ANALYSIS

Department of Education
State School Fund Modernization

Analyst: Julie Neburka and Ed Arabas

Request: Acknowledge receipt of a report on the Department of Education's plan to replace the system relied upon to calculate and process State School Fund distributions to school districts and education service districts in Oregon.

Analysis: A primary responsibility of the Oregon Department of Education (ODE) is to calculate school funding formula resources and allocate State School Fund dollars to school districts and education service districts (ESDs) in Oregon, in a timely way and in the correct amount. For the 2023-25 biennium, school funding formula resources total $15.3 billion; of that amount, the State School Fund totals $10.2 billion. Computation of each school district and ESD grant from the State School Fund is made using an information technology (IT) system that was built over time from various Microsoft office productivity tools including Microsoft Access and Excel. In its present state, this system is far beyond its useful life and is extraordinarily vulnerable to software failure and human error.

A budget note in HB 5014 (2023) directed the agency to work with the Department of Administrative Services' Enterprise Information Systems (EIS) to initiate an IT project to replace the State School Fund system and to report back to the Legislature on certain topics. The text of the budget note reads:

> **"Budget Note: State School Fund system replacement**
> The Oregon Department of Education (ODE) administers the State School Fund (SSF), a $10.2 billion line item in the 2023-25 budget, using information system technology that is far beyond its useful life. ODE has determined that this mission-critical system must be replaced and will create a major IT project to manage that effort. The Department is directed to use the joint State CIO/Legislative Fiscal Office (LFO) Stage Gate process to document the project's readiness to proceed and to work with DAS Enterprise Information Services to develop initiation and planning documents for a new State School Fund system. ODE is further directed to report back to the Legislature during the 2024 legislative session. The report shall, at minimum, include project status information on:
>
> - Project governance, management, and staffing
> - Project scope, schedule, and budget
> - Current or planned procurements/contracts (at the time of the report)
> - Legacy system & data conversion planning/activities
> - Risks and challenges, and any proposed mitigations
> - Independent quality management services findings, if available
> - Any other information that would inform the legislature about the status of this project."

The Department has begun work with EIS and has provided a high-level report describing the modernization project that includes the elements required by the budget note. Documents describe the need to replace the system, the analysis done to date on the various methods of replacing the system, and an estimated project scope, timeline, and cost for replacing the system by developing a new software solution in-house. This report was not accompanied by a funding request for the 2024 legislative session, a reflection of the fact that the project is in its initial planning stage and will benefit from a more robust analysis of requirements than has been done to date. It has not yet received Stage

Gate 1 endorsement from EIS.

It would be difficult to overstate the risk to the public school finance system if the Department were unable to make timely, accurate State School Fund payments. School funding is the largest single expenditure in the state's General Fund budget, and the State School Fund is in turn the largest source of revenue for most school districts in the state. To justify the necessary investment in a new system, additional time and attention needs to be paid to developing a more robust business case that is well-supported by a detailed analysis of the alternatives that were considered. The absence of comparable measures and timeframes between all of the alternatives that were considered weakens any conclusion that might be drawn as to the best path forward. Building a new system "in-house" appears to be a favored option and is lightly supported by an outside assessment conducted by Info Tech Consulting Services. The Info Tech analysis itself, however, is vague and relies on assertions that are not supported with detailed references.

The Department's report and associated appendices do not make clear the scope of the project, its timeframe, stakeholders, risks, or alternatives. Additional business case analysis and foundational business analysis are needed to provide assurance to decision-makers and stakeholders that a replacement system will not merely repeat the limitations of the current system. To that end, the Department would benefit from an additional, limited duration business system analyst resource to further document the existing State School Fund solution - its data sources, data interfaces, data manipulations, reporting, and information repositories.

Legislative Fiscal Office Recommendation: The Legislative Fiscal Office recommends that the Joint Committee on Ways and Means acknowledge receipt of the report, with instruction to the Department of Education to report back with additional detailed analysis of the project's scope, schedule, budget, risks, and challenges to the Joint Legislative Committee on Information Management and Technology prior to November 2024.

Request: Report on the status and needs of the State School Fund (SSF) system replacement as required in a budget note included in the budget report for House Bill 5014 (2023) by the Oregon Department of Education (ODE).

Recommendation: Acknowledge receipt of the report.

Discussion: The budget report for House Bill 5014 (2023), ODE's main budget bill for the 2023-25 biennium, included the following budget note:

> **Budget Note: State School Fund system replacement**
> The Oregon Department of Education (ODE) administers the State School Fund (SSF), a $10.2 billion line item in the 2023-25 budget, using information system technology that is far beyond its useful life. ODE has determined that this mission-critical system must be replaced and will create a major IT project to manage that effort. The Department is directed to use the joint State CIO/Legislative Fiscal Office (LFO) Stage Gate process to document the project's readiness to proceed and to work with DAS Enterprise Information Services to develop initiation and planning documents for a new State School Fund system. ODE is further directed to report back to the Legislature during the 2024 legislative session. The report shall, at minimum, include project status information on:
> * Project governance, management, and staffing
> * Project scope, schedule, and budget
> * Current or planned procurements/contracts (at the time of the report)
> * Legacy system & data conversion planning/activities
> * Risks and challenges, and any proposed mitigations
> * Independent quality management services findings, if available
> * Any other information that would inform the legislature about the status of this project.

The report delivered by ODE meets the requirements of the budget note and includes a project scope, schedule, and estimated budget. The Department did not submit a corresponding budget request for consideration during the 2024 Legislative Session, though the report estimates the cost of building a new system "in-house" would cost $1.8 million in 2023-25 and $4.1 million in 2025-27. The current staffing plan projects a need for 10 additional positions, mostly IT positions, along with the continuation of two limited duration positions that were approved during the 2023 Legislative Session.

The report indicates a four-year timeline for project implementation with much of the work happening in the second half of this biennium and next. The SSF modernization project is currently in stage 1 of 4 in the Department of Administrative Services Enterprise Information Services (EIS) stage gate process, which is the state IT project oversight model for major IT initiatives. The stage gate process is designed to ensure the right solutions are identified and executed, while mitigating project risks to deliver successful outcomes.

The SSF system is the data and technology system that gathers, stores, calculates, and processes funding distributions to Oregon public schools and Education Service Districts. In the early 2000's, ODE began transitioning from a paper-based system to the current system. The current system uses a variety of tools, such as SQL, Microsoft Access, and Excel to gather data, compile information, calculate, and disseminate information to and from ODE Systems.

The SSF system is complex and contains outdated systems. While this system completes the work necessary to distribute funding, it is dependent on outdated Microsoft Access and the manual calculating, transferring, and processing of billions of dollars with multiple spreadsheets that raise the risk for ODE and its partners.

ODE has researched how other states process and disburse payments for education. While many states use similar software tools for funding data and distribution, no state was similar enough to Oregon to model a prospective system. The Department also contracted with Info Tech to evaluate the pros and cons of a commercial product that could be adapted to Oregon's needs without extensive modifications. These modifications would likely make any subsequent updates to the system difficult if not impossible to configure. The Info Tech report recommended an in-house build with varying cost of ownership and staffing estimates. Info Tech recommends using some level of state staff support in any effort to replace the existing system, given both the specifics of the SSF and the need to retain knowledge after project close. This expertise is likely to be critical, as statutory changes may be made in the coming biennia and the system needs modification.

ODE has made progress moving the project forward and has met the requirements of the budget note, demonstrating an overall commitment to the SSF modernization project. EIS has indicated support for the path forward at this time. However, more progress with the EIS stage gate process is recommended to ensure project risks are mitigated and standard state IT project oversight is followed, particularly given the amount of funding that flows through the SSF system. For example, it is unclear whether the Department should pursue an internal build of the new system or outsource a custom build. As the Department moves through the stage gate process and learns more about the necessary coding work, required system features for modernization, the Department's access to sufficient human capital to build the new system, and needs of Oregon's public education partners, ODE could bring a more targeted request to the Legislature.

Dr. Charlene Williams
Director of the Department of Education

January 15, 2024

Senator Elizabeth Steiner, Co-Chair
Representative Tawna Sanchez, Co-Chair
Interim Joint Committee on Ways and Means
900 Court Street NE
H-178 State Capitol
Salem, OR 97301

Dear Co-Chairs:

Nature of the Request

The Oregon Department of Education (ODE) administers the State School Fund (SSF), which represents the largest line item in the State's General Fund budget. This investment in education is also the primary source of funding for providing K12 public education for Oregon, where typically the SSF accounts for approximately 80% of school districts' operating budget.

The SSF system is a complex data system that has been utilized in its current form and technology since the early 2000's. Although this system is highly accurate and enables ODE to distribute funding as required, it is dependent upon an outdated and unsupported version of Microsoft Access along with multiple spreadsheets and manual data manipulation processes that raise the risk of system failure that could prevent the ODE from fulfilling its obligation to appropriate and disburse funds.

It has become evident in recent years that the current system will eventually fail if action isn't taken to modernize the software, systems and processes used for the SSF.

As requested under a budget note in HB 5014 (2023) the ODE is submitting a report on the status and needs of the SSF.

Agency Action

ODE tasked Info Tech, a preferred third-party technology vendor, to research how other states process and disburse payments for education. Other states use a variety of software to administer their school

funding data and distributions, including the ones we primarily use (Excel/SQL DB), and were similar in a lot of ways to our own strategies. But each state is different in their needs depending on their formula, and no two states were similar enough that one could borrow from another without significant modifications to the system.

Info Tech conducted research to identify potential Commercial-Off-The-Shelf (COTS) products that could serve the purposes of the SSF system. This research did not yield any products with comprehensive functionality which would directly support the SSF business process without considerable modifications. Such modifications would almost certainly make the product difficult if not impossible to update as patches or new versions of the software are released by the vendor.
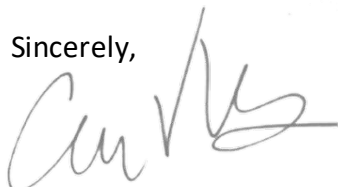
In their report to the ODE, Info Tech recommended replacing the existing SSF system by using "in-house" resources due to the knowledge of the existing system and in turn retaining the knowledge after the project closes. This also provides ODE with an opportunity to apply best practices in architecting and developing the system and resulting programming for the future. Building the SSF system with best practices will allow ODE to respond to changes in legislative mandates to the SSF system calculations in a more efficient and timely manner.

Action Requested

Acceptance of the report on the status and needs of the State School fund as required in HB 5014 (2023).

Legislation Affected

No legislation affected at this time.

Sincerely,

Dr. Charlene Williams (she/her)
Agency Director
Oregon Department of Education
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