

October 2024



**EVALUATION OF THE SELECTION, PLANNING, AND
IMPLEMENTATION OF THE STATE'S ENTERPRISE
RESOURCE PLANNING SYSTEM**



OFFICE OF PERFORMANCE EVALUATIONS

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EXECUTIVE SUMMARY

In February 2024, the Joint Legislative Oversight Committee commissioned an evaluation of Luma, Idaho’s enterprise resource planning (ERP) system which was implemented by the Office of the State Controller (SCO). As with many large-scale IT implementations, the transition to Luma has had many challenges, including reports of inefficiencies, inaccuracies, and unnecessary complexity. Our office was directed to conduct a comprehensive evaluation of the Luma project, from initial conception to the current impact to agencies. This report assesses the planning, procurement, implementation, and financial impact of Luma, providing recommendations for future improvements.

KEY FINDINGS

1. Procurement and Implementation Processes
 - a) The decision to replace the state’s aging legacy systems was reasonable, given their outdated technology and inefficiencies.
 - b) The procurement and implementation processes for Luma were flawed. The SCO prioritized acquiring a specific software product over aligning the ERP with the state’s operational needs.
 - c) A lack of change management planning and insufficient customization to Idaho’s requirements contributed to the system’s launch challenges.
2. Impact on State Agencies
 - a) Survey responses from over 2,000 state employees revealed significant inefficiencies and disruptions caused by Luma, including increased workloads and reliance on external tools.

- b) Agencies continue to face difficulties with training, user adoption, data accuracy, and system security. Employees reported frustrations with the ticketing system and insufficient support for complex issues.
3. Financial Assessment
 - a) Luma’s costs exceeded initial projections, reaching \$117 million by 2024. The original estimate suggested that the project would be cost-neutral by 2036, but actual savings have been lower than anticipated.
 - b) Ongoing costs are estimated at \$9.8 million annually, with total expenditures expected to reach \$220.8 million by 2034.

RECOMMENDATIONS FOR IMPROVEMENT

- a) Immediate focus should be on improving training resources, user support, and addressing system inefficiencies.
- b) The SCO should develop a sustainability strategy to ensure Luma’s long-term success, including better governance and improved change management practices.
- c) Future IT projects should emphasize organizational change management and align procurement strategies with user needs from the outset.

This report underscores the importance of addressing Luma’s deficiencies to enhance system performance and improve agency operations. While the initial implementation has been challenging, focusing on optimization and sustainability will help the state realize value from its ERP investment.

I. INTRODUCTION

LEGISLATIVE INTEREST AND STUDY REQUEST

In February 2024, the Joint Legislative Oversight Committee directed our office to evaluate the new enterprise resource planning system (ERP), commonly known as Luma, which was being implemented and managed by the Office of the State Controller (SCO). Luma is an ERP, a type of software designed to integrate, automate, and manage essential business operations inside a single software system.¹ A goal of Luma was to bring together and modernize the state’s budget planning, financial management, procurement, payroll, and human resources.

The Luma project began in 2014 when the SCO requested an appropriation to commission a system modernization study that would determine the replacement options for the state financial and accounting systems. The justification for the request was that the legacy systems had been in place since the 1980s and were nearing the end of their useful life.

The budget module of Luma went live in July 2022. The other components of Luma went live in July 2023. After the 2023 go live date, the Legislature received many complaints from agencies alleging the system was plagued by inefficiencies, inaccuracies, and unnecessary complexity.

As a result of the complaints, our office was asked to conduct a comprehensive evaluation of the Luma project, from initial conception to the current impact to agencies. This report is organized to answer four primary questions:

- 1) Were the Luma procurement and implementation decisions and processes reasonable?
- 2) What is the impact of Luma on agencies?
- 3) What is the financial impact of Luma?
- 4) Where do we go from here?

This evaluation is not a technical evaluation of Luma’s functionality or vulnerabilities. The Legislative Services Office’s Legislative Audit Division’s *Luma IT Audit* and *Luma System Optimization: Business Process Assessment and Ongoing Issue Root Cause Analysis* are two additional reports that provide more detail about Luma’s operating effectiveness and ongoing issues with data validity.²

¹ Jiang Li, *The Past, Present and Future of Enterprise Resource Planning*, 4(1) THE JOURNAL OF ENTERPRISE AND BUSINESS INTELLIGENCE 32 (2024).

² The Legislative Services Office’s Legislative Audit Division’s special reports about Luma can be found at <https://legislature.idaho.gov/lso/audit/acfr-icr/>.



BACKGROUND AND APPROACH

Criteria and context are essential components of any evaluation. Large-scale IT implementations are difficult to execute. According to 18F, a federal agency specializing in government software implementation, only 13 percent of large government IT projects succeed.³ In the private sector, implementations of IT systems designed to integrate essential business processes have high estimated failure rates, anywhere from 60 to 90 percent.⁴

When state government IT projects fail, particularly ERPs, they often receive broad news coverage. California started implementing a new ERP in 2005. It has cost \$1 billion and has yet to be implemented by every agency.⁵ Nevada spent \$80 million to replace its legacy ERP. It abandoned the project before going live, choosing to start over.⁶ Oregon is currently engaged in multiple lawsuits over failures of its new payroll system.⁷ It had previously invested \$300 million into a separate health insurance exchange that never went live.⁸

ERP implementations can be considered failures based on several criteria such as cost overruns, missed deadlines, and unmet expectations when the software is not as useful as expected. Organizations will often stay with an ERP that has had a less than successful transition because the transition costs are too high.

Similar to many other evaluations of large-scale IT project implementations, the findings in this report tend toward the negative. While this context does not offer a justification for falling short, it is helpful when drafting realistic recommendations for how to move forward.

In addition to the general difficulty of IT implementations of this scale, this project has spanned over 10 years. We did not evaluate every possible decision made. We highlighted the decisions and processes points that we determined were the root cause of the greatest concerns expressed by end users today.

³ 18F, *Derisking Government Technology Guide*. (September 2024). p5 <https://guides.18f.gov/assets/derisking-government-tech/dist/18f-derisking-guide.pdf>

⁴ Jiang Li, *The Past, Present and Future of Enterprise Resource Planning*, 4(1) THE JOURNAL OF ENTERPRISE AND BUSINESS INTELLIGENCE 32 (2024).

⁵ Wes Venteicher, *\$1 Billion and Climbing: New Milestone for California Government’s Delayed Tech Program*, THE SACRAMENTO BEE., Sep. 18, 2019.

⁶ Eric Neugeboren, *‘Destined to Fail’: How Nevada’s \$80 Million HR, Finance System Upgrade Went Haywire*, THE NEVADA INDEPENDENT., Jul. 16, 2023.

⁷ Dianne Lugo, *State Workers Demand Action From Oregon Gov. Tina Kotek on Persistent Payroll Issues*, STATESMAN JOURNAL., Apr. 4, 2024.

⁸ Gosia Wozniacka, *Oregon Decides To Ditch Its Online Health Exchange for Federal Site*. PBS NEWS., Apr. 25, 2014.

I. INTRODUCTION

II. WERE THE PROCUREMENT AND IMPLEMENTATION DECISIONS AND PROCESSES REASONABLE?

SUMMARY

In 2014, the SCO requested an appropriation to commission a study that would determine whether there was a business case to replace the state's finance and accounting systems. In January 2015, the Information Services Group (ISG) delivered a report that recommended the state pursue a modern ERP that would encompass the state's accounting, budgeting, payroll, purchasing, and human resources systems.

Leading up to the first of the Request for Proposals in August 2018, the SCO completed a series of activities to prepare for the Luma project: it conducted a Request for Information from vendors; created a Luma Project Charter signed by the Controller, the Governor, the Speaker of the House, and the President Pro-Tem of the Senate; obtained a funding source via continuous appropriation; created a governance board with key leaders throughout the state; and hired a project manager and a third-party procurement consultant.

The Luma Project Charter outlined high-level goals. These goals included better integration among state business software, a single source of truth rather than fragmented systems, a platform that could be sustained and continuously improved, and standardized and improved state business processes.

We found that the SCO was overly focused on purchasing a specific type of software solution rather than meeting the needs of end users. We identified issues with the procurement process that prevented the SCO from getting and using as much information as possible.

Once implementation began, we found that the goals of the Luma project remained at the high level outlined in the Luma Project Charter. We found that many core deliverables from the implementor were generic and vague rather than addressing the specific needs of Idaho. The SCO took the important step of bringing in subject-matter experts from state agencies to staff the Luma project. However, the lack of specificity regarding how state business processes were going to change and a lack of engagement with end users led to the problems with training and adoption we identify in the next section.

II. WERE THE PROCUREMENT AND IMPLEMENTATION DECISIONS AND PROCESSES REASONABLE?

BACKGROUND AND METHODS

The ISG report made certain assumptions about how quickly a new system could be implemented, how quickly users would adopt the new system, and how useful the new system would be in integrating other agency information management systems. The ISG report also made many recommendations for how to proceed.

In this section we evaluated the reasonableness of the SCO's decisions and processes that were implemented after this report was published. Our assessment was based on a review of the following sources:

2015 System Modernization Study conducted by ISG

documents used in the procurement process for the ERP system including the requests for proposal submissions from Infor, Deloitte, and ISG

interviews with the SCO and other state agency staff who were directly involved in the procurement and governance of the ERP

interviews with procurement experts with the state and the federal government

documents published by other states and the federal government regarding large-scale IT projects and procurement

In addition, we consulted with Simplar, a procurement consultant with expertise in large-scale IT procurement in both the private sector and in government.⁹ The expert opinion of our procurement consultant deviated in many ways from the expert opinion given to the SCO. However, the findings and recommendations in this section represent OPE conclusions based on our analysis, not necessarily those of our consultant.

Our goals are to identify areas where we believe the procurement and contract management processes affected project success and to identify how the state can do better in future IT projects. Given the low rate of success of traditional IT procurement in government and private sectors, we do not believe the state should expect success by replicating commonplace practices.

This section has three subparts:

II.A - Concept and organizational change management

II.B - Procurement

II.C - Contract and change management

⁹ For more about our choice of Simplar, please see Appendix C where we describe our methods in more detail.

II.A REASONABLENESS OF DECISIONS RELATING TO THE CONCEPT AND INITIAL PLANNING OF THE LUMA PROJECT

We identified five foundational early decisions made by the SCO. The following slides summarize each decision and assess the reasonableness of the decision on a three-point scale:

- REASONABLE** The decisions were well supported by documentation, supported the overall goals of the project, and were consistent with professional standards of good practice.
- MIXED** The decisions were supported by some documentation but were either inconsistent with overall project goals or needed additional resources to properly manage.
- NOT SUPPORTED** The decisions were not sufficiently supported by documentation, were not in alignment with project goals, or were not supported by assumptions that were fully explained.

DECISION	ASSESSMENT
1.1 Replace legacy systems	Reasonable
1.2 Have no organizational change management plan before procurement	Not supported
1.3 Focus on buying the right product instead of improving state outcomes	Not supported
1.4 Grant continuous appropriation and create dedicated fund	Reasonable
1.5 Create a governance board	Reasonable



1.1 REPLACE LEGACY SYSTEMS

The legacy systems were increasingly unable to conduct the state's business. For example, legacy systems ran on the increasingly outdated COBOL programming language. COBOL was designed in 1959 and was the basis for many mainframe systems created into the 1990s. Systems running on COBOL, particularly unemployment benefit systems, experienced significant failures during the Public Health Emergency because of the lack of scalability, the age of the systems, and a lack of skilled programmers. The systems increasingly needed more frequent work to maintain and there were a limited number of programmers who coded in the COBOL program language. Given the challenges with the legacy systems, it was reasonable to pursue replacement options.

The following list describes additional challenges posed by the legacy systems:

- lack of functionality in the legacy systems led more agencies to adopt separate systems
- unstandardized data inputs created difficulties in identifying trends across agencies
- the mainframe operating system was near the end of its life cycle and had security vulnerabilities
- the Statewide Accounting and Reporting System (STARS) was not sufficient to conform to changes in Generally Accepted Accounting Principles and by the Government Accounting Standards Board

1.2 HAVE NO ORGANIZATIONAL CHANGE MANAGEMENT PLAN BEFORE PROCUREMENT

NOT SUPPORTED

After deciding to replace the legacy systems, the SCO created a project charter that outlined high-level goals. However, before moving to procurement the SCO should have created a detailed organizational change management plan. The plan should have included:

Timeline - Developing a realistic timeline for change speed and sequencing. Offering options based on the capabilities of existing state staff.

Baseline & measurements - Gathering baseline performance of existing processes and tools. Preparing an outline of potential key performance indicators and metrics, validating these metrics with stakeholders, collecting data, and establishing benchmarks. Establishing transparent adoption metrics.

Communication - Ensuring employees understand how the change will improve their work functions. Developing communication plans with stakeholders.

Change agents - Identifying, training, embedding, and supporting change agents.

Training - Identifying and using adult-learning models to train new skills, processes, and practices. Providing adoption dashboards for leadership to identify and address resistance.

Leadership - Ensuring demonstrable engagement for change agent support, adoption and resistance reporting, and resource balancing. Leadership must actively engage with providing mentorship and support.

The plan should have been seen as a key to developing the RFPs. This plan could have informed more detailed proposals, particularly from the implementors. Instead, the SCO intended for the implementor to develop a change management plan, which was too late in the process. This was a critical deficiency.

The lack of a detailed change management plan led to many subsequent problems with the project: poorly supported procurement decisions, generic contract deliverables, and a training approach that was one-size-fits-all and not tailored to the variety of user needs.

By simply replacing the legacy systems, the SCO assumed that state business processes could adjust to whatever was in the new software, which would lead to improvements. In part, the SCO was attempting to avoid a common cause of ERP failure, which is over-customizing the system to meet all existing business processes. Over-customization led Nevada to abandon its ERP after an \$80 million investment and has been part of the reason California’s ERP challenges have dragged on for years.

The goal of helping the state improve business processes was underdeveloped. Specifics should have been developed in concert and in constant communication with end users. Conflicts between the new system and existing practices should have been specifically noted and collaboratively resolved.

The key lesson learned is to develop an organizational change management plan before starting procurement. For more detail, see the Lessons Learned for Future IT Projects in Section V of this report.

1.3 FOCUS ON BUYING THE RIGHT PRODUCT INSTEAD OF IMPROVING STATE OUTCOMES

NOT SUPPORTED

The SCO started with an assumption that the legacy systems were fundamentally flawed and an upgrade would only be a step forward. Because progress was assumed, the SCO strategy was to focus efforts on finding the correct software.

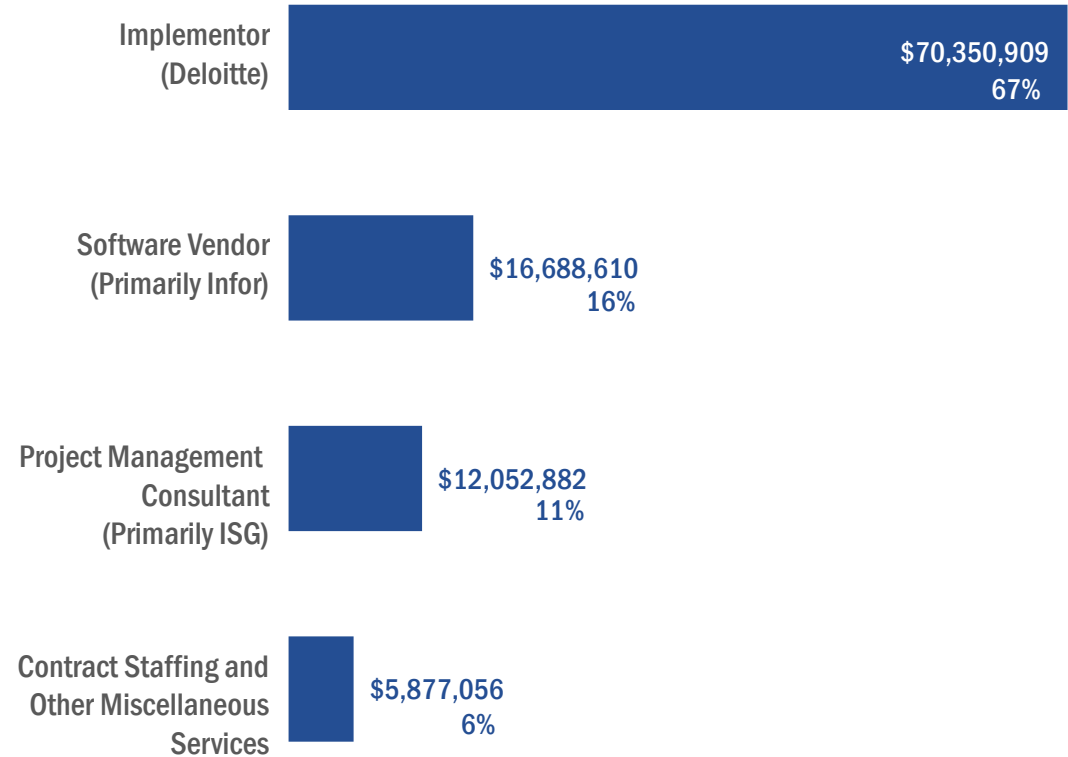
However, IT systems are not an end to themselves. The focus should have been on the desired outcome of more reliable, valid data for strategic decision making, and less on the input of the software solution.

The SCO considered only software that could meet all of the state’s finance, payroll, human resources, procurement, and budgeting needs. Software specialized in one of these, such as procurement, typically has more features than an ERP has. Specialized software must be integrated with an ERP which requires resources and carries risks. An organizational change management plan could have led the SCO to focus on a wider variety of software solutions and consider these tradeoffs rather than the narrow set of software that could do everything.

The Luma project included two major procurements: (1) the ERP software that would be the core of the system and (2) the implementor: a consulting services that would align the chosen software with state business processes and integrate the software with other state IT systems. A lot of focus was on selecting the right software, even though software was only 16 percent of contracted project costs. The focus on software led the SCO to select the software product, Infor, before selecting the implementor, Deloitte.

Instead, the SCO should have shortlisted the most viable software options and selected a software implementation team that best met the state’s needs. Had the SCO had an organizational change management plan, the criteria for procuring both the software and the implementor would have been clearer.

Implementor costs for change management, training, and integration were four times greater than costs for the Luma software vendor between fiscal years 2019 and 2024.



II. REASONABLE DECISIONS AND PROCESSES



1.4 GRANT CONTINUOUS APPROPRIATION AND CREATE DEDICATED FUND

REASONABLE

The Legislature created the Business Information Infrastructure Fund (BIIF) with a dependable funding source for the Luma project. The BIIF was continuously appropriated throughout the project beginning in fiscal year 2018.

The funding strategy allowed the state to avoid one of the major risks in state IT projects: a lack of flexibility when projects require change.

Federal guidance states that “colors of money doom software projects.” Requiring money to be appropriated by fiscal year with separate personnel and operating budgets would have created undue rigidity.¹⁰

One drawback of continuous appropriation is that expenses are not reported or brought to the attention of the Legislature through the budget documents of the Division of Financial Management or Legislative Services Office’s Budget and Policy Analysis Division.

Overall, seeking a continuous appropriation was a reasonable strategy to allow the SCO to adapt to the emergent needs of a multi-year project.

10 Defense Innovation Board. Software is Never Done: Refactoring the Acquisition Code for Competitive Advantage. U.S. Department of Defense, May 2019. <https://innovation.defense.gov/software>.



1.5 CREATE A GOVERNANCE BOARD

REASONABLE

According to the Luma Project Charter (2018), the Governance Board and Leadership Council were to have the authority to make final decisions where conflicts regarding scope or requirements emerged.

The Leadership Council was established by statute in 2018 and has not functionally provided much oversight. The Council meets at the call of the chair and has not formally convened.

The SCO convened the Governance Board in 2018. The Governance Board was designed to have a representative group of state agencies who could analyze and resolve issues forwarded to them by the Luma Project Team. The Board sits between the Luma Project Team and the Leadership Council as a “second layer of project oversight,” according to the Luma Project Charter.

The Governance Board has become the source of recommendations and oversight for the Luma Project Team. While the creation of the Governance Board afforded multi-agency feedback to the SCO, the membership in 2019 did not contain representatives from all the state constitutional offices. Had the SCO formally invited the Superintendent of Education, the Treasurer, and the Secretary of State, those offices would have had the opportunity to assess the appropriate level of participation and understand any changes needed for them to carry out their constitutional duties.

The concept of a governance board is a reasonable strategy to elicit input from stakeholders and obtain leadership buy-in.

The Governance Board was established in the Luma Project Charter and sits between the Leadership Council and the Luma Project Team as a second layer of project oversight.



Agencies with members on the Governance Board were more likely to agree that their agency had an opportunity to provide input about project planning and timing.

In our survey of directors and fiscal officers, respondents from agencies who participated in the Governance Board were more likely to agree that their agency had the opportunity to provide input during the conception and project timeline of Luma than those from agencies who were not represented on the Governance Board.

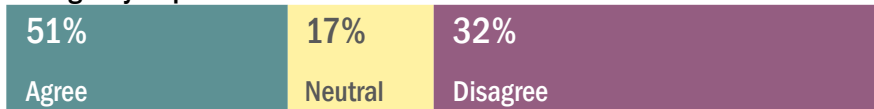
SURVEY ITEM

My agency had the opportunity to provide input during the conception and planning of Luma.

Governance Board Participation



No Agency Representative on Governance Board



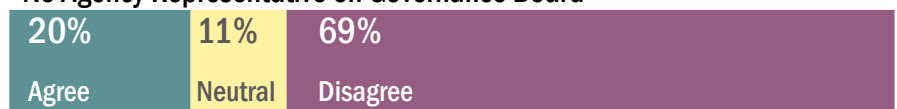
SURVEY ITEM

My agency had the opportunity to provide input about the timeline of Luma implementation.

Governance Board Participation



No Agency Representative on Governance Board



II.B PROCUREMENT PROCESS CONCERNS

Summary of Process and Findings

The SCO is exempt from the state procurement act and had no legal obligation to go through an RFP process before selecting vendors. The SCO chose to conduct a procurement with the goal of discovering the best fit for Idaho. Our evaluation of the procurement process identified areas where the SCO’s practices could have revealed better information and avoided later concerns.

As discussed, the SCO conducted a separate RFP for the software and for the implementor. We find the SCO’s decision to have separate RFPs defensible. However, the SCO selected software before inviting implementors to bid. Implementors do not have generic software implementation teams. Instead, they have different teams with expertise in specific software. Had the SCO selected multiple viable software candidates and allowed implementors to submit proposals for each of the viable candidates, the SCO would have had more options to select the best joint software-implementor team rather than only those teams with Infor experience.

Given the separate RFPs, we found that the people involved in selecting the software and implementor continued to believe the state selected the best of the available options given the information they had at the time, particularly for the software.

However, we found flaws in the RFP and source selection plan that reduced the likelihood that the state would receive, and could process, the information needed to make the best decision.

Eight software vendors submitted proposals, but only four vendors were found adequately responsive; three were excluded due to minimum requirements we believe were unnecessary. The state requested a massive amount of information which led to proposals too large for the evaluation committees to meaningfully understand given the timeframe.

The evaluation committees then scored proposals as a group using a consensus scoring method. Individual scores and comments prior to the consensus score were destroyed. The evaluation committees were chaired by the Deputy Chief State Controller, who was a superior to many of the committee members. While no committee members reported any undue influence, we believe having the chair of an evaluation committee be someone committee members report to introduces unnecessary risks. Particularly with consensus scoring, protecting the ability for individuals to express independent opinions is paramount.

II.B PROCUREMENT PROCESS CONCERNS

Methods

The focus of this analysis is to identify areas for improvement on future IT projects, which means that we focus on aspects of the RFPs that we found needed improvement. Aspects of the procurement process were assessed on the following three-point scale for adherence to general procurement criteria:

Minimal: The decisions were well supported by documentation, supported the overall goals of the project, and were consistent with professional standards of good practice.

Moderate: The decisions were supported by some documentation but were either inconsistent with overall project goals or needed additional resources to properly manage.

Significant: The decisions were not sufficiently supported by documentation, were not in alignment with project goals, or were not supported by assumptions that were fully explained.

Our assessment is based on interviews, a review of industry and federal procurement standards, and documents provided by the SCO regarding procurement. These included:

- interviews with people involved in the procurement process and federal software procurement experts
- published guidance from federal agencies concerning software procurement and implementation
- documents from the RFI and RFPs provided by the SCO
- reviews of RFP documents by Simplar

DECISION	ASSESSMENT
2.1 RFP format and requirements	Moderate
2.2 Getting the right information	Significant
2.3 Procurement timeline	Significant
2.4 Evaluation procedures	Reasonable

II. REASONABLE DECISIONS AND PROCESSES



2.1 REQUEST FOR PROPOSAL (RFP) FORMAT AND REQUIREMENTS

MODERATE

An RFP should be comprehensive, easy to navigate, and provide vendors with all the information needed to submit a proposal that is thorough and allows the state to make a meaningful decision.

The RFPs were organized, though some information was inappropriately placed, such as including minimum qualifications in the introduction section.

The RFPs did not contain submittal templates for vendors to provide their responses. This meant that responses came in a variety of formats and were not consistently organized, which led to confusion for some members of the evaluation scoring committees. The RFPs also did not specify maximum proposal lengths.

An RFP should invite consideration from as many vendors as are capable of meeting desired outcomes. Mandatory requirements should only exclude vendors whose product cannot deliver those outcomes. An RFP should describe desired outcomes rather than specifying numerous inputs the state thinks are necessary to meet the outcomes.

The SCO wanted assurances that responding software vendors would be capable of delivering an ERP to an organization with comparable size and complexity to Idaho. The RFPs had a mandatory requirement that vendors could demonstrate that their financial management or human resource component was in production or used by a state, city, or county government with at least a \$4 billion annual budget and a minimum of 10,000 employees.

Three vendors were cut because they did not meet the requisite government type, budget size, or employee count. However, the customers served by these vendors arguably showed an ability to serve an organization as complex as the State of Idaho. Given that the evaluation committee scored proposals based on vendor qualifications, experience, and references, we believe the state was not at risk of selecting an unqualified vendor and these minimum qualifications were unnecessary.

Conversely, the state credited Infor for serving state government clients using its ERP software hosted on-site, not the cloud-based software as a service it was offering the state. In summary, some mandatory requirements were more rigidly applied than others.

2.2 GETTING THE RIGHT INFORMATION FOR EVALUATION

SIGNIFICANT

In general, RFPs should ask for material that meaningfully differentiates one vendor from another on dimensions the state is willing to pay for, so the evaluation committee can assess what best meets the state's needs.

For the software RFP, vendors were asked to respond to 1,459 questions. The responses from the four finalists totaled 1,577 pages. For the implementor, the three responses totaled 996 pages. Evaluators were required to read, understand, assess, and score all of this material in less than three workweeks while many evaluators still managed their regular full-time responsibilities.

The SCO did provide training for the evaluation committees and had subject matter experts to assist in understanding the technical questions. However, given the amount and technical complexity of the information provided, the evaluators were not likely to fully understand the differences in vendor responses by the time the evaluation team was expected to come together for the first round of consensus scoring.

Key Personnel Interviews: The key personnel with the implementor are arguably the most important factor for predicting overall ERP success. Although the SCO performed presentations with the shortlisted integration firms, the SCO failed to conduct individual interviews with the implementor's key personnel: the overall project manager, human resources lead, and finance lead. Overlooking this critical procedure is considered a significant flaw to the procurement approach.

The SCO identified the importance of the implementor's key personnel by the second year of implementation. The SCO requested significant personnel changes and interviewed replacements, accepting the personnel only when the SCO believed them to be a good fit for the Luma project.

2.3 PROCUREMENT TIMELINE

SIGNIFICANT

The overall procurement timeline was very aggressive, especially considering the number of questions that were asked and the size of the written proposals.

For most software procurements, a six-week proposal timeline is typically sufficient. However, the SCO may not have accounted for the large number of questions that were being asked, nor for the amount or technical depth of the material requested. This encouraged vendors to give boilerplate answers instead of meaningful responses that were specific to Idaho.

	Software	Implementor
Number of responsive proposals received:	4	3
Total size of written proposals (# of pages):	1,577	996
Size of evaluation committee (# of people):	9	10
Total number of working days that the evaluation committee was provided to read and score the proposals:	13	10

Evaluators had 13 working days to read and assess the proposals. Assuming it typically takes 5-6 minutes to comprehend a technical page, reviewing and assessing the 1,577 pages of software proposals would have required the evaluators to read over 10 hours per day for 13 days.

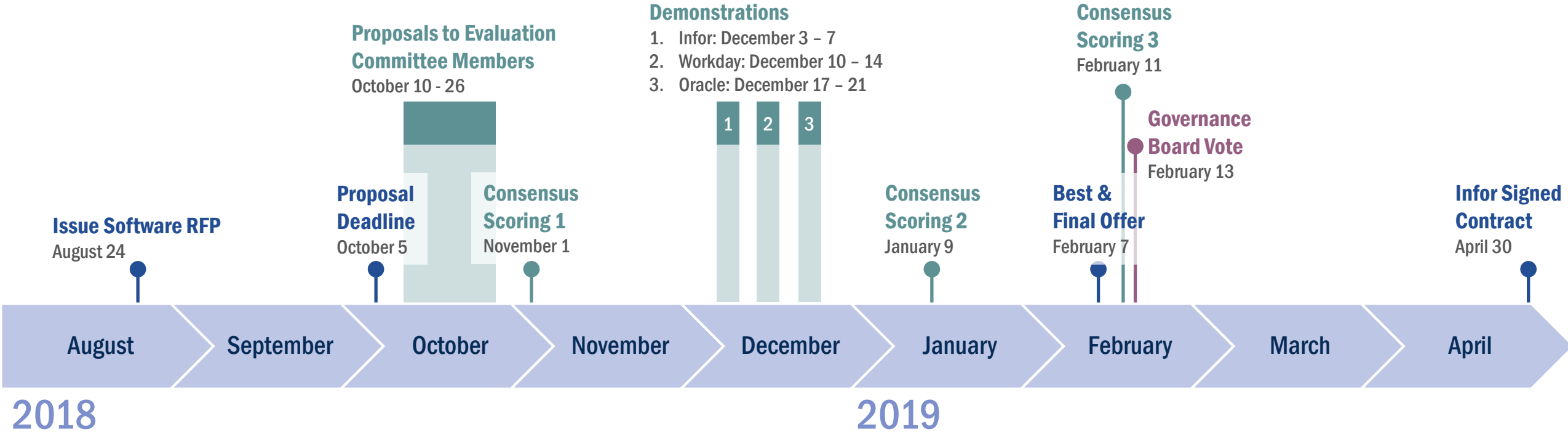
Given that the evaluators were still managing their regular full-time responsibilities, it is unlikely that they were able to read the written proposals in their entirety. The SCO would have ensured the evaluation committee had sufficient time under one of two options.

Option 1: SCO could have limited the material requested from the proposers, which would have reduced the burden on the evaluators. Proposals could have been limited to approximately 10-15 pages. The remainder of information could be moved into a presentation, interview period, and a pre-contract clarification period.

Option 2: SCO could have assumed that evaluators would spend approximately two hours per day reading proposal material while also maintaining their current workloads. The SCO should have set aside at least 65 working days for evaluation of the software proposals and 42 for the implementor proposals.



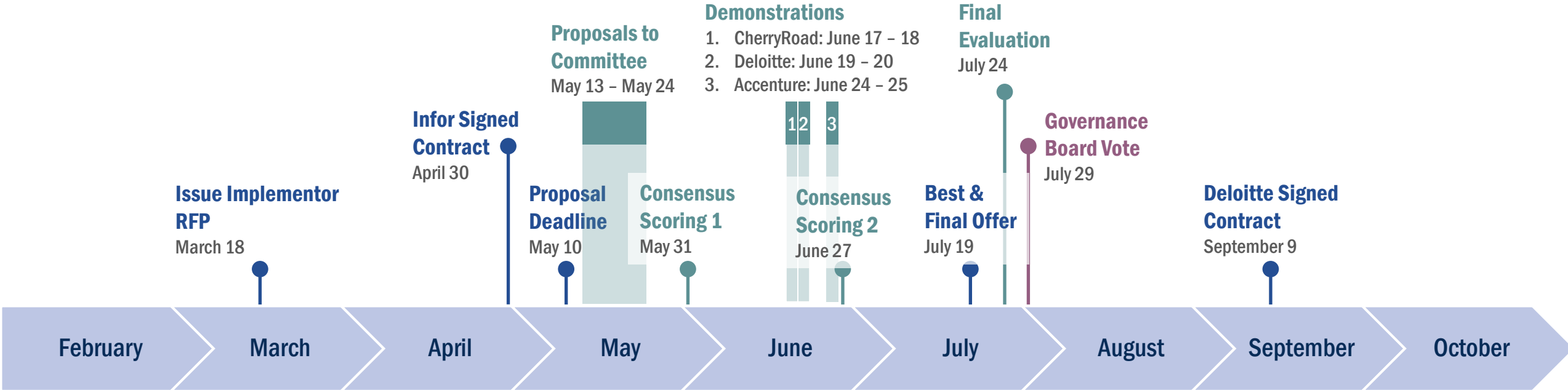
Exhibit 1. Timeline of Software Procurement



II. REASONABLE DECISIONS AND PROCESSES



Exhibit 2. Timeline of Implementor Procurement



2019



II. REASONABLE DECISIONS AND PROCESSES



2.4 EVALUATION PROCEDURES

SIGNIFICANT

Composition of Selection Committees: An evaluation committee should have enough skills and knowledge relating to both the state's needs and the product being evaluated to ensure the state gets the best value. Evaluators should be able to exercise their individual judgement.

The size of the evaluation committees was appropriate at ten members each. Both committees were chaired by the Chief Deputy State Controller. Four members of the software committee and five members of the implementor committee were employees of the State Controller's office. All other committee members were subject matter experts chosen throughout state government.

Almost half of the software committee and half of the implementation committee had a reporting relationship with the chair of both committees. This reporting structure had a high risk of compromising the objectivity and independence of the evaluation process, as employees may have felt pressure to align their assessments with the preferences of their superior. This risk was particularly acute when a committee was scoring as a group, rather than individually.

While no one reported feeling pressured by the Chief Deputy State Controller, we would encourage the state to avoid this risk in the future. Particularly when group scoring is used, reporting relationships should be minimized or procurements should be chaired by a third party who can monitor the evaluation process.

Transparency: The decisions of a procurement process should be documented thoroughly, providing a clear rationale for each decision made. The

process should allow for oversight and external review when necessary to validate the decisions made.

For both procurements, evaluators reviewed proposals using internal evaluation score sheets. After consensus scoring, the SCO planned to collect and destroy the individual score sheets and comments, leaving only the consensus score as the record of the evaluation scoring. The destruction of these records was not fully complete, and the SCO provided us with the records that were not destroyed.

The SCO believed that, because the consensus score was the only one that mattered, the individual scores were not relevant records. We disagree. We believe maintaining these scores and comments would have created a stronger record of the procurement decisions. The destruction of records leaves us unable to assess whether the consensus score deviated from the individual scores. This is of particular interest given the potential influence of a superior on the scoring committee.

Scoring Rubric: Evaluators should have clear direction for scoring. A scoring rubric should capture all the goals in the RFP while being easily understandable and allowing for meaningful gradients of quality.

For both RFPs, the rubric switched between adjective-based scoring (e.g., acceptable, good, excellent) and numeric scoring from 0-100. Using adjectives to rate the proposals is not advisable, as it increases the risk of errors when converting into numerical scores. Multiple rubrics also caused confusion among the committee and vendors.

II. REASONABLE DECISIONS AND PROCESSES



II.C CONTRACT MANAGEMENT

CONTRACT MANAGEMENT DECISION	ASSESSMENTS
3.1 Project schedules	Significant
3.2 Project management deliverables	Significant

3.1 PROJECT SCHEDULES

SIGNIFICANT

A well-drafted contract should include an overall project schedule and detailed individual schedules assigning specific people or teams to specific tasks for an estimated time. Because IT projects are so complex, the detailed schedules should cover only the first several months of a project, with the expectation that detailed scheduling will periodically happen when the team learns more about the project’s needs. The state should have this detailed schedule in place before the contract is signed.

Idaho’s contract with Deloitte had only a high-level schedule, outlining targets for major milestones but lacking specific activities and assignments for project employees.

3.2 PROJECT MANAGEMENT DELIVERABLES

SIGNIFICANT

The deliverables we reviewed should have been the foundation for holding the contractor accountable for ensuring that later work advanced the project’s goals. The documents should have contained specific tasks that outlined Idaho’s specific needs and an understanding of the specific software being implemented.

Six of the eight documents provided by Deloitte were highly generic, based on templates, repeated information from the contract’s scope of work and contained very little information specific to Idaho or to the implementation of Infor’s software. Idaho paid \$1,650,705 for these six deliverables.

Two of the documents, the deliverables log and change readiness assessment, were of much higher quality, being highly customized to Idaho and the Luma project.

The SCO had the authority to reject deliverables that failed to meet the state’s needs. Staff at the SCO expressed frustration at deliverables they considered generic or that failed to demonstrate an understanding of state business processes or of Infor’s product. However, the lack of specificity in the contract and early project management documents kept the state from having clear criteria to reject deliverables. Additionally, some project staff believed that SCO leadership was reluctant to hold the contractor accountable in order to maintain relationships, despite the decision by SCO leadership to replace key contractor staff two years into the project.

III. WHAT IS THE IMPACT OF LUMA ON AGENCIES?

SUMMARY

The flaws in the early deliverables and under prioritization of user needs led directly to problems when Luma went live. Despite an internal emphasis on Luma changing how the state does business, the change management approach did not adequately prepare people and agencies to change how they worked.

The lack of substance, a lack of Idaho-specific criteria and knowledge, and a failure to meaningfully capture the user experience set the stage for a difficult transition. In addition, the SCO failed to take concerns from knowledgeable users seriously. Members of the Governance Board raised concerns about reporting as far back as 2019, with the SCO acknowledging issues only after go live. This aligns with the observation from the Legislative Audits Division’s *Luma IT Audit* that the SCO “has relied on a reactive approach to break fixes.”

We found that overall, the transition to Luma had a negative impact on state agencies. State employees reported that Luma is less efficient than legacy systems and overly complicated. We found that employees lack adequate, updated training resources with step-by-step instructions. State agencies have not fully adopted Luma and continue to rely on outside applications instead of or in addition to Luma.

State employees also do not trust the accuracy of data within Luma and have expressed concerns about the security of the system. In a 2024 report, the Legislative Audits Division concluded that critical security processes in Luma

had not been formalized and existing security controls were largely informal and not optimized. We found similar concerns during our evaluation and support the recommendations of the Legislative Audits Division to address security issues.

We found that the communication between the State Controller’s Office and state employees was mixed. Although the SCO may be effectively responding to some types of user needs, the ticket system is not currently an effective way for users to resolve complex or time-sensitive issues.

METHODS

We conducted interviews with over 88 agency staff including representatives from the State Controller's Office.

We analyzed key descriptive variables for all ServiceNow tickets from July 1, 2023 to July 15, 2024. The dataset contained 56,156 tickets. Our review was limited by a few factors. First, the SCO does not track all tickets in the same way and has also updated its tracking process since go live. This variation in available data for each ticket limited our ability to analyze all tickets for certain attributes and trends. Second, some state employees reported using methods outside the ticketing system to report issues to the SCO. This means that ticket data may not fully capture user concerns or experiences with issue resolution.

We reviewed the written interactions between the SCO and the ticket submitter

for a sample of 101 tickets related to training.

We surveyed 5,042 state employees who were assigned specific Luma security roles for financial, human resources, payroll, procurement, and purchase card activities. We received responses from 2,608 individuals. After removing incomplete responses and individuals who self-identified as only using Luma for timesheet entry, we were left with 2,183 responses, for an overall response rate of 43 percent. Survey respondents represented 70 state agencies.

The survey included a mix of quantitative and qualitative questions. In the following slides, we include the major findings and themes from our analysis. A more comprehensive breakdown of survey results will be included in a supplemental appendix.

SURVEY RESPONDENTS BY AGENCY SIZE AND FREQUENCY OF LUMA ACCESS

Agency Size	Frequency of Luma Access				Total Respondents	Count of Agencies Represented
	Every workday	A few days a week	Once a week	Rarely		
Fewer than 15 employees	33	14	2	1	50	15
15-49 employees	56	38	12	2	108	11
50-499 employees	568	292	68	9	937	30
500-999 employees	170	153	45	1	369	4
1,000+ employees	372	202	38	7	619	3
Public Health Districts	59	31	10		100	7
Total Respondents	1,258	730	175	20	2,183	70

III. IMPACT TO AGENCIES



METHODS

Our assessment of end user experiences was broken into five categories:

- Efficiency Has Luma increased employee efficiency?
- Communication Is there an effective process for state employees to provide feedback and have their concerns addressed?
- Accuracy Do state employees trust the data or system outputs as accurate?
- Security Has Luma increased data security?
- Adoption Have a majority of state agencies and employees fully adopted Luma for core business processes?

USER EXPERIENCE CRITERIA		ASSESSMENT
1	Efficiency	Negative
2	Communication	Mixed
3	Accuracy	Negative
4	Security	Negative
5	Adoption	Negative

Each category is rated on the following three-point scale:

- POSITIVE** The criteria demonstrates a positive impact of the Luma system on state agencies.
- MIXED** The criteria demonstrates both positive and negative impacts of the Luma system on state agencies.
- NEGATIVE** The criteria demonstrates a negative impact of the Luma system on state agencies.

III. IMPACT TO AGENCIES



1. EFFICIENCY

NEGATIVE

76% of survey respondents reported that Luma is less efficient than the legacy systems ($n = 2,041$).

65% of agency directors and fiscal officers who responded to our survey reported that Luma has negatively affected their agency's ability to carry out statutory responsibilities ($n = 113$).

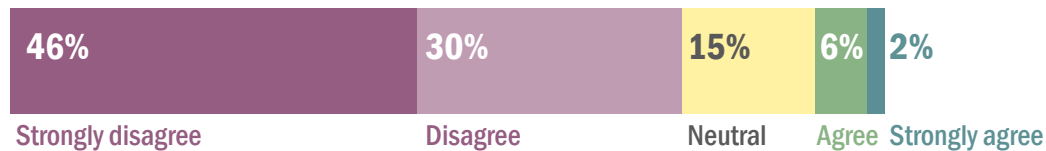
55% of agency directors and fiscal officers who responded to our survey cited increased workloads and inefficiencies ($n = 113$).

“*There really is no positive or upside to how Luma has affected our agency's ability to carry out our responsibilities. It has made everyone's jobs more difficult even for non-financial staff.*”
- Fiscal officer response to survey question, “How has Luma positively or negatively affected your agency's ability to carry out statutory responsibilities?”

SURVEY ITEM

It takes me less time to complete tasks in Luma than it did in the legacy systems.

$n = 2,041$



BARRIERS TO EFFICIENCY

Luma is complicated.

The majority of survey respondents who identified efficiency concerns described Luma as overly complicated, cumbersome, and clunky. State employees reported frustration with the number of clicks or steps it takes to complete functions.

Some employees expressed disappointment that even after training and increased confidence in their understanding of the system, it still takes longer to perform tasks than in the legacy systems.

“

Too many clicks to get to where you need to be. It is not intuitive.

- State employee

“

Luma has doubled if not tripled the time it takes to complete our normal daily tasks. Processes that would normally take 2 to 5 steps in the old system now take 5 to 10 steps to complete in Luma

- Fiscal officer

Training resources are inadequate.

92% of survey respondents reported that they participated in some form of Luma training facilitated by the State Controller’s Office ($n = 2,132$).

State employees reported that Luma training resources, such as Quick Reference Guides (QRGs) and videos, are frequently not accurate or up-to-date. They described frustration when processes or steps had changed, but the training resources were not updated.

State employees reported that training resources were difficult to locate because the resource titles are not intuitive, do not use familiar or consistent verbiage, and are not organized in a user-friendly fashion.

We asked state employees how training could be improved, and they reported a need for more “cheat sheets” or detailed, step-by-step instructions to perform specific functions. State employees also requested more in-person or live trainings and more customized trainings for their agency.

“

Luma seems fluid and is often changing. The QRGs, however, are not updated as quickly as Luma leaving us behind the curve with information.

- State employee

“

It feels like I need specific, undocumented magic words to find the right training.

- Fiscal officer

2. COMMUNICATION

MIXED

We assessed the SCO’s use of the ServiceNow ticketing system, the primary method that users have to communicate issues. We were interested in understanding how well the system addresses user feedback and concerns.

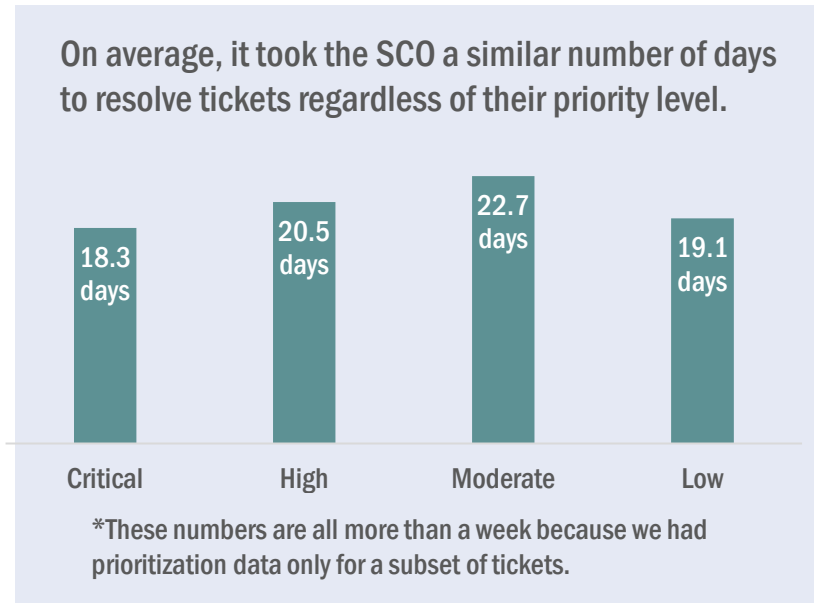
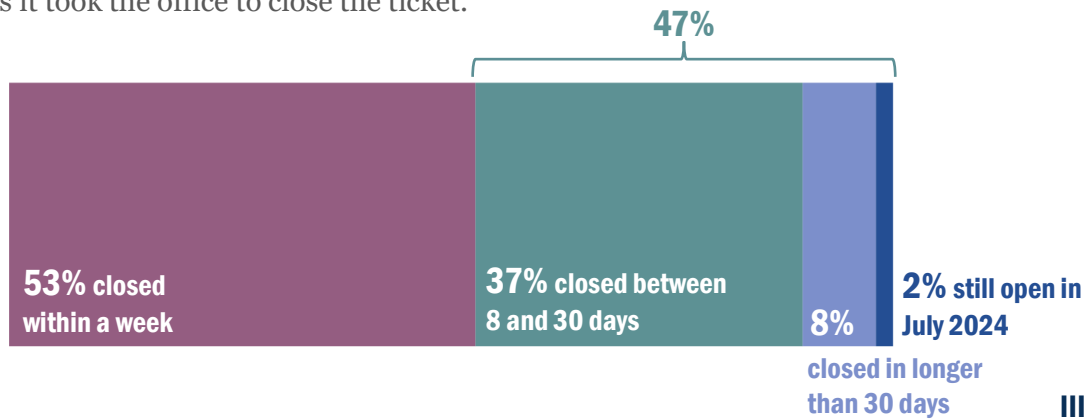
We found that the communication between the SCO and state employees was mixed. Although the SCO may effectively respond to some types of user needs, the ticket system is not currently an effective way for users to resolve complex or time-sensitive issues.

Tickets are assigned a priority level by the system based on data entered by the end user. Some tickets go through a 7-day resolved state before being closed. The SCO does not communicate a goal timeline to close tickets to users but aims internally to resolve critical tickets within four hours and low priority tickets within ten business days.

We found that it took the SCO longer than a week to close almost half of the tickets in fiscal year 2024. While we did not have resolved data for many of the tickets, the priority level of a ticket did not significantly affect the number of days it took the office to close the ticket.

“ I have submitted helpdesk tickets to ServiceNow and had to wait sometimes over a month for a response. When a response was received it was usually a question about the issue that had already been answered in the initial request.

- State employee



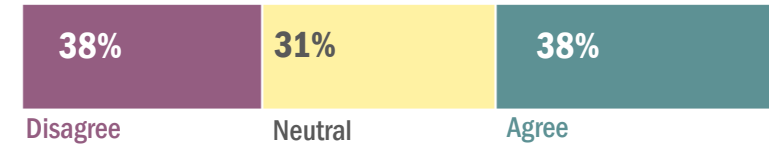
BARRIERS TO COMMUNICATION

State employees who responded to our survey reported mixed experiences with ServiceNow. Although some tickets are closed quickly, others can take weeks or even months to be addressed.

SURVEY ITEM

When I submit help tickets to ServiceNow, the issues are resolved to my satisfaction.

n = 920



State employees can’t escalate issues.

Many state employees reported concerns with the SCO ticket prioritization process. They described how the inability to escalate a time-sensitive issue was disruptive to their jobs. We found that tickets related to issues that we heard were particularly frustrating, such as reporting, projects, and grants, can take the SCO many days to close.

Ticket subject matter	Average days to close
Section 508 Accessibility (n= 2)	103
Luma Reporting (n= 571)	47.5
Projects and Grants (n= 584)	34.9
Purchasing (n= 10)	33.3
Security (n= 449)	30.8
Chart of Accounts (n= 746)	28.6

State employees want more and better interaction.

Many state employees also reported frustration with SCO’s responses to tickets, mentioning long wait times and unhelpful responses. They commented that talking to a live representative would have been more useful. Some even reported circumventing the ticketing process entirely by contacting someone they knew at the SCO.



Most of the time it takes multiple responses (and sometimes a meeting) with them to understand what I need to do in order to resolve the issue or get what I need.

- State employee

NEGATIVE

3. ACCURACY

Many state employees reported that they question the accuracy of data in Luma.

“ I use an excel spreadsheet for all of my invoice and requisition approvals. I have seen multiple errors in Luma in tracking these items, so I took it upon myself to safeguard that with a manual tracking system.

- State employee

“ We keep manual entries outside of LUMA as the reporting has not been correct and the data in the system has been suspect.

- State employee

BARRIERS TO ACCURACY

Reports are unreliable.

30% of agency directors and fiscal officers who responded to our survey cited inaccurate or inaccessible reports as a barrier to carrying out the statutory mission of their agency.

“ I still do not trust that the reports I build using Luma information are accurate.

- State employee

“ We are still unable to generate the reports that we need, so we extract multiple reports, add some manual data, and then use another system to combine the data. The report platform often provides data that is contradictory to the in-system data.

- Fiscal officer

“ I cannot rely on the reporting tools in Luma, this has caused my agency to look 'incompetent' with Legislative committees.

- Fiscal officer

III. IMPACT TO AGENCIES

4. INCREASED SECURITY

NEGATIVE

The Legislative Audit Division reported in its 2024 *Luma IT Audit* that "key privacy controls were inadequately designed and implemented."

The report described that critical security processes had not been formalized and existing security controls were largely informal and unoptimized.

The report gave the example that although Luma uses a role-based access model, no process existed to continuously evaluate those roles for duty segregation or the principle of least privilege.

State employees reported similar concerns during our evaluation.

Many employees explained that internal controls have been weakened. For example, the security roles are poorly configured, giving too little or too much access to certain users. We invited employees to participate in our survey based on their assigned security role(s) in Luma. Over 300 employees responded that they did not actually use Luma or the assigned role(s) they had been given.

Other employees reported that Luma did not match or reflect the internal control processes of the agency. Some employees described moving documentation and tracking outside of Luma due to system constraints or a lack of trust in the system.

“ We were told . . . that we would be able to use LUMA as a storage option for employee documentation . . . but when it came down to it . . . we can't use it for that because there are confidentiality issues with employees being able to see things that they shouldn't.

- State employee

The Legislative Audit Division's reports offered the following recommendations:

- formalize and strengthen security process controls
- ensure user access controls
- incorporate segregation of duties considerations
- optimize the platform's security programs
- continuously improve and monitor expected controls

We support and reiterate the importance of these recommendations for strengthening the system security.

5. ADOPTION

NEGATIVE

To get the maximum return on investment, employees must use Luma as intended and to the full extent of its functionality. The more employees who complete business activities in Luma, the more it can become the sole source of truth. One year after full implementation, we asked state employees about how they complete an array of 36 business activities within the following areas:

- HR & Payroll (13 activities)
- Finance (15 activities)
- Budget (1 activity)
- Procurement (7 activities)

We wanted to know if they were using Luma, an application or process outside of Luma, or a combination of both for each business activity.

For a few activities, more than 80 percent of employees reported that they completed the activity in Luma without using any external application or process, as shown in the table below.

Category	Activity	Percent of employees who completed activity in Luma alone
Finance	P-Cards	91%
HR & Payroll	Payroll	89%
Procurement	Approving	85%
	Requisitioning	80%

For most activities, between 50 and 79 percent of employees reported completing the activity in Luma without using any external application or process.

For nine activities, less than half of employees reported that they completed the activity in Luma alone and instead used an application or process outside of or in addition to Luma. To the degree that users were performing activities outside of Luma, it indicates that they have not fully adopted Luma.

BARRIERS TO ADOPTION

Luma does not have the functionality to complete key tasks without the use of outside applications.

We asked state employees how they were performing different business activities. Employees could indicate that they were completing the task **entirely inside Luma**, using **Luma plus another program or application**, or performing the task **entirely outside of Luma**.

We found that state employees will continue to be reliant on outside applications because Luma does not meet specific agency needs.

“ *Luma currently does not have the ability to adequately track budgets. As a manager, it is impossible to perform monthly, quarterly, or annual assessments of budget structure.* ”
- State employee

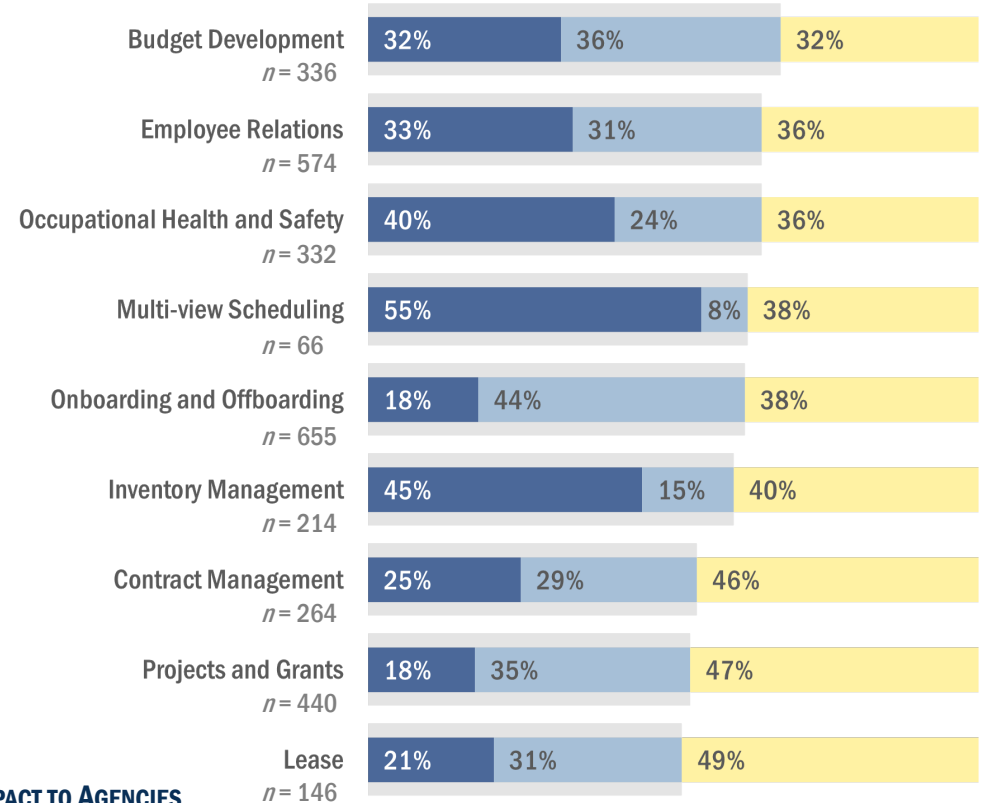
“ *LUMA doesn't have a functional budgeting module. Additionally, we can't even pull appropriate reports within LUMA to know how much money we are spending from our budget. To develop a budget, I have to put together my own spreadsheet to understand personnel costs and then be able to input operating costs. LUMA is a train wreck on this front.* ”
- State employee

“ *Balances for our contracts have been wildly inaccurate therefore we track invoices separately in an excel spreadsheet.* ”
- State employee

“ *Our state and federal grant (pass-through) programs require exponentially more work.* ”
- Fiscal officer

SURVEY ITEM

For the following business activities, indicate if you are using **Luma**, an application or process outside of Luma, or **both**.



III. IMPACT TO AGENCIES

BARRIERS TO ADOPTION

Reporting is inadequate.

State employees were frustrated that reports take a long time to download and often “time-out” before completion. The titles of search fields are too complex, unclear, or use inconsistent terminology. State employees said reports must often be generated for smaller periods of time, such as months instead of years, and spliced together in Microsoft Excel.

“ Compared to the legacy program we used prior to Luma, we struggle to have access to a fraction of the reporting data we used to have.

- State employee

“ Each time a report is run in Luma, even if on the same day in the same hour or minute, you will get different results every time.

- State employee

“ Major system improvements including reporting would need to be changed before any more migration to Luma could continue.

- Fiscal officer

BARRIERS TO ADOPTION

Employees do not perceive a benefit of migrating to Luma.

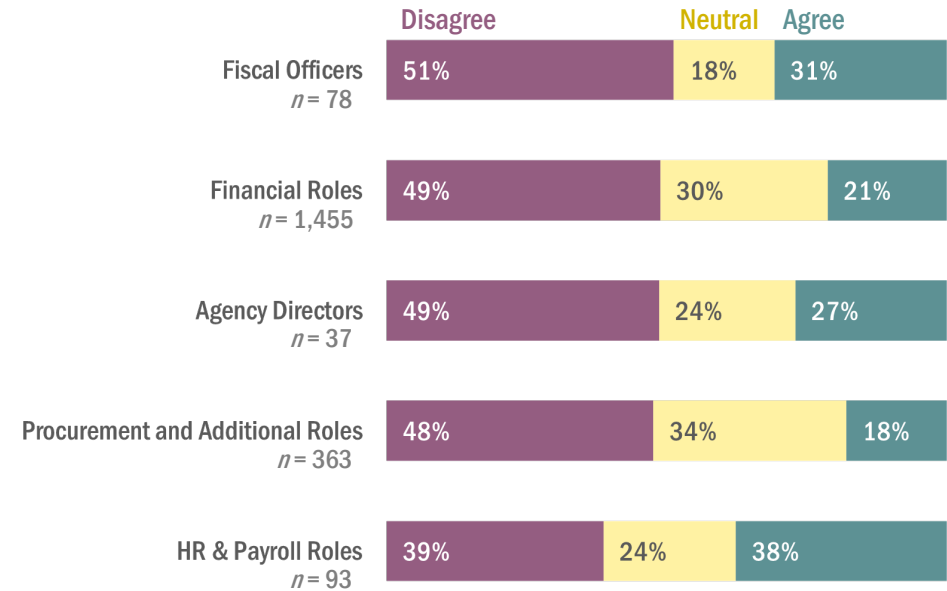
When we asked state employees if they saw benefits to Luma over the legacy systems, we found the majority of survey respondents did not perceive additional benefits or capabilities. For employees in HR and payroll roles, a higher percent of respondents saw perceived benefits. For employees in the fiscal officer role, 51 percent disagreed that Luma had additional capabilities that improved their jobs compared to legacy systems.

In open-ended survey responses, very few state employees reported experiencing any job improvements or benefits with Luma.



We use Luma because we have to, but I haven't seen a benefit yet.
- Fiscal officer

SURVEY ITEM Luma has additional capabilities compared to the legacy systems that improve my job.



III. IMPACT TO AGENCIES

BARRIERS TO ADOPTION

Luma is not accessible to those who require accommodations.

State employees reported that there are many aspects of Luma that are not accessible for blind and visually impaired users.

State employees also reported that the inconsistent terminology across modules and training materials hampered accessibility. Luma terms also do not reflect standard accounting terms.

“ We have employees who are unable to complete simple tasks like filling out their timesheet because Luma is not accessible for screen readers.

- State employee

“ While Luma has the potential to be a great system, accessibility should have been a priority and built in from the beginning rather than added as an after-thought. As an employee, I should have the same right to access my information as any other state employee. With the current system, I have to rely on sighted assistance by other employees which compromises my privacy and leaves me reliant upon others to perform tasks correctly on my behalf.

- State employee

BARRIERS TO ADOPTION

Employees are exhausted by Luma.

We heard repeatedly from state employees that they felt exhausted, burned out, and unheard. Many employees were frustrated that the message to the public and the Legislature was that employee struggles with Luma were due to a “training issue.”

“Legislators should understand that this is not a training issue at the agency level. This is a poorly-designed platform that is simply not a great fit for the tasks and actions that most agencies perform.”
- Fiscal officer

“I dread coming to work since Luma has been implemented. I do not feel like I can effectively do my job with the current state of Luma. I have contemplated leaving my position...”
- Fiscal officer

“Every state employee I have spoke with or dealt with in regards to Luma is trying very hard to make it work. They are giving 110% and have been demoralized by statements in the national press that indicated they were not.”
- Fiscal officer

SYSTEM POTENTIAL

Some employees expect things to get better.

Many employees reported that they did not see the legacy systems as sustainable. While Luma has yet to lead to the hoped-for improvements, employees shared that they see how Luma has improved since the beginning and expect Luma to ultimately be an improvement over the legacy systems. Some employees who had been with the state when the legacy systems went live recall that it took years for the system to become as useful as it eventually was.

“ I can see a lot of positive potential in the Luma system but I think it will take a few more years to recognize that potential assuming that the system continues to improve and become stable. I understand that the amount of funds invested in Luma was significant and that the pressure to roll out the new system was great but additional planning, testing, running two systems at the same time and adding a SCO/Luma expert at each agency would have made the rollout better. The biggest thing I would like to see going forward is more communication and a global approach to identifying, communicating and resolving problems.

- Fiscal officer

“ LUMA has a significantly higher ceiling of potential from our legacy systems. The best way forward is to weather the storm and know that these issues will be resolved.

- State employee

“ I appreciate the legislature looking into Luma. The oversight sets expectations. Expectations will drive improvements . . . I would like to see the legislature stay on top of this issue to ensure that the state doesn't fall into the trap of "let's just figure out how to get this system to process things" and instead keep the state moving towards "let's get this system to work to its full potential."

- State employee

III. IMPACT TO AGENCIES

IV. WHAT IS THE FINANCIAL IMPACT OF LUMA?

SUMMARY

In 2018, the SCO estimated that Luma would cost \$102 million to implement. We found that through fiscal year 2024, the SCO has spent a total of \$117 million on Luma. This figure includes both project costs and post-implementation costs. When considering only the costs associated with the creation and implementation of Luma, including one-time post-go live expenses such as temporary employees and decommissioning the legacy system, the total cost for the project stands at \$91.6 million. We estimate that ongoing costs of Luma will be an average of \$9.8 million a year, bringing the total cost of Luma to \$220.8 million through fiscal year 2034.

We found that Luma is not on track to provide the \$212 million in savings over the legacy systems that the 2015 *System Modernization Study* estimated by year 10 post-go live. Some anticipated savings, such as those from increased employee efficiency, have not materialized. Other savings, such as the standardization of purchasing statewide, were happening prior to Luma’s inception and have experienced no additional savings from its implementation.

In our survey, 78 percent of fiscal officers and directors stated their agency has not realized any savings from the transition to Luma, with only 3 percent reporting agency savings from the transition.

The 2015 *System Modernization Study* did not project most savings to first appear until a year after go-live and fully realized until year two after go-live, which would be FY25 and FY26, respectively. It is too early to tell if some savings from the *System Modernization Study* will be met. **Due to this, future analysis is needed to accurately estimate savings generated from the transition to Luma.**

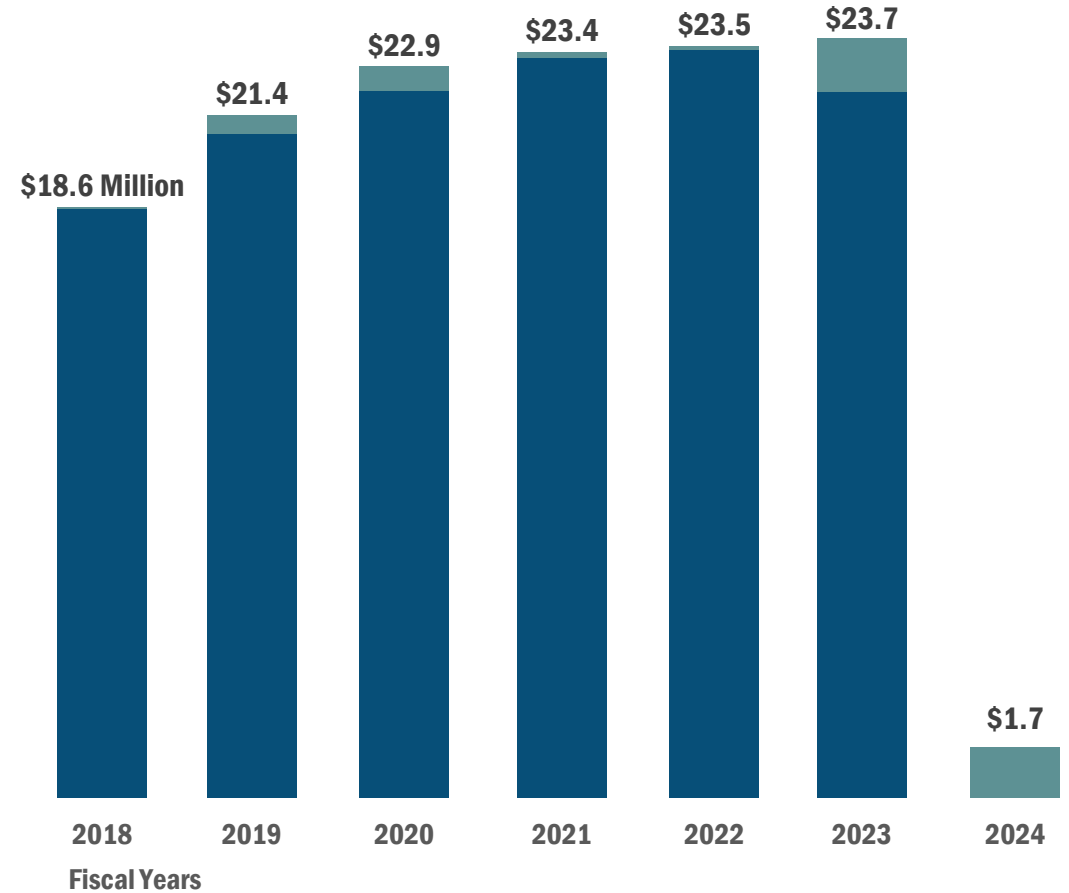
BIIF received \$135.2 million in funding from fiscal years 2018 – 2024.

To fund the implementation of Luma, the Legislature created the Business Information Infrastructure Fund (BIIF) in 2018. Funding for BIIF came from the Statewide Cost Allocation Program (SWCAP), which recovers costs for services provided by the Attorney General's Office, State Controller's Office, and the State Treasurer's Office.

Initially, the Legislature authorized SWCAP payments to go to BIIF for fiscal years 2018 through 2022. In 2022, the Legislature added another year of SWCAP payment to BIIF for fiscal year 2023. No SWCAP payments were added to BIIF in fiscal year 2024.

\$130 million has been transferred to BIIF from SWCAP. The fund has generated an additional \$5.2 million in interest payments, bringing the total amount of funds in BIIF to \$135.2 million from fiscal years 2018 through 2024.

BIIF had \$135.2 million in revenue between fiscal years 2018 and 2024. 96% of BIIF funds were from SWCAP and 4% were from interest payments.

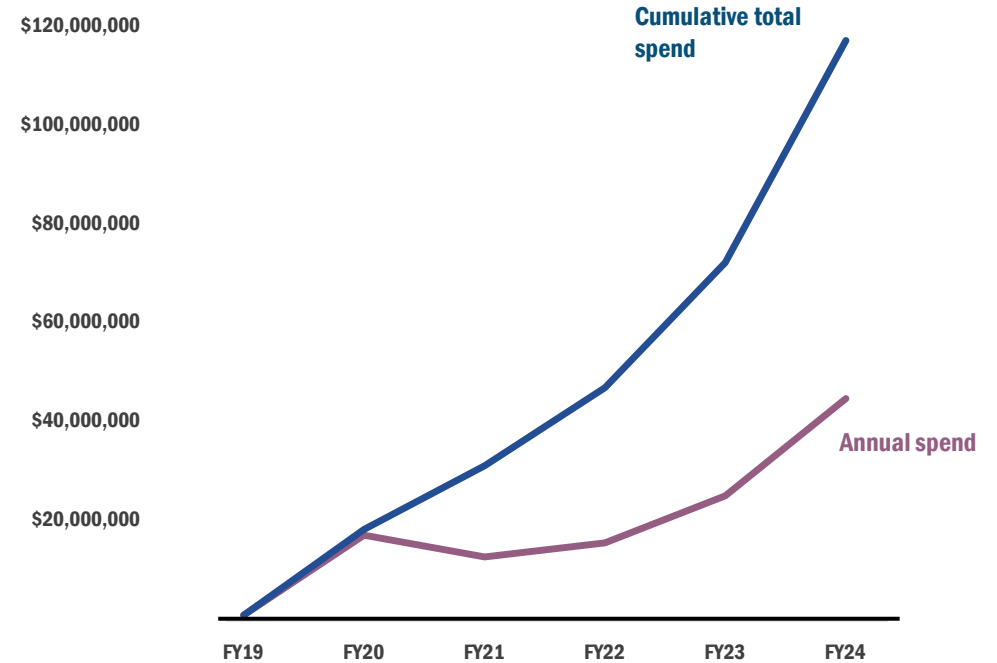


The SCO spent a total of \$117 million on Luma between fiscal years 2018 and 2024.

Expenditures through fiscal year 2024 include both the project cost and ongoing expenses of Luma. Ongoing costs of Luma totaled \$25.4 million through fiscal year 2024. Luma's project cost totaled \$91.6 million when including one-time costs at go live such as decommissioning the legacy system.

At the end of fiscal year 2024 there was \$5.3 million in outstanding payments remaining to Deloitte, of which \$2.5 million was for sustainment and \$2.7 million was for implementation. When accounting for the outstanding payments the total project and ongoing costs of the Luma are raised to \$94.2 million and \$28 million, respectively.

Luma's project cost totaled \$91.6 million and ongoing costs totaled \$25.4 million through fiscal year 2024.



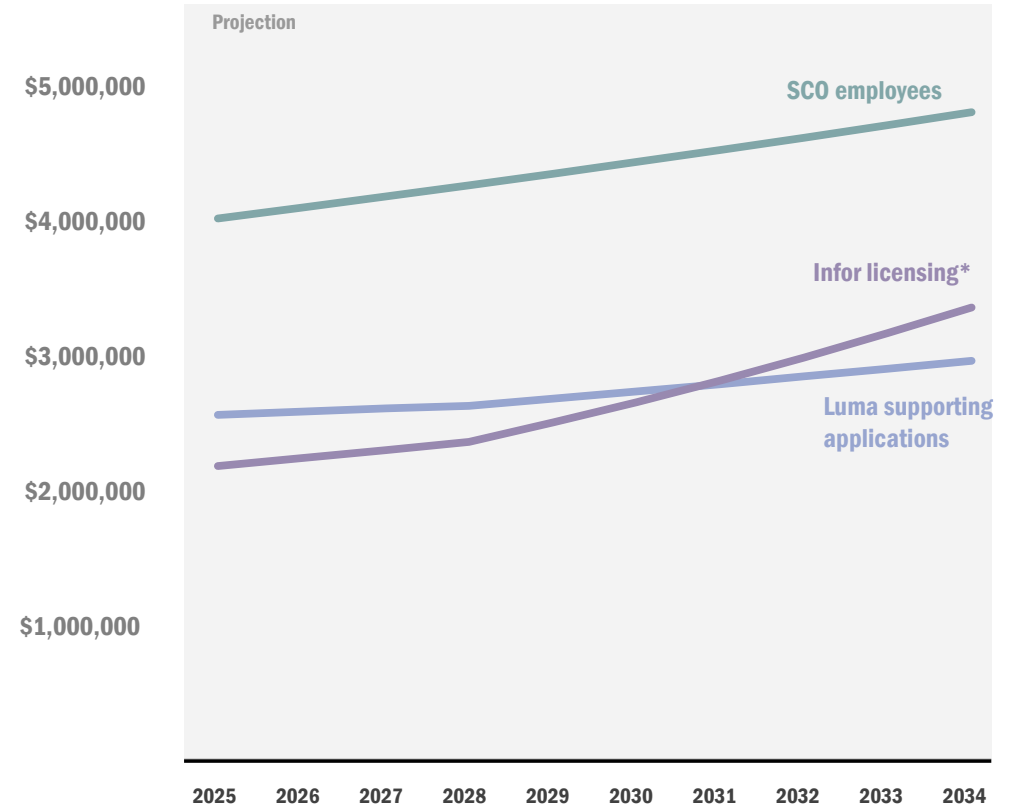
Luma will cost an estimated ongoing average of \$9.8 million per year through fiscal year 2034.

Ongoing costs for Luma come from three primary sources:

- employees at the SCO who work on Luma-related activities,
- annual licensing costs for Infor,
- and annual licensing costs for other Luma supporting applications and software.

We estimate that Luma will cost \$8.8 million in fiscal year 2025. About half of the cost, \$4 million, comes from SCO's personnel. The rest of the cost will come from \$2.6 million in licensing fees for Luma supporting applications and software and \$2.2 million in licensing for Infor. By fiscal year 2034 we project that the ongoing costs for Luma will rise to \$11.2 million, when accounting for increases in contracts and employee costs.

Luma's ongoing annual costs are projected to rise to \$11.2 million by fiscal year 2034. Most of the ongoing costs will be for SCO employees.



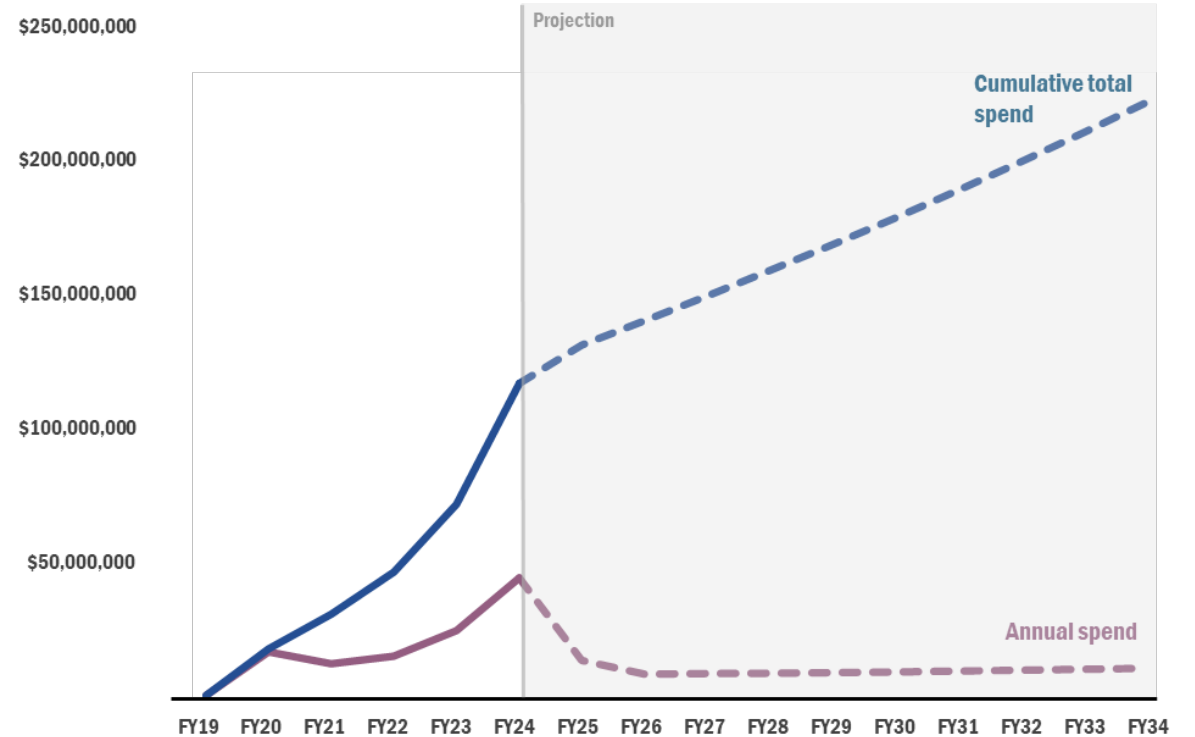
* The licensing contract with Infor assumes a 6 percent annual increase starting in fiscal year 2029 if no new contract is agreed to before the contract expires. Actual costs will vary depending on contract renegotiation.

IV. FINANCIAL IMPACT

Luma's estimated total cost through fiscal year 2034 is \$220.8 million.

We estimate Luma's ongoing costs will total to \$98.4 million from fiscal years 2025 through 2034. Combined with the \$117 million already spent by the SCO through fiscal year 2024 and the \$5.3 million in outstanding payments to Deloitte, the total projected cost of Luma is expected to reach \$220.8 million by 2034.

Luma's estimated sixteen-year total projected costs includes \$117 million spent in the first six years and a projected \$98.4 million in the next ten years.



Luma was projected to provide \$212 million in savings to the state by year 10 post-go live.

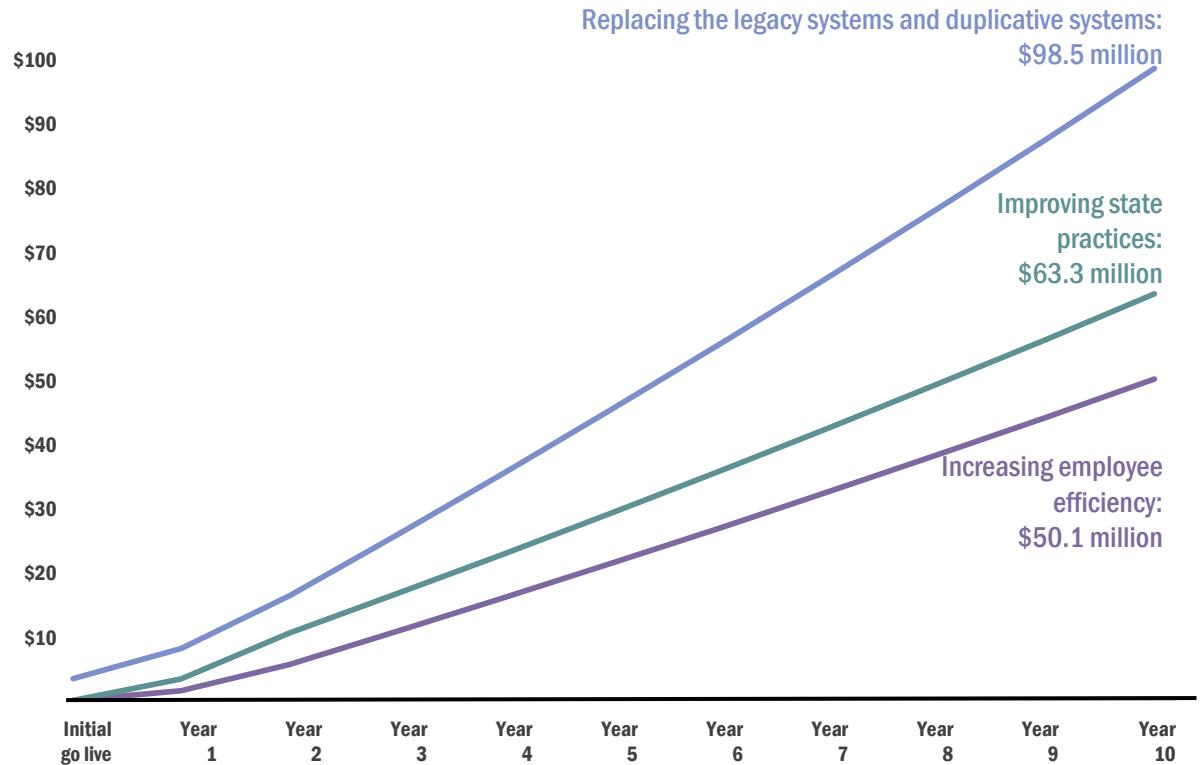
The 2015 *System Modernization Study* identified the following three ways a new ERP system could reduce costs to the state:

- (1) Avoid current system costs by phasing out the legacy systems and reducing duplicative systems statewide
- (2) improve state practices in purchasing and accounts receivables
- (3) increase efficiency of employees working in HR and finance modules

The *System Modernization Study* projected that savings would start to appear one year after go live, or fiscal year 2025. Savings would not be fully realized until 2026. More analysis will be needed in the future to estimate the amount of savings to the state because of Luma.

However, when looking at the projected savings from the 2015 *System Modernization Study* in comparison to current experiences with Luma, it is not likely that Luma will prove savings on the level originally projected.

The 2015 *System Modernization Study* projected that a switch to an ERP system could provide \$212 million in total savings ten years after go live.



The state may not realize the projected savings.

When looking at the projected savings from the 2015 *System Modernization Study* in comparison to current experiences with Luma, it is not likely that Luma will provide savings on the level originally projected for three reasons.

(1) Not all systems have been decommissioned that were listed in the *System Modernization Study* and some have been added.

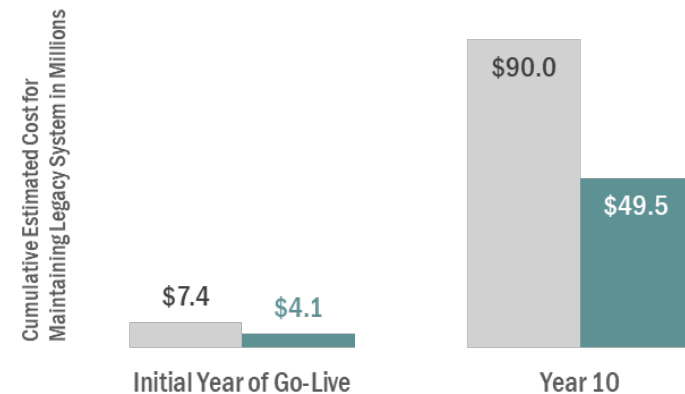
Replacing the legacy systems and duplicative systems was projected to provide \$98.5 million in savings. The *System Modernization Study* estimated that shutting down the legacy systems would provide savings between \$7.4 million to \$9 million a year for the SCO by not having to maintain and staff the legacy systems.

The limitations of the legacy systems required individual agencies to purchase software or systems to provide functionality to the agency that was not available in the legacy systems. For example, the Department of Health and Welfare used Microsoft's Navision ERP to supplement the STARS system in areas such as accounts payable, purchasing, and asset management.

A modern ERP system with comprehensive built-in functionalities would eliminate the need for agencies to purchase alternate software or systems to fill in gaps. According to the *System Modernization Study*, the state could potentially save between \$1.5 million and \$2 million annually by eliminating these agency-specific software and systems across ten agencies.

The cost to operate the legacy systems has decreased and new estimates put the cost of maintaining the legacy systems at **nearly \$40 million below the original estimate.** The *System Modernization Study* estimated that maintaining the legacy systems would cost an average of \$7.4 million from year of go live to the 10th year post-go live, with a total cost of \$90 million over this timespan. Estimates from the SCO projected that maintaining the legacy systems would have cost \$4.7 million in fiscal year 2023 and \$4.1 million in fiscal year 2024. This accounts for mainframe hardware upgrades done during that time. Using the same two percent annual adjuster as the *System Modernization Study* would result in a total cost of \$49.5 million to maintain the legacy systems through fiscal year 2034, or nearly \$40 million less than anticipated.

The 2015 *System Modernization Study*'s cumulative estimate for maintaining the legacy systems were \$40 million higher than OPE's updated estimate from 2024.



IV. FINANCIAL IMPACT

Agencies have started using new systems, which was not accounted for in the *System Modernization Study*. In our interviews and survey of Luma users, we found that Luma has not eliminated the need for external systems and processes for state agencies. Employees frequently cited the cumbersome and time-intensive nature of Luma, its inability to meet their specific needs, and a lack of trust in information generated as reasons for relying on external systems.

One department we spoke with has spent \$744,000 on software and contractors for better functionality of department-specific processes that Luma could not provide.

Likely more third-party systems will be eliminated as state employees become more accustomed to Luma and its functionality is improved, increasing the savings generated over time. In total, some level of savings will be provided to the state by eliminating the legacy systems and some third-party systems, but it is unclear if it will provide the \$98.5 million in savings projected in the 2015 System Modernization Study.

“ We use processes outside of LUMA because it does not fully meet our business needs. In my experience, it takes a few years for users to become solid users of the new system and processes, and it takes time for the system to meet needs overall. I don't find it problematic to supplement the system until all priorities can be addressed to fully use the system as designed.

- Fiscal officer

(2) Procurement was expected to see the largest estimated savings from improved practices, but those savings will likely not be realized.

We believe these estimates included savings from practices already in place by the state. Further, the small number of registered vendors in Luma suggest the state may be seeing reduced competition.

The *System Modernization Study* identified two areas where the state could leverage a modern ERP to improve state processes and generate savings:

- 1) improving state practices for tracking and collecting accounts receivable
- 2) streamlining purchasing across the state.

The study estimated that improving state processes could provide \$5.5 million in annual savings to the state by the second year after go live.

Improvements to accounts receivable

Accounts receivable is money that individuals and vendors owe the state for services rendered. The *System Modernization Study* suggested that a new ERP system with an advanced accounts receivable module could enhance data accuracy, visibility, and communication, leading to a reduction in the overall accounts receivable balance.

The *System Modernization Study* estimated that lowering the balance of accounts receivable for two agencies, Health and Welfare and Fish and Game, would increase state cash flow by \$1.35 million dollars. The state could then invest the increased cash flow, generating an additional \$40,578 per year in interest.

Improvements to purchasing

There were two benefits a new ERP system could have for purchasing in the *System Modernization Study*. First, improving spend intelligence could allow the state to leverage its purchasing power across agencies to reduce the cost of commodities. Second, reducing “maverick spend”, purchases that are not in compliance with state policy or that do not use pre-established contracts negotiated with vendors, could further cut costs of purchasing. A modern purchasing system that is easier to use would allow agencies to access statewide contracts for purchasing commodities, thereby reducing their costs.

In the 2015 *System Modernization Study*, researchers were not able to estimate the potential savings to the state using Idaho-specific data due to a lack of available purchasing data at the time. Instead, researchers used figures from other states to estimate Idaho’s potential savings for modernizing its purchasing system. The study projected that the state

could save about \$5.4 million a year if it upgraded its purchasing system and utilized the new data generated to reduce purchasing costs.

The largest savings factor for improving state processes was streamlining purchasing statewide through reducing the amount of maverick spend and increasing the use of catalogs and state contracts.

The state has likely not realized any new savings to date from the procurement module in Luma.

After the 2015 *System Modernization Study* and prior to Luma go live, the state had already transferred over to a new unified eProcurement system called Jaggaer beginning in 2018. The transition to an eProcurement system allowed state agencies to consolidate many purchases under existing state contracts and potentially realize some of the savings from the 2015 *System Modernization Study*. However, it is difficult to measure the total savings from this consolidation as it was not tracked.

Additional savings could be gained from the procurement module in Luma, but it will likely not save the initially projected \$5.4 million a year. For example, in both the prior eProcurement system and the purchasing module in Luma, the state does not use the catalog function. Catalogs list the existing state contracts, allowing purchasing agents to quickly identify and select state contracts that exist for certain commodities.

(3) The state started losing efficiency during the first year after go live.

The state was not expected to see efficiency gains in the first year of implementation. Instead, efficiency was expected to begin increasing during the two years following the year of implementation. However, we found efficiency losses during the last year which means improvements will have to come from a place of less efficiency.

The *System Modernization Study* projected that employees working within two modules of the legacy systems, STARS and IPOPS, could see workflow efficiency improvements in a new ERP system.

The study assumed that employees who spend an estimated 75 percent of their workday on system-related activities in the legacy systems could experience a 10 percent increase in efficiency. Employees who spend an estimated 20 percent of their workday on system-related activities in the legacy systems could experience a 5 percent increase in efficiency.

In total, the study estimated that efficiency gains could save employees an average of 1.6 work hours per week, translating to approximately \$4.6 million in savings a year beginning in the third year after go live. These hours could then be saved, avoided, or redirected within an agency and eventually lead to the elimination of unfilled, unrequired positions.

Of the directors or fiscal officers who responded to our survey, 28 percent reported hiring extra employees to manage the increased workload from

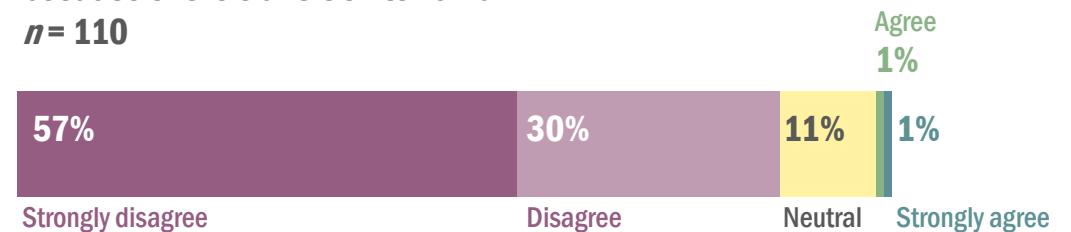
Luma. Over 30 positions were reclassified into financial roles from other areas to assist with the demands of Luma’s finance requirements. Several directors and fiscal officers also increased the hours of part-time employees working within finance to help handle the workload.

The *System Modernization Study* did not expect savings from increases in employee efficiency to be fully realized until two years after go live. While efficiencies may be achieved in Luma by two years past go live in fiscal year 2026, as employees become more accustomed to the system, it is unlikely that the state will see the projected \$50.1 million in savings from increased employee efficiency by 2034 based on current trends.

SURVEY ITEM

In the foreseeable future, I will be able to cut positions because of the transition to Luma.

n = 110



“ We have added an accounts payable position and are evaluating need for additional personnel before completing budget requests. The amount of time required to complete tasks is exponential in Luma and will require more support to handle routine functions.

- Fiscal officer

IV. FINANCIAL IMPACT

V. WHERE DO WE GO FROM HERE?

SUMMARY

We identified ways the SCO could have better facilitated the Luma project's conception, procurement, contract management, and change management prior to go live. We developed checklists for future IT projects.

We found that Luma is not living up to expectations, owing to a combination of inconsistent expectation setting, system limitations, and flawed training approaches and material. We found that, although users spoke highly of line staff at the SCO, many users feel disillusioned with Luma and disrespected by SCO leadership. We found that the system is likely to cost more than expected and save less money than expected.

Two suggested paths forward are not feasible: returning to the legacy systems or starting from scratch.

It would be impractical to return to the legacy systems. The process of migrating data from one system to another led to many mistakes and inefficiencies. Migrating back to the legacy systems, particularly with the loss of employees who knew these systems, would add an additional year of transition without solving the problems of the legacy systems.

Because the SCO did not benchmark the old system or make specific claims about Luma's performance or state resource needs, users had

widely varying expectations. Without these, users can remember how legacy systems were better than Luma without remembering its flaws, while the Controller can claim success regardless of functionality.

Replacing Luma with a new system would require an investment of similar size to Luma, because most of the cost was not in the software, but in the implementation. With lessons learned from Luma, implementation of another new system would likely be smoother, but even smooth ERP transitions are costly and risky.

The best interest of the state is to focus on moving forward. SCO leadership needs to work to repair relationships with state employees and to develop a plan for continuous improvement and sustainment. The SCO should also communicate its expectations for business process changes so agencies can plan and adapt.

SCO plays the most important role in Luma succeeding. However, the agencies adapting to Luma mostly fall under the Governor's jurisdiction. The Governor must play an active role in understanding and communicating how Luma changes agency's needs. The Legislature should also recognize that Luma is here to stay and invest accordingly.

This section provides recommendations for how the state can move forward with its current ERP and best practice checklists that can be used for future large-scale IT procurements.

RECOMMENDATIONS OVERVIEW

We have three recommendations for the SCO, two considerations for the Legislature, and best practice checklists for future IT projects.

Recommendations to the SCO

1. The SCO should take steps to repair its relationship with state employees.
2. The SCO should develop a sustainability strategy focused on training to ensure the long-term viability, efficiency, and effectiveness of Luma.
3. The SCO should take steps to improve the transparency of issues with Luma and efforts to improve it.

These recommendations dovetail with those made in the Legislative Audit Division's *Luma System Optimization* report.

Considerations for the Legislature

1. We suggest the Legislature and the Leadership Council consider aligning the responsibility for and governance of Luma with the scope of the system.
2. We suggest the Legislature consider changes to the State Procurement Act.



1. THE SCO SHOULD TAKE STEPS TO REPAIR ITS RELATIONSHIP WITH STATE EMPLOYEES.

We recommend the SCO take steps to repair its relationship with state employees. Luma was more than the implementation of a new ERP software. It was a change event. Success was dependent on the degree to which employees understood and knew how to use the software as much or more than on the software itself. Luma presented a change in business processes that were not well articulated to users.

The SCO and employees across the state put forth a colossal effort. But the effort was not as fruitful as it could have been in part because the effort was not equally acknowledged. In our survey, employees across the state recognized the work of the SCO staff. However, SCO leadership repeatedly and publicly blamed the problems of Luma to change resistance and a lack of understanding by state employees. There was not an acknowledgement by the SCO that it had a responsibility to ensure that the training and materials available were sufficient to support employees. Luma will not be successful if employees resent Luma and resent the SCO.



2. THE SCO SHOULD DEVELOP A SUSTAINABILITY STRATEGY FOCUSED ON TRAINING TO ENSURE THE LONG-TERM VIABILITY, EFFICIENCY, AND EFFECTIVENESS OF LUMA.

Given the high resistance to the new ERP, we recommend the SCO adopt a sustainability strategy. The objective of this recommendation is to recenter responsibility for improving Luma with the SCO and clarify expectations from state agencies. The SCO should identify resource needs to implement this recommendation and ensure that Luma can be viable and effective in the long-term.

Some of the strategies that should have been incorporated into an organizational change management plan before procurement are still relevant and should be incorporated. These strategies are as follows:

- include a peer-support structure
- measure adoption and resistance across state employees
- revise communication and leadership support strategy

The sustainability strategy should incorporate the following elements:

Adult learning models: The SCO should develop trainings based on adult learning models. The SCO should hire an adult learning specialist to be a training and development consultant to create this training and maximize Luma's adoption. This consultant should be chosen based on an

understanding of Idaho's needs, not based on previous ERP experience to minimize the risk that trainings are generic. These trainings should be customized to agency expectations and concerns.

Method for documenting and publishing the root cause of issues: For each major issue raised in our survey or by stakeholders, the SCO should work with affected users to identify root causes and publish the findings. Documenting the cause of an issues would allow the SCO and users to work collaboratively to solve the issue.

Complete and clear system documentation: The SCO should publish clear and accessible documentation about how the system works. Specifically, report documentation is needed so users understand what fields from which modules are being pulled together. Reports are only useful if the end user can understand and interpret the data appropriately.

User forums: The SCO should facilitate user forums, which would enhance the ability of similarly situated users at different agencies to share knowledge, rather than relying solely on the SCO.

Business practice documentation: The SCO should compile a statement of specific changes in business practices that agencies need to adopt to successfully use Luma, such as the need for additional accounting knowledge in agencies. Agencies should identify whether these changes are realistic for their current staffing model.



3. THE SCO SHOULD TAKE STEPS TO IMPROVE THE TRANSPARENCY OF ISSUES WITH LUMA AND EFFORTS TO IMPROVE IT.

We recommend the SCO recenter the user by increasing the transparency of Luma's issues and efforts to improve Luma. The objective of increasing transparency in these ways is to provide measures for stakeholders to assess the status of Luma rather than relying on competing narratives. This would enhance accountability for and trust in the SCO, identify areas of needed investment, and save users time in trying to understand whether an error is due to the user or the system.

The SCO should:

Develop key performance indicators that address issues found in this evaluation and raised by other stakeholders. These indicators should assess system performance, user adoption of the system, time to complete certain processes, and user trust in system processes and reports. The indicators should also include time-specific targets for improvement. It should also collect key descriptive variables for all tickets, not just incidents or requests, to identify emergent issues.

Publish a dashboard, accessible to the public or to state employees, listing these key performance indicators and their status.

Publish a known error portal through ServiceNow, available to state employees, which includes a description, affected systems and modules, workarounds, the status of the error (e.g., under investigation, permanently resolved), and an estimated timeline of its resolution.

Improve transparency and user feedback within the ticketing process, including communicating more frequently with users regarding ticket status; reviewing the ticket prioritization process with end users to assess whether tickets are being effectively prioritized; and institute an automated user satisfaction survey triggered by incidence closures.

Publish a dashboard through ServiceNow displaying the number of open incidents, timeliness of ticket resolution, and a summary of user satisfaction surveys.





1. THE LEGISLATURE AND THE LEADERSHIP COUNCIL SHOULD CONSIDER ALIGNING THE RESPONSIBILITY FOR AND GOVERNANCE OF LUMA WITH THE SCOPE OF THE SYSTEM.

The current governance structure of Luma gives the State Controller unilateral authority over decisions involving Luma. By statute, Luma is supposed to be overseen by a Leadership Council. The Governance Board, constituted by the SCO and chaired by the Chief Deputy State Controller and has its agenda set by the SCO. The primary role of the Governance Board has been a forum for the SCO to communicate to key stakeholders and generate buy in.

By law, the SCO has formal authority over the state's accounting and payroll systems and the subject matter expertise to oversee these systems. However, under the current governance structure, the SCO can effectively set standards for human resources, budget development, and procurement. The agencies with the statutory authority for these functions have no contractual relationship with the vendor providing the ERP software and cannot hold the vendor accountable.

The SCO has made significant informal cooperative efforts, particularly involving human resources and budget development. However, relying on informal cooperation, particularly across elected offices, introduces risk from changes in priorities. We suggest the Leadership Council and the Legislature consider options to better align the authority over Luma with the statutory responsibilities carried out by Luma.



2. THE LEGISLATURE SHOULD CONSIDER CHANGES TO THE PROCUREMENT ACT.

Luma is more than just the software contract with Infor; it consists of other software products procured using the SCO's exemption from the State Procurement Act. Many of these products are essential for the Controller to accomplish its statutory responsibilities, such as cost allocation software. However, other products are less related to these and may be used by agencies that are not exempt from the Act. For example, the SCO has procured a survey tool used by the Division of Human Resources and other agencies, and the help desk software used by the Office of Information Technology Services.

Leveraging the state's purchasing power to negotiate statewide contracts with software vendors is a good practice. However, these contracts would be subject to the State Procurement Act if managed by the Division of Purchasing or the Office of Information Technology Services. The broad scope of Luma creates a risk that purchases the Legislature intends to be subject to the Act are instead purchased by the Controller.

The Legislature should consider adding specific procurement requirements for these scenarios. Examples include:

- adding a requirement that procurement records are not to be destroyed outside of a record retention policy
- adding a requirement that when a procurement is of a certain size or involves a certain number of nonexempt agencies, the evaluation team created to compare vendor responses is chaired by someone who is not in the supervisory chain of the other team members so as not to exert undue influence on the individual team member scores



LESSONS LEARNED FOR FUTURE IT PROJECTS

Throughout this report, we have identified areas where the SCO adhered to, or deviated from, recommended IT project management practices. We have collected a series of lessons learned for reference by state agencies embarking on large-scale IT implementations.

ORGANIZATIONAL CHANGE MANAGEMENT PLANS

The key lesson learned is to develop an organizational change management plan before starting procurement. The plan should include the following elements:

Timeline: Develop a realistic timeline that accounts for speed of change that is expected from internal staff. The timeline should provide multiple options (aggressive, recommended, and conservative schedules).

Baseline: A description of baseline system performance and baseline performance measures, current business processes, and a description of current processes and intended changes. Gather information on baseline performance of existing processes and tools. Prepare an outline of potential key performance indicators and metrics. Validate these metrics with stakeholders. Collect data and establish key benchmarks that the new system will be measured against. Metrics should include some measurement of satisfaction and key measurements of the functionality of the tool itself (i.e., time to process activity one, time to process activity two, etc.)

Communication: Develop a communication plan or strategy that ensures that employees understand how the change will improve their work functions. Develop a communication schedule and timeline that relates back to the overall project timeline. Validate the communication plan with the stakeholders.

Change Agents: Identify key change agents to be the primary individuals who will be trained on the new system. Identify how the change agents' current workloads will be shifted. Reduce change agents' workload by 20-50% to provide them time to learn the new systems. Identify how these change agents will be embedded throughout the organization and agencies to mentor and train other staff. Identify how these change agents will be supported by leadership.

Optimized Training: Develop a training strategy or approach to help train adults on new skills, processes, and practices.

Leadership: Ensure demonstrable engagement for change agent support, adoption and resistance reporting, and resource balancing. Leadership must be actively engaged with providing mentorship and support.



LESSONS LEARNED FOR FUTURE IT PROJECTS

Throughout this report, we have identified areas where the SCO adhered to, or deviated from, recommended IT project management practices. We have collected a series of lessons learned for reference by state agencies embarking on large-scale IT implementations.

PROCUREMENT

The project should be funded like an infrastructure project: with minimal restrictions on what money can be spent on between personnel, operating, and capital, and with continuous appropriation. Avoid ‘colors of money’ that can lead to suboptimal decisions.

Request examples of key project deliverables from vendors, such as project management plans, project charters, schedules, communication plans, and other key documents. This gives the state an opportunity to review what to expect from each vendor and assists with contract management. The state can ensure that deliverables are not generic and represent the staff investment the state expects for the deliverable.

If separate software and implementor vendors are to be hired, maximize the state’s options by first shortlisting the acceptable software products and then requesting proposals from implementors. Implementors have specialized teams dedicated to specific software; shortlisting software increases the number of software-implementor combinations the state can consider.

Invite consideration from as many vendors as are capable of meeting the state’s needs. Mandatory requirements, if necessary, should be stated in terms of outcomes—for example, that software be able to accomplish certain tasks—rather than inputs dictating how outcomes will be met.

Request only information in the RFP that the evaluation committee can use to meaningfully differentiate one vendor from another. The information should be about dimensions the state is willing to pay for. Additional information can be gathered during a presentation and interview period and a pre-contract clarification period.

Consider including submission templates to ensure vendors do not miss required information and to make it easier for the evaluation committee to compare proposals. Also consider maximum proposal lengths to minimize boilerplate language and focus on the most meaningful aspects of a proposal.

Evaluation committees should be 5-10 people. The committee should have enough skills and knowledge related both to the state’s needs and the product being evaluated to ensure the state gets its best value. End users should be represented.

Scoring rubrics should be clear, capturing all the goals of the RFP, while allowing for meaningful gradients of quality. A single rubric, ideally numeric, should be used, as switching between letters, adjectives, and numbers can introduce confusion.



LESSONS LEARNED FOR FUTURE IT PROJECTS

Throughout this report, we have identified areas where the SCO adhered to, or deviated from, recommended IT project management practices. We have collected a series of lessons learned for reference by state agencies embarking on large-scale IT implementations.

Include a comprehensive project schedule with specific details on delay management and contingency plans.

Clearly identify all critical assumptions related to the project.

Be written clearly and understandably to individuals outside the project team, ensuring transparency and alignment across the organization.

PROJECT CHARTERS

Clearly outline project objectives, measures, staffing, organization, high-level timeline, and scope.

Go beyond repeating the contract scope of work, providing specific insights that drive clarity and accountability.

Include names and contact information for key project team members, stakeholders, and decision rights holders.

Thoroughly discuss critical risks or challenges that could impact the project, with plans for mitigation.

Define key performance indicators (KPIs) or performance measurements to track project success and progress.

Provide detailed discussions on budget management, including handling potential cost overruns.



LESSONS LEARNED FOR FUTURE IT PROJECTS

Throughout this report, we have identified areas where the SCO adhered to, or deviated from, recommended IT project management practices. We have collected a series of lessons learned for reference by state agencies embarking on large-scale IT implementations.

Have several planned and scheduled times of work stoppage and detailed planning. A project of this size should have several detailed planning sessions throughout the project life.

No work should be performed that has not been scheduled in detail.

Work progress should be closely tracked, with any deviations from the plan schedule timeline documented, reported, and assigned a specific cause for delay.

PROJECT MANAGEMENT AND WORK PLANS

Include sufficient detail to be useful for practical implementation across the team.

Include a work plan with sufficient detail to allow accountability.

Discuss strategies for budget and cost management with contingencies for cost overruns.

Discuss schedule and delay management.

Focus on establishing specifics and details for project management, particularly around the most likely risks that will impact client and user satisfaction.

Include a high-level general schedule, with key project milestones planned out.

Include a very detailed schedule for immediate activities (first 2-6 months) based on available information at time of contract, ideally to be completed before the contract is signed.



LESSONS LEARNED FOR FUTURE IT PROJECTS

Throughout this report, we have identified areas where the SCO adhered to, or deviated from, recommended IT project management practices. We have collected a series of lessons learned for reference by state agencies embarking on large-scale IT implementations.

CHANGE MANAGEMENT PLAN

Identify the project not as simply the adoption of a new tool, but as a change event whose success is driven not by technology but by people.

Include specific organizational insights in addition to a broad approach.

Consider the adoption strategy based on how frequently users will accomplish a task (with 3-7 repetitions). More frequently completed tasks, like timesheets, will require a shorter support period than less frequently completed tasks, like annual budget submission.

Identify different change strategies for different levels of users, such as those working in the system for most of their job versus those who only complete specific tasks. This should include identifying what level of proficiency different positions need.

Consider different approaches for users at different geographic locations or in different agencies who may have access to different informal resources.

Have a specific change management timeline.

Communicate to users how adopting the new tools will be a personal benefit.

Include statewide leadership in the implementation of the change management strategy.





LESSONS LEARNED FOR FUTURE IT PROJECTS

Throughout this report, we have identified areas where the SCO adhered to, or deviated from, recommended IT project management practices. We have collected a series of lessons learned for reference by state agencies embarking on large-scale IT implementations.

and providing adoption dashboards for leadership to identify and address resistance.

END-USER TRAINING STRATEGY

Consider the training needs by position and function, particularly with how frequently people in various positions will use the tool; those who use the tool frequently will need a different strategy than those who use the tool infrequently.

Set capability goals by position and function, realizing that not every user needs to be an expert.

Modify training materials based on the frequency of use and identified capability goals.

Have separate training strategies for users who have no experience with the old system and for users who are transitioning from prior tools and processes. Users transitioning from old systems will need crosswalks between the old and new and training on what old processes not to do.

Plan to use adult-learning models to train new skills, processes, and practices,



Idaho State Legislature

700 West Jefferson Street

P.O. Box 83720

Boise, Idaho 83720

February 13, 2024

Rep. David M. Cannon, Co-Chair
Sen. Melissa Wintrow, Co-Chair
Joint Legislative Oversight Committee

Dear Co-Chairs and JLOC Members,

We respectfully request that the Joint Legislative Oversight Committee (JLOC) direct the Office of Performance Evaluations (OPE) to evaluate the new enterprise resource planning system, commonly known as Luma, which is being implemented and managed by the State Controller. This system encompasses payroll, human resources, budgeting, finance, and procurement on a statewide basis, and is critical to the provision of government services to all Idahoans.

The Legislature has received many complaints from state agencies alleging this system is plagued by inefficiencies, inaccuracies, and unnecessary complexities, and is requiring more resources to complete basic fiscal functions and requirements than were required with the legacy systems. We would request that an evaluation of this system address, at a minimum, the following:

- 1.) Choice of the system for Idaho. This can include:
a.) The RFP and selection process.
b.) The contract negotiation and development process.
c.) Accountability measures in the contract.
d.) Contract deliverables and penalties for nonperformance.
e.) System and contractor costs.
f.) The overall complexity of the system for state government functions.
g.) Any required statewide accounting changes.
2.) What planning and approaches were used to implement the system? This can include:
a.) The use of agency input in system mapping.
b.) Creation of the Business Infrastructure Information Fund and its uses.
c.) Readiness of the system to go live.
d.) Communication and outreach to agencies.
e.) The amount, level, and types of training and support provided to agencies.
f.) Guidance on reporting functions and creation of statewide reports, including mapping of key legacy reports to new reports.

- g.) Decommissioning of the legacy systems, including consideration of running dual systems during the implementation period.
h.) Development of a robust "Plan B" in the event of new system failure.

3.) Analysis of agency workload and required transactions prior to and after Luma implementation.

4.) The number and type on ongoing system issues and errors.

5.) Purported savings from the new system. The State Controller testified to the Joint Finance Appropriations Committee in October 2017 that the implementation of this system would realize an estimated \$251.6 million in savings over a ten-year period. This included process improvement savings, procurement spending reduction, planned system upgrades, and the elimination of existing systems.

This evaluation will provide the Idaho Legislature with valuable information regarding information technology selection and implementation in Idaho state government, and potential paths forward to remedy ongoing issues. Because state agencies continue to face problems with the use of Luma, we request that JLOC consider approving this study as soon as possible, and direct OPE to make this their highest resource priority project.

Sincerely,

[Signature of Mike Moyle]

Rep. Mike Moyle
Speaker of the House

[Signature of C. Scott Grow]

Sen. C. Scott Grow
Chairman, Senate Finance Committee

[Signature of Wendy Horman]

Rep. Wendy Horman
Chairman, House Appropriations Committee

[Signature of David Cannon]

Rep. David Cannon
Co-Chair, Jt. Leg. Oversight Committee

[Signature of Melissa Wintrow]

Sen. Melissa Wintrow
Co-Chair, Jt. Leg. Oversight Committee

[Signature of Ilana Rubel]

Rep. Ilana Rubel

[Signature of Douglas T. Pickett]

Rep. Douglas T. Pickett

[Signature of Steve Berch]

Rep. Steve Berch

APPENDIX B: SCOPE

Legislators wanted to know the answers to the following questions:

1. What was the State Controller’s Office’s approach, from initial concept to current implementation, for Luma?

In answering this question, the study requestors asked for a robust description of the following items:

the RFP and vendor selection process

the contract negotiation and oversight process

the readiness of the system to go live, including consideration of running dual systems during implementation and development of a “Plan B”

the use of agency input

and end-user training, including on reporting functions and the creation of statewide reports

2. How has Luma affected the workload of state agencies?

3. Are there ongoing system issues? How do these issues affect the ability of agencies to carry out their statutory responsibilities?

4. What has been the financial impact of Luma?

In answering this question, we will review the following:

the Business Infrastructure Information Fund and its uses

system and contractor costs

realized cost savings

As a statewide enterprise system, Luma affects all state agencies, state employees, and vendors seeking to do business with the state. We will provide recommendations to remedy ongoing issues and compile any lessons learned for future large-scale information technology projects.

APPENDIX C: METHODS

During the scoping for this evaluation we interviewed the State Controller's Office, the State Treasurer's Office, legislators who requested the study, and legislative staff.

A Luma IT audit was conducted concurrently by the Legislative Audits Division of the Legislative Services Office. After a review of the RFP released by Legislative Audits and an interview with the division manager, we decided to focus our analysis of the current status of the system on the user experience rather than technical issues.

INTERVIEWS

We conducted over 60 interviews with 88 staff during fieldwork. We wanted to ensure we heard perspectives from agencies of various sizes, plus agencies with uncommon business needs, such as large grant recipients, grant dispersers, and accounts receivable. Interview participants included

leadership and financial officers from a variety of state agencies;

financial officers with public health districts and counties;

contractors from Deloitte and the Information Systems Group (ISG);

state employees involved in the procurement process;

procurement and IT specialists at 18F, the digital services agencies within the federal General Services Administration.

DOCUMENT REVIEWS

We reviewed two major groups of documents.

CRITERIA DEVELOPMENT DOCUMENTS

We reviewed guidance and lessons learned on IT procurement and implementation from a variety of sources.

Federal guidance included practice guides published by 18F, publications by the Defense Innovation Board, and evaluations conducted by the Government Accountability Office (GAO).

State-level guidance included previous OPE reports, other state legislative oversight reports, and program documents from other states' enterprise resource planning (ERP).

Academic and consultant-based publications on change management, ERP options, and user training strategies.

APPENDIX C: METHODS

PROJECT DOCUMENTS

The Controller provided us over 2,700 files.

The major documents reviewed included

- the System Modernization Study from 2015 commissioned by the State Controller;

- a Request for Information (RFI) and responses from 2017;

- the Request for Proposals (RFP) and responses from 2018 and 2019;

- project charter documents and governance board minutes starting in 2019 (earlier meetings were not documented) through April 2023 (later meetings were recorded on video);

- contract documents for Infor, Deloitte, and ISG ;

- specified deliverables provided to the Controller by Deloitte.

Agencies other than the Controller provided us with documentation relating to their experience with Luma.

We also reviewed the public and confidential versions of LSO Audit Division's *Luma IT Audit* and *The Luma System Optimization: Business Process Assessment and Ongoing Issue Root Cause Analysis Report*.

FINANCIAL ANALYSIS

For background on the purported savings of a new ERP system we reviewed the 2015 System Modernization Study and met with the creators of the study, ISG, to discuss their findings. We also reviewed presentations and estimates provided by SCO related to the estimated savings at the outset of the Luma project.

We used financial data and vendor contracts provided by SCO to determine what has been spent on Luma through the end of Fiscal Year 2024 and project costs moving forward. We assumed a 2 percent annual increase for vendor licensing costs of Luma modules at the expiration of their current contract. For Infor, we assumed a 6 percent annual increase starting in Fiscal Year 2029 due to specific language of the Infor contract. Additionally, we used a 2 percent annual increase in employee costs for SCO staffing for Luma.

We used surveys and interviews to determine whether state agencies had realized any savings from Luma to date or if they were expecting to realize savings in the near future.

APPENDIX C: METHODS

TICKET ANALYSIS

We analyzed the State Controller’s Office’s use of the ticket system, ServiceNow.

QUANTITATIVE ANALYSIS

We received key descriptive variables for all ServiceNow tickets from July 1, 2023, to July 15, 2024. The dataset contained 56,156 tickets.

The dataset contained two types of tickets: 39,666 incidents and 16,490 requests. The Controller’s office reported that incidents are created when a state employee sends an email to create a ticket. Requests are created when a state employee submits a form on the service portal. Employees at the Controller’s Office reported that, in practice, the distinction between incidents and requests has been muddled. The Controller’s Office collects different pieces of information about each ticket type. The office also updated some of its tracking processes since go-live. This variation in available data for each ticket type limited our ability to analyze all tickets for certain attributes and trends. In this report, we refer to both incidents and requests as “tickets.” When necessary, we note when our analysis refers to only a subset of tickets.

Some state employees also reported using methods outside the ticket system to report issues to the Controller's office. This means that

available ticket data may not fully capture user concerns or experiences with issue resolution.

QUALITATIVE ANALYSIS

We received the written interactions between Controller’s Office employees and the ticket submitter for a sample of 101 tickets related to training. We reviewed the interactions for themes. Our findings help inform our conclusions about communication between the Controller’s Office and state employees.

SURVEY

We surveyed 5,042 state employees who were assigned specific Luma security roles for financial, human resources, payroll, procurement, and purchase card activities. We received responses from 2,608 individuals. After removing incomplete responses and individuals who self-identified as only using Luma for timesheet entry, we were left with 2,183 responses, for a response rate of 43 percent. Survey respondents represented 70 state agencies.

The survey included a mix of quantitative and qualitative questions. Comprehensive survey results will be included in a supplemental appendix.

APPENDIX C: METHODS

SUBJECT MATTER EXPERTISE

Government software implementations have a high failure rate. One commonly identified reason for these failures, particularly at the federal level, is procurement rules that do not lead to good outcomes for software. In addition, the market for ERP software has been shifting in recent years. We believed that we would benefit from assistance from subject-matter experts actively working in the industry, but who were not affiliated with Luma.

After considering multiple options, we contracted with Simplar Sourcing Solutions, LLC. Their scope of work was to conduct an independent review of the procurement and specific deliverables and to review copies of the full report to ensure our findings and recommendations were useful and supported. Simplar was recommended to us based on work done with the state of Idaho. We conducted interviews with former clients and with Simplar before selecting them.

Simplar reviewed and provided opinions regarding the procurement procedures that were implemented on the Luma project, which included: procurement fundamentals (fair, open, transparent), procurement approach (one-step vs two-step), criteria and weights, source selection plan (evaluation guide), evaluation strategy, key personnel strategy, interview & presentation procedures, product demonstration procedures, and preplanning strategies.

Simplar selected foundational deliverables, which OPE provided. Simplar then reviewed and provided opinions on those deliverables. These early deliverables included the implementation project charter, the project management plan, the master project work plan, a deliverables log, the change management strategy, the communication strategy, a change readiness assessment approach, and an end-user training strategy.

RESPONSES TO THE EVALUATION



“As the OPE report states, it is important that my office and the executive branch agencies play an active role in understanding and communicating the priorities and improvements for a path forward. Therefore, I have tasked my Administrator of the Division of Financial Management and Administrator of the Division of Human Resources to take the lead for executive branch agencies to work closely with legislators and the State Controller’s Office.

- GOVERNOR BRAD LITTLE



“SCO leadership is profoundly humbled and grateful for the thousands of state employees who embraced this change, even in the face of unexpected challenges. We recognize that many difficulties stemmed from strategic decisions made by project leadership, which led to gaps in training. We accept full responsibility for these support deficiencies and are working diligently to address them.

- CONTROLLER BRANDON WOOLF



BRAD LITTLE
GOVERNOR

November 4, 2024

Ryan Langrill, Interim Director
Office of Performance Evaluations
954 W. Jefferson St.
Boise, ID 83702

Dear Interim Director Langrill,

Thank you for sharing the Office of Performance Evaluation's (OPE) report on the Luma System and for your office's evaluation of the selection, planning, and implementation of the state's Enterprise Resource Planning (ERP) system. The integrity and functionality of Luma are very important to me and Idaho's state executive branch agencies. The success of the ERP system is critical to state operations, as it serves as the record of all financial transactions, budget development modules, human resource actions, procurement actions, payroll, and accounting transactions.

The OPE evaluation was comprehensive and provides productive recommendations to ensure Idaho can optimize and improve the current functionality, use, and confidence of the system. As the OPE report states, it is important that my office and the executive branch agencies play an active role in understanding and communicating the priorities and improvements for a path forward. Therefore, I have tasked my Administrator of the Division of Financial Management and Administrator of the Division of Human Resources to take the lead for executive branch agencies to work closely with legislators and the State Controller's Office to ensure the recommendations within this report are supported and that a solid, well-coordinated sustainability strategy is determined.

Thank you again for your thoughtful and well-executed review and response to this important study.

Sincerely,

Brad Little
Governor of Idaho



STATE OF IDAHO
OFFICE OF THE STATE CONTROLLER
BRANDON D WOOLF

SCO Response to The Office of Performance and Evaluations, *Luma Evaluation of the Selection, Planning, and Implementation of the State's Enterprise Resources Planning System*

October 30, 2024

Management Response

We would like to thank the Office of Performance Evaluation (OPE) for their thorough review and report on Luma. We recognize that this was a significant undertaking, and considerable effort was involved in reaching this point. This report will be valuable to many, including organizations considering future IT projects.

Upon reviewing the OPE's approach and conclusions, we acknowledge that certain aspects of the study reflect issues and concerns that the SCO has previously recognized. We will take responsibility for these matters and incorporate them into our plans. However, we do not concur with other conclusions drawn in the OPE study, many of which are based on assumptions or differing professional opinions. In areas of disagreement, we will provide evidence that SCO processes adhered to relevant professional standards and were conducted with a strong commitment to due diligence.

Our response follows the order of the report, addressing all key findings highlighted in the executive summary. While we haven't responded to every section of the report, we acknowledge the length of our response, underscoring our commitment to the recommendations provided.

Were the Procurement and Implementation Decisions and Processes Reasonable?

1.1 Replace Legacy Systems

We fully agree with the assessment that replacing the state's aging legacy systems was a reasonable and necessary decision. The challenges presented by outdated systems, such as lack of scalability, security vulnerabilities, and insufficient functionality, created significant risks for the state. In pursuing Luma, the state sought to build a more resilient, integrated system that could better serve the evolving needs of the state. This foundational decision remains critical toward improving the efficiency and accuracy of Idaho's business processes.

1.2 Have No Organizational Change Management Plan Before Procurement

We acknowledge the report's finding that a formal Organizational Change Management (OCM) plan was not in place prior to procurement. However, creating a detailed OCM plan before selecting software is uncommon; at best, it would have reflected only the high-level goals outlined in the Luma Charter. Significant OCM efforts were undertaken during the requirements gathering and business process mapping phases. These efforts aimed to build support for the initiative, foster a shared understanding, and incorporate statewide business processes into the software requirements.

During the development of the software RFP, we engaged eight functional teams consisting of 57 state employees from 23 agencies. These teams held 24 meetings, totaling 80 hours of work, which resulted in 1,170 documented requirements and 60 process maps that aligned with the state's operational needs. Additionally, we hosted two statewide workshops with over 100 participants to review and discuss the statewide "to-be" process maps, which were also made available on our website for broader accessibility. In parallel, we undertook a large-scale leadership alignment effort. The Controller, Chief Deputy Controller, and Organizational Change Management lead met with each Agency Director to ensure leadership was aligned and informed about the initiative.

The criteria for each RFP were well-defined, and an OCM plan prior to procurement would not have provided further clarity. While we respect the recommendation, it's unclear how this would have assisted in developing the RFP. Until the software functionality is known and aligned with state business processes, the specific change impacts cannot be fully identified.

1.3 Focus on Buying the Right Product Instead of Improving State Outcomes

While some critiques suggest that the SCO's focus on software detracted from achieving desired outcomes, we firmly stand by our decision to implement an off-the-shelf SaaS ERP system that most closely aligned with our statewide requirements and "to-be" process maps.

The report suggests that SCO could have explored a broader range of software solutions to balance functionality trade-offs. As mentioned in OPE report, other states have selected specialized software tailored to each agency's perceived unique processes. This leads to complex, custom integrations that significantly increase long-term costs, resource demands, and increases risk of failures during implementation and future upgrades. By choosing a SaaS solution, we aimed to standardize processes and adopt a comprehensive system that would be easier to maintain, scale, and update over time. The decision to pursue a single, integrated ERP solution was intentional and core to the Luma strategy, as we believe this SaaS ERP approach provides a modern, adaptable system that can evolve with the state's needs while minimizing the issues linked to overly customized or best-of-breed solutions.

While we recognize software represented only 16 percent of the overall contracted project costs, we prioritized selecting the right software solution since it would be used for years to come. Nearly all ERP projects allocate 10-20% of initial costs to software and 80-90% to implementation services and related costs. Emphasis on the software selection process was appropriate, as the software ultimately shapes transaction processing and user experience long

after the integrator's role concludes. Over time, the software's value and improvements continue to grow, while the percentage of costs associated with integration services decreases.

SCO's decision to conduct two separate procurements, one for software and another for integration services, mirrors the approach taken by about half of U.S. states implementing ERP systems since 1995. Industry experience indicates that a one-RFP versus two-RFP approach is not determinative of project success. By avoiding a joint procurement of software and implementation services, we eliminated the potential conflict of preferring software from one proposal and an implementation partner from another. Pursuing separate procurements makes the decisions processes less complicated. Combined procurements often require a trade-off between best product and best integrator.

2.4 Evaluation Procedures

Composition of the Selection Committees: The evaluation committee was aptly sized, and the members were well-qualified representatives of their functional and technical roles, with extensive knowledge of State processes and their respective agencies' needs. While the SCO did have representation on the committees, this was justified by its role as the primary owner of critical state functions, such as accounting, payroll, central security, and reporting. It would be difficult to find other subject matter experts in state government with the necessary expertise in these areas. Given the breadth of SCO responsibilities, its level of representation was both reasonable and warranted.

Concerns about undue influence on subordinates are largely unfounded, as the team structure was specifically designed to prevent it. This review overlooks the balanced authority held by key team members, policy owners, and stakeholders, which minimizes bias. No committee members reported feeling pressured by the Chief Deputy State Controller, but we agree that minimizing reporting relationships in future procurement processes would reduce perceived conflicts of interest.

Transparency: The ability to assess whether the consensus score deviated from the individual scores is irrelevant. The purpose of consensus scoring is to reach a unified decision, and for that reason, individual score sheets were not retained. The ability to compare consensus scores with individual scores is not necessary, as the consensus represents the collective judgment of the committee. Retaining individual scores would undermine the goal of the consensus process. Transparency in the evaluation process was maintained through the consensus itself, not through the preservation of individual assessments.

There are both advantages and disadvantages to the consensus scoring method. However, for the Luma procurement, the benefits clearly outweighed any potential downsides. Consensus decision-making fosters trust, encourages ownership, and ensures commitment, which was crucial given the wide range of state functions—procurement, budget, HR, finance, and payroll—that the ERP system would need to support. Each evaluator contributed unique expertise, and the evaluation committee was more effective working collaboratively rather than as a group of isolated scorers. While there is always a minor risk of conformity pressure in consensus scoring, there is no evidence that such pressure influenced this procurement. In contrast, relying solely on individual scores without group deliberation would have introduced a

much higher risk of evaluators misunderstanding complex proposals or applying scoring criteria inconsistently—especially for a project as large and intricate as Luma.

SCO retained an Independent Verification and Validation (IVV) consultant, Information Services Group (ISG), who has a proven record with over 15 state ERP implementations (now over 26) and followed best practices that have succeeded in multiple states. While alternative strategies may exist, SCO's approach met procurement standards and followed an established, effective process for ERP projects.

What is the Impacts of Luma on Agencies?

1. Efficiency

Luma is Complicated: We appreciate the many state employees who took time to provide OPE with feedback. The adoption of Luma has introduced sweeping changes across state agencies, impacting nearly every state employee. Feedback indicates that Luma is as more complex and less efficient than legacy systems, a concern the SCO is committed to addressing.

In legacy systems, certain workflows lacked the essential controls that are now standardized in Luma. Previously, STARS mainly served as an Accounts Payable system, with other areas such as accounts receivable, projects, and assets managed outside of statewide systems. Now, we have a comprehensive system that encompasses all these modules, significantly surpassing what the SCO provided in the legacy environment. Luma consolidates previously “off the books” processes into a unified approach that, while it may feel unfamiliar, ultimately enhances oversight and accountability.

Training Resources are Inadequate: It's clear that while a significant number of employees have engaged with the training resources, there are critical areas for improvement. We take accountability for training state employees to effectively use Luma and are planning to upgrade our ticketing system and training strategy. We address these updates in more detail in the Recommendations section below.

5. Adoption

We appreciate the acknowledgment on page 40, “Some employees who had been with the state when the legacy systems went live recall that it took years for the system to become as useful as it eventually was”. In this past year of transition to Luma, it's important to acknowledge the Satir Change Curve, which illustrates the emotional journey individuals experience during organizational change. Initially, we encounter a dip in productivity as users adapt to the new system. This is a natural part of the adoption process. However, as we follow the recommendations in this report and users become more familiar with Luma, we can expect a gradual upward trajectory toward improved efficiency and engagement, ultimately realizing the benefits of this transformative change.

Acknowledging that Luma introduces a level of complexity, our goal is to ensure that with improved training and resources, employees will feel more confident and capable in utilizing the system. We are committed to addressing these training challenges to support all state employees in adapting to this new ERP system.

What is the Financial Impact of Luma?

We would like to first acknowledge that the OPE report finds the implementation costs of the Luma project was within the appropriated budget, as stated of page 41. There is some confusion when comparing this finding with the comments in the Executive Summary, item 3a. The OPE report states the estimated ongoing costs of Luma will average \$9.8 million a year, bringing the total cost of Luma to \$220.8 million through fiscal year 2034. It's important to first point out that the estimated \$9.8 million are not new costs. Already existing SCO costs were estimated to be \$7.4 million from the year of go-live just to maintain the existing outdated legacy system (*See System Modernization Study, p. 51*). Additionally, we must consider the costs saved of the Department of Administration's procurement system, costs of DHR's Talent Acquisition system, and costs of DHW's Fiscal system, all of which we know have been decommissioned because of Luma. While at this time we don't know the exact new costs going forward, consideration should be given to the fact that some of these costs include costs of other systems that have been replaced by Luma.

The OPE report also mentions the System Modernization Study assertion that replacing the legacy and duplicative systems was projected to provide \$98.5 million in "savings" over 10 years. We believe this is a fundamental misunderstanding of what is stated in the Study. The Study states that the projected \$98.5 million represents system costs that are to be "avoided" relative to retiring existing systems and the associated ongoing and one-time costs (*See Study, pgs. 6 and 54*). There needs to be a clear understanding between "avoided costs" and "cost savings." The Study projects operating costs for Luma over 10 years to be \$97.5 million. The projected avoided costs over that same period of \$98.5 million would yield a cost savings of approximately \$1 million.

We want to reiterate that the decision to acquire and implement a new ERP system for the state was never based on cost savings. There were legacy system costs that would be avoided because of Luma replacing them, it was always presented as a cost neutral proposition. We must remember the primary justifications for a new statewide ERP system included the following: outdated technology of legacy systems, the inability to scale and upgrade the financial and payroll systems to meet core business requirements, and the lack of skilled programmers to maintain the mainframe. There was a tremendous need to have a modern ERP system to better serve the evolving needs of the state and provide a unified and integrated system for a single source of truth.

Where Do We Go From Here?

We agree that focusing on a path forward is essential for the state and that fostering productive relationships with state employees is a key part of that. The SCO is committed to strengthening these relationships and has already begun efforts to engage more directly with employees and agency leadership to understand their needs, listen to their feedback, and address their concerns.

As the primary driver of Luma's success, the SCO is fully committed to seeing the Luma ERP system fulfill its intended purpose and deliver value across the state.

Recommendations to the SCO

The SCO should take steps to repair its relationship with state employees: The implementation of Luma was far more than a simple system upgrade. From the outset, our communication across the state emphasized that this shift would bring broad changes to business processes, based on insights gathered from hundreds of employees during the initial design sessions. While the focus of the project often fell on the SCO's project staff, the scale of change demanded a dedicated, all-hands effort from agency personnel across Idaho.

It's regrettable that messages from SCO leadership, intended to encourage and remind all involved of the importance of collaboration, was conveyed in a manner that was felt and perceived as placing blame on state employees. SCO leadership is profoundly humbled and grateful for the thousands of state employees who embraced this change, even in the face of unexpected challenges. We recognize that many difficulties stemmed from strategic decisions made by project leadership, which led to gaps in training. We accept full responsibility for these support deficiencies and are working diligently to address them.

In response, we have restructured our approach to change management, added the Agency Success Managers roles, reorganized the Luma division and training resources, and implemented additional, user-focused training events. We understand that these past challenges have created a trust deficit, and SCO leadership is committed to supporting initiatives and personnel dedicated to positive collaboration and effective solutions. Together, we aim to restore trust and ensure that everyone feels equipped and supported in the transition to Luma.

The SCO should develop a sustainable strategy focused on training to ensure the long-term viability, efficiency, and effectiveness of Luma: The Luma Continuous Improvement team is piloting a new training tool designed to automate process documentation, generate visual guides, and improve consistency. Additionally, we will be rolling out an update to the Service Portal interface in December 2024, making it easier and more intuitive for employees to find materials and resources.

1. Adult learning models: The Luma team is actively sourcing specialized training resources to address the need for more targeted user support. This expertise will improve the quality and focus of training provided to all users. At go-live, over a thousand process documents were available for reference, but as we continued refining processes, rapid changes were implemented immediately after successful testing without corresponding updates to training materials or user notifications. This approach created unnecessary frustration in a rapidly evolving environment.

To address this, we have instituted a system release and change management process centered on end-user needs. Going forward, major changes initiated by Idaho will only be released once they have completed testing, training materials are updated, and adequate user awareness and training have been provided. We believe this approach will positively impact the user experience and strengthen trust between the SCO and system users.

SCO has also requested the appropriation for five permanent training positions and seeks legislative support to meet this need. These positions, initially Limited Service, are essential for meeting Luma's basic training requirements. Considering the heightened concerns over training outlined in recent reports, we may require additional resources beyond this initial request. Prior analyses by our integrators suggested that as many as ten resources might be necessary to fully support training during the system's initial years. Temporary funding for these additional positions would help meet training demands until end-users achieve greater proficiency. SCO will continue to work with executive and legislative leadership to determine the fiscal feasibility of this expanded support while advocating for the five core positions.

2. Method for documenting and publishing the root cause of issues: We are actively developing a site to provide users with greater visibility into major issues and their pending resolutions. Luma team members maintain standing meetings with several agencies that have identified issues requiring enhanced oversight and collaboration. Many of these meetings occur weekly, while others are bi-weekly. Our approach has always been collaborative, with a strong emphasis on agency engagement for addressing business process concerns.

The next step is to expand these agency-specific engagements into a statewide platform that keeps all users informed. Our goal is to create a standardized method to share root cause analyses and to highlight the progress made on agency concerns. The Luma team is dedicated to working collaboratively with users, and SCO leadership fully supports and champions this effort.

3. Complete and clear system documentation: We recognize the challenge of providing thousands of reference documents for individual process steps. To help users fully understand and leverage the integrated platform, these documents need to be consolidated into comprehensive business process references. These references will not only clarify how each module functions but also show how data integrates across modules.

For instance, creating a new position in the Human Capital Management module requires assigning a financial accounting string. This string is generated in the Financial module, linking the position to the financial data. Once connected, an individual can be hired into the position, and the position and financial string are then transmitted to the Workforce Management module, enabling time tracking. Recorded time flows to the Payroll module for payment processing, and expenditures are recorded against the global ledger in the Financial module. This end-to-end example highlights the need for integrated documentation to help users understand these connections.

The Luma team has started building system-wide integrated business process maps to illustrate how the modules interact. We hope these resources will provide guidance in our training and provide users with a clear understanding of “how the system works.”

4. User forums & business practices documentation: Following go-live, we piloted financial user groups to create a forum for idea sharing. These pilots were successful, and with some personnel reorganization, we're excited to expand from the pilot phase to a full financial user forum, set to launch in November. Included in this effort is an informative seminar planned in the spring 2025, creating a collaborative space for best practices developed by Idaho users.

Additionally, we have initiated a partnership with a local educational institution to establish a “Financial Academy.” The academy’s curriculum will focus on building core accounting knowledge, Idaho-specific process expertise, and proficiency in governmental accounting principles, which differ significantly from commercial practices. Using an agile development approach, we plan to release basic accounting coursework in the spring of 2025, with more courses to follow as development progresses.

We look forward to supporting the user forum, Financial Academy, and other opportunities for idea exchange, building a strong and knowledgeable Idaho financial community.

The SCO should take steps to improve the transparency of issues with Luma and efforts to improve it: Communication regarding KPI information and known system errors has been a significant source of frustration for users across the state. We recognize that our efforts to be transparent have not met expectations, and we are committed to improving this situation. Since 2020, we have implemented ServiceNow (SNOW), a case management tool, to track changes and user support actions. This platform has proven invaluable, allowing users to access their requests easily and see progress updates. SCO leadership leverages SNOW to monitor staff workloads and prioritize efforts, which has been crucial during Luma’s sustainment operations. Without SNOW, we would have had to rely on emails and phone calls, leading to severe transparency issues, difficulties in tracking user requests, and increased frustration due to delayed responses.

Our next steps involve enhancing the SNOW platform and developing improved information-sharing options. We will explore webpage integrations to publicly display KPIs derived from SNOW activities, as well as system performance and processing timelines. Additionally, we aim to communicate known system upgrades or improvements, including expected completion dates. This initiative is already underway, and we understand the value it can provide to users in rebuilding their confidence for the future.

Considerations for the Legislature

The Legislature and the Leadership Council should consider aligning the responsibility for and governance of Luma with the scope of the system: The SCO acknowledges and has great appreciation for the Constitutional and statutory authorities of all the subject areas within Luma (accounting, payroll, human resources, budget development and procurement). Our system modernization study revealed that an ERP that provides one source of truth was best for Idaho and recommended all these areas to be inclusive within an integrated ERP system. (See System Modernization Study, Appendix A). It should be noted that the legacy system had always included accounting, payroll and human resources with its STARS, Payroll an Employee Information System (EIS).

We understand this OPE recommendation to be complimentary of the “significant informal cooperative efforts” made by SCO to align and include all the critical functional areas of Luma so that: (1) the proper state agency with governance authority over an area could exercise that policy making authority, and (2) SCO was not overstepping any of its authorities in operating Luma. As mentioned in the OPE Evaluation, this was accomplished by the creation of the

Governance Board that was made up of representatives from each agency making up these key subject areas within Luma.

The principal statutory authority over Luma is the Leadership Council created in Idaho Code § 67-1021B. The Leadership Council's specific statutory duties are "to garner statewide cooperation in standardizing business practices and gaining efficiencies wherever possible in order to eliminate duplicative business systems." With this guiding principle, the SCO created the Luma Governance Board as a collaborative working board not just to steer the Luma project team with implementation decisions, but also to continue into sustainment of the Luma subject modules moving forward. We see these collaborative relationships and Governance Board as critical to the operation of Luma.

While not statutorily created, the SCO formalized the Governance Board with a charter and governance principles, emphasizing that SCO cannot unilaterally set standards or policies beyond its constitutional authority. The Governance Board's role is centered on collaboration and conflict resolution, ensuring that procurement, budget, and HR initiatives cannot advance without the approval and guidance of statutory owners represented on the Board. The Governance Board has been a successful collaboration. However, we welcome efforts to collaborate with the Leadership Council and Legislature to align authority over Luma more formally, as appropriate.

The Legislature should consider Changes to the Procurement Act: The SCO exemption from the State Procurement Act is critical to carrying out its constitutional duties and authority. There are instances, as identified in the OPE recommendation, where SCO procured a service software or a software survey tool necessary for carrying out our mission. In those instances, SCO is purchasing it for its own needs, and able to negotiate the scope of the software license to include statewide use. The SCO has not made purchases with the intent of skirting the State Procurement Act for non-exempt agencies. Rather, there have been a few instances where leveraging the SCO's purchasing power (for its own purchases) has created efficiencies that have not only standardized business processes for the state, but also saved taxpayer money. The SCO will continue to partner with the Legislature, and the rest of the state, in creating appropriate procurement guidelines. We simply ask the Legislature to recognize that being able to negotiate statewide contracts with software vendors is a good practice when it can be accomplished in the appropriate manner and create those efficiencies.

Conclusion:

We want to thank the staff at OPE for their thorough report and review activities throughout the study. We recognize that this was a significant undertaking with a broad scope, a complex subject matter, and required considerable effort in reviewing documents and conducting interviews. There are many aspects of this review, specifically around the development of a sustainment plan focused on training and improving user transparency and experience, that we acknowledge and recognize as our responsibility to address and make positive improvement.

SCO has incorporated much of this report into its plans moving forward. There are a few conclusions drawn on the procurement and implementation of Luma that we feel are based on assumption or differing professional opinion. In those areas, we feel the processes adhered to professional standards and best practice with a commitment to due diligence. Despite a difference in opinion in those areas, there are positive lessons learned and recommendations that can come out of them moving forward.

We have a great deal of appreciation for where we are in the implementation and sustainment of Luma. We want to extend our sincere gratefulness to all the dedicated state employees that have worked hard to adopt our new system. To the Luma project team members that made this all possible, thank you for all your efforts and we are indebted for your unwavering commitment. We also want to thank OPE for their partnership and look forward to improving our sustainment of Luma.

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