other upgrades is no longer done on state servers with state staff. It is currently unknown how the state will manage testing new releases of WorkDay ERP, the impact that there may be on system integrations, and how the plan aligns with WorkDay recommendations.

²⁸ CSA is a not-for-profit organization dedicated to promoting best practices for security within cloud computing.

²⁹ <https://cloudsecurityalliance.org/research/cloud-controls-matrix>

³⁰ <https://www.nacha.org/rules>

Analysis of Testing on WorkDay ERP

The State's testing strategy for WorkDay, post go-live is unclear and its alignment to WorkDay's recommendation for ongoing testing is unknown. However, much of the documentation indicates the "testing" is mainly focused on reviewing new features so the organizations will understand how the new features must be implemented. Testing of integrations will come into play when new features impacting integrations are included, configurations are changed to meet new State requirements, or new systems are added to integrations.

WorkDay partners have developed white papers that share strategies to best approach testing releases. A white paper titled "*Ultimate Guide to Workday Update Testing*," developed by Kainos (a certified WorkDay partner), provides detailed guidance on the importance of testing WorkDay updates.³¹

WorkDay also believes testing is important. In June 2024, WorkDay announced a partnership with Opkey, an automated testing solution.³²

The documentation indicates that while testing, clients are not testing the software itself but testing their organization's configurations to see if the release impacts the configuration.

WorkDay recommends QA teams test key integrations, critical business processes (hires, transfers, payment processing), and critical custom reports. WorkDay customers can test releases during the five-week release preparation window.³³

D. Data Migration and the Archive of Data from Systems Being Replaced

The State plans to migrate two years of data from the systems being replaced to WorkDay. This limit is included as a boxed scope within the PIV contract. State staff will load prior years' data and all other data that does not fit within the WorkDay ERP data model into a Data Lake. A Data Lake is "a centralized repository designed to store, process, and secure large amounts of structured, semi structured, and unstructured data."³⁴ Data Lakes are easy to build because they require no prior definition of the table structure but form the structures on import. While this makes them easy to build, it requires knowledge of the design of the system containing the tables that were imported into the Data Lake to access the data.

Analysis of Data Migration and Data Lake Plan

The data archive that will be implemented for this project will be sizable and required in order to continue to meet State and federal reporting requirements. State staff have conducted several pilots using Data Lakes but have not implemented a large Data Lake project to-date.³⁵ It is unclear what the State's staffing plan for this work might be but given the operational needs to maintain access to this data, it's clear the Data Lake must be active and accessible when the WorkDay ERP project goes live.³⁶

³¹ <https://www.kainos.com/insights/whitepapers/ultimate-guide-successful-workday-update-testing>

³² <https://www.opkey.com/news/opkey-named-workday-partner>

³³ Opkey Whitepaper "Addressing Workday Implementation Challenges with Test Automation"

³⁴ <https://cloud.google.com/learn/what-is-a-data-lake>

³⁵ Based on information received on 7/24/2024 via email from Jon Kelley to Lisa Gauvin

³⁶ See Appendix 3 more additional information on Business Drivers for Archived Data

The WorkDay contract includes a license for Prism, which is a tool that allows report developers to link WorkDay housed data with external data sources. It is likely that the State plans to use this for accessing information in the Data Lake.

A major risk with the State's plans to use the Data Lake to store historical data is that building it is only part of the project. To successfully implement the Data Lake, the State will need a comprehensive plan to ensure that there is proper documentation and training in place to give users access to the data. In addition, a plan to classify data according to its security requirements is necessary given the sensitive nature of data contained in all the systems being replaced by the ERP. There is a significant amount of data that will be transferred, and it will need to be accessible upon go-live. Without a comprehensive plan for the construction and implementation of the Data Lake, it is difficult to determine the risk of failure.

Summary: The decision to implement WorkDay ERP application is aligned with the State's goals. The PIV is qualified to deliver this implementation. However, the process for managing integrations and testing changes without an implementation tenant pose risks to the system after go-live. The State's approach to testing future changes and releases are not in alignment with WorkDay recommendations. The State's plan for archiving data may not align with needs of the business users and the State's plan to allow appropriate access to the data is unknown. It is unclear when or if the analysis of the Chart of Accounts will occur and if it will be completed in time to inform the configuration of WorkDay. This increases the risk that STARS and FARS will not be replaced by WorkDay or that rework will be required to replace STARS and FARS with WorkDay.

Recommended Oversight Activities by JITOC to Confirm Technical Approach is Successful

Timing: At end of requirements for activities for PIV and Business Process Re-engineering contract.

- a. State provides an update on how Chart of Accounts was confirmed/redesigned prior to start of WorkDay implementation
- b. State provides an update on the plan to mitigate risks associated with the lack of a post-go live test environment and the plan for testing that is aligned with WorkDay recommendations
- c. State provides progress reports on the implementation of the plan to ensure access to current and historical data for reporting

Appendix 1: Phases of a Project

Initiating Phase: During this phase, the project is proposed, initially defined, and approved. The Initiating Phase is considered complete when a Project Charter has been accepted that defines what is going to be accomplished, why it is necessary, when it is going to be completed, and who is responsible and accountable for the project's success.

Planning Phase: In the planning phase, the groundwork is laid for the executing phase. This includes developing project plans and defining the specifics of scope, requirements, schedule, and cost. The procurement process is started (RFPs), and risk management is planned. Communications between stakeholders (status reports, etc.) are established.

Executing Phase: During this phase, the actual work required to meet project goals is performed in accordance with the project plans. This includes the execution of contracts, the performance of project work, and the management of communications between project participants and stakeholders.

Closing Phase: In the closing phase, the project is determined to be complete, and for most projects, the transition is made from a project mode to an operations mode. Procurements are closed, project teams are released to other tasks, and lessons learned are documented.

Throughout: During all phases, the project team monitors project status and controls scope, schedule, work, costs, quality, communications, risks, procurements, and stakeholder engagement.

Appendix 2: The Selection of WorkDay ERP

The selection of the WorkDay ERP solution did not stem from a State of Vermont RFP for an ERP solution, instead the State purchased WorkDay from the National Association of State Procurement Officials (NASPO) cooperative contract for cloud services solutions. NASPO coordinated a competitive RFP process with member states – including Vermont assisting with the selection. The primary selection criteria were adherence to the National Institute of Standards and Technology (NIST) technical cloud services standards.³⁷

Specifically, the selection criteria were based on alignment to the following NIST Cloud Services areas – which are all technical:

- 8.1.2.1 On-Demand Self-Service
- 8.1.2.2 Broad Network Access
- 8.1.2.3 Resource Pooling
- 8.1.2.4 Rapid Elasticity
- 8.1.2.5 Measured Service

This was a technical bid and not a solicitation assessing a solution against the State's business requirements. Also, unlike bids submitted in response to State RFP's, NASPO does not make available lists of submitted and rejected bids, and no other ERP vendors awarded a contract through this process. There is no indication other ERP vendors were evaluated.

This information is relevant to the assessment of Clarity of Purpose because provisions often included as mandatory in State RFPS may not have been included in the NASPO bid document. Also, some mandatory requirements in the NASPO bid documents may have been waived, such as the mandatory requirements that begin on page 31 of the NASPO Cloud Services RFP. One of these mandatory requirements (6.5.3) stated:

"Offeror must describe how its Solutions are NIST compliant, as defined in NIST Special Publication 800-145, with the service models;"

Yet the WorkDay response says,

"Workday does not serve the US Federal Civilian or Defense Markets. Therefore, we do not programmatically invest in industry specific certifications for NIST or FEDRAMP. While we follow the most advanced cloud industry security practices that are also important considerations for NIST, we cannot attest to being NIST compliant."

³⁷ NIST is a US federal agency that, among other broad functional areas, develops standards for Information Technology and Cybersecurity.

Also, 508 Accessibility compliance is usually included as a mandatory requirement in Vermont IT RFPs. The NASPO RFP also included the following mandatory requirement on page 40 of 405 in its Cloud Services RFP:

"Compliance with Accessibility Standards: The Contractor shall comply with and adhere to Accessibility Standards of Section 508 Amendment to the Rehabilitation Act of 1973 or any other state laws, or administrative regulations identified by the Participating Entity."

Yet the resulting NASPO contact indicated WorkDay did not warrant compliance with Section 508. This was also noted on page 30 of the CIO's independent review where the reviewer stated:

"Based on Workday publicly provided information, Workday does not warrant compliance with Section 508 of the Rehabilitation Act of 1973."

It is unclear if mandatory provisions usually included in Vermont's standard procurement process were included or overlooked and what the consequences of any misalignment to there might be.

Appendix 3: Business Drivers for a Data Archive for Consideration

The purpose of this Appendix is to provide examples of operational needs that require the State to have access to archived data from the systems being replaced. This is not intended to be an exhaustive list.

The State plans to import two years of data into the ERP system before go-live, and will archive the remaining data from systems that are being replaced into a data lake. If data does not "fit" within the WorkDay ERP data model, this data will also be stored within the Data Lake. It is unclear whether the State plans to carry only two years' worth of data in the Workday ERP or if this limit will exist only within the go-live year – or if this decision has been made. The project team also identified and noted this risk in the risk log as R.17³⁸.

The archiving of data is not within the scope of the PIV contract. Any requirements gathering to inform this area of the project should consider the following sample of functions that require drawing off more than two years of ERP data. This does not include research, strategic planning, trend analysis or forecasting activities.

1. Grant Management and Reporting: Grants received by State agencies span more than two years. Required reporting often includes the need to track allocations and expenditures over the entire grant period
2. Regulatory Compliance: Many regulations require the retention of records beyond two years. For example, financial records, contract documents, and audit trails must often be retained for five to seven years to comply with federal regulations. The historical records must be accessible and linked to data in the current ERP system.
3. Audit and Accountability: Auditors need access records to verify transactions, ensure compliance with regulations, and identify any discrepancies or fraudulent activities
4. Legal Requirements and Litigation: Historical data may be required for legal proceedings or investigations. This includes records of past contracts, correspondence, and transaction histories, which might be necessary to resolve disputes or comply with subpoenas.
5. Annual Financial Reports: Federal agencies require state agencies to produce annual financial reports that often include comparative data from previous years. Historical data is essential to comply with these requirements.
6. Federal Reporting Requirements: Agencies receiving federal funds must often provide detailed reports on how those funds have been used over multiple years, including compliance with federal guidelines and performance outcomes.
7. Freedom of Information Act (FOIA): FOIA requests may require the State to produce more than two years' worth of data. Agencies must retain and be able to retrieve records that are pertinent to public information requests.

³⁸ VT ERP Project Team Risk Log, last updated 7/28/2024

The migration of only two years' worth of data may significantly impair the State's ability to meet operational needs, comply with regulatory and legal requirements, and fulfill comprehensive reporting obligations.

Appendix 4: Authorizing language

The General Assembly included language in the Fiscal Year 2022 Appropriations Act, [Act 74 of 2021, Sec. E.127.1](#), relating to the review of State information technology projects:

Sec. E.127.1 INFORMATION TECHNOLOGY REVIEW

(a) The Executive Branch shall transfer, upon request, one vacant position for use in the Legislative Joint Fiscal Office (JFO) for a staff position, or the JFO may hire a consultant, to provide support to the General Assembly to conduct independent reviews of State information technology projects and operations.

(b) The Secretary of Administration and the Chief Information Officer shall:

(1) provide to the JFO access to the reviews conducted by Independent Verification and Validation (IVV) firms hired to evaluate the State's current and planned information technology project, as requested;

(2) ensure that IVV firms' contracts allow the JFO to make requests for information related to the projects that it is reviewing and that such requests are provided to the JFO in a confidential manner; and

(3) provide to the JFO access to all other documentation related to current and planned information technology projects and operations, as requested.

(c) The JFO shall maintain a memorandum of understanding with the Executive Branch relating to any documentation provided under subsection (b) of this section that shall protect security and confidentiality.

(d) To fund this work for fiscal year 2022 and fiscal year 2023, notwithstanding 32 V.S.A. § 706, at the close of fiscal year 2021, \$250,000.00 in carryforward from the legislative budget shall be transferred to the JFO.

* * *

The General Assembly included language in the Fiscal Year 2023 Appropriations Act, [Act 185 of 2022, Sec. E.105.2](#), governing the release of an appropriation to support this project:

Sec. E.105.2 FISCAL YEAR 2023; TECHNOLOGY MODERNIZATION SPECIAL FUND; AUTHORIZATIONS

(a) In fiscal 2023, the following expenditures are authorized from the Technology Modernization Special Fund to the projects described in this section:

(1) the sum of \$11,800,000 for Enterprise Resource Planning (ERP) system upgrade of core statewide financial accounting system and integration with the Vermont Department of Labor and the Agency of Transportation financial systems;

* * *

(b) The expenditures authorized in subdivision (a)(1) of this section shall only be released following approval by the Joint Information Technology Oversight Committee upon a review of the following documentation as provided by the Agency of Digital Services, the Agency of Administration, and the Joint Fiscal Office's IT consultant:

- (1) adequacy of departmental readiness;
- (2) the responsiveness of requests for proposals; and
- (3) results of the independent review

* * *

The General Assembly included language in the Fiscal Year 2024 Budget Adjustment Act, [Act 87 of 2024, Secs. 57-59](#), relating to the amendment of a prior year appropriation, the amendment of uses of funds from the Technology Modernization Special Fund, and reporting requirements for the Agency of Administration:

Sec. 57. 2021 Acts and Resolves No. 74, Sec. G.501(a) is amended to read:

(a) \$52,000,000 is appropriated in fiscal year 2022 from American Rescue Plan Act - Coronavirus State Fiscal Recovery Funds as follows:

* * *

(4) \$12,800,000 to the Agency of Administration for a Human Capital Management ERP upgrade - replacement of the HR system that tracks employee information, timesheets, and contracts, including a VANTAGE budget system upgrade and interface with the new HR system. Up to \$3,000,000 of these funds may be expended for other Enterprise Resource Planning modernization related projects, including business process transformation.

* * *

Sec. 58. 3 V.S.A. § 3306 is amended to read:

§ 3306. TECHNOLOGY MODERNIZATION SPECIAL FUND

(a) Creation. There is created the Technology Modernization Special Fund, to be administered by the Agency of Digital Services. Monies in the Fund shall be used to fund business process transformation and to purchase, implement, and upgrade technology platforms, systems, and cybersecurity services used by State agencies and departments to carry out their statutory functions.

* * *

Sec. 59. AGENCY OF ADMINISTRATION; ENTERPRISE RESOURCE PLANNING

(a) In fiscal year 2024, the Agency of Administration shall report to the Joint Information Technology Oversight Committee within three business days after any change in status of any contract relating to the Enterprise Resource Planning (ERP) Modernization – Business Transformation project changes.

(b) The Agency of Administration shall share the results of its independent review with the Committee within three business days after its completion.

* * *

Appendix 5: Response from the Administration – Recommendation on Reporting Requirements

JFO received an email from Secretary of Administration Clark on Monday, November 18 with a single recommendation. The text of this recommendation is below.

From: Clark, Sarah <Sarah.Clark@vermont.gov>
Sent: Monday, November 18, 2024 6:27 PM
To: Emily Byrne; Reilly-Hughes, Denise
Cc: Catherine Benham
Subject: RE: DRAFT - ERP Report

Catherine and Emily,

Considering time constraints and operational deadlines associated with the ERP project, we have requested that JITOC meet as soon as possible but before the end of the month. As you know, the ERP project is scheduled to kick off on December 1st and we believe it is important that JITOC release the appropriation associated with Phase 2 (financials) of the project prior to contract execution and kick-off. We have requested this meeting and associated timing from the JITOC Chair and Vice-chair.

Related to the draft JFO report, at this time, we can provide the language below related to section D of the JFO IT consultant's report "recommended oversight activities". In addition to this language related to project updates and consistent with our current practices, the JFO IT consultant will continue to have full access to all project materials, and we will continue our regular touch base meetings on the project.

Recommendation from ADS/AOA – page 8 of JFO IT Consultant report, replace all recommendations with a single comprehensive approach:

ADS and AOA leadership will provide regular project updates to JITOC at times of their committee convenience throughout the term of the project. These updates will include details on financial status, communications, collaboration between executive, judiciary, and legislative users/business offices, and any other status details as requested.

Happy to meet to discuss more if it is useful.

Thank you,
Sarah



Sarah Clark | Secretary
 Agency of Administration
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