



Oregon

Tina Kotek, Governor

Higher Education Coordinating Commission

3225 25th Street SE

Salem, Oregon 97302

www.oregon.gov/HigherEd

January 16, 2024

Senator Aaron Woods, Co-Chair
Representative Nancy Nathanson, Co-Chair
Joint Committee on Information Management and Technology
900 Court Street NE
H-174 State Capitol
Salem, OR 97301
VIA EMAIL: LFO.LegRequests@oregonlegislature.gov
CFO.LegRequests@oregon.gov

Dear Co-Chairs:

Nature of the Request

The Higher Education Coordinating Commission (HECC) respectfully requests an opportunity to present the attached status report on the HECC Modernization Project to the Joint Legislative Committee on Information Management and Technology (JLCIMT) during the 2024 Legislative Session. The Modernization Project's purpose is to replace multiple legacy information systems: FAMIS (Financial Aid Management Information System), ETPL (Eligible Training Provider List System), and PCSVets (Private Career Schools and Office of Degree Authorization). The 2021 Legislature approved \$5 million in Article XI-Q Bonds for the FAMIS project, and the 2023 Legislature approved an additional \$5 million in Article XI-Q Bonds for the second phase of the agency's IT Modernization Project. The budget bill for the agency, HB 5025 (2023), included a budget note directing the agency to report on the project, including updated status information on:

- Project governance, management, and staffing
- Project scope, schedule, and budget
- Current or planned procurements/contracts
- Legacy system and data conversion planning and activities
- Risks and challenges
- Completion of State CIO Stage Gate Endorsement requirements
- Independent quality management service contractor findings and recommendations
- Any other information that would inform the JLCIMT or other Legislative Committees about the status of this Modernization project

Agency Action

As the 2023 Regular Legislative Session drew to a close, HECC anticipated that it would receive Enterprise Information System (EIS) endorsement to begin the design phase of its Modernization project by the start of the 2023-25 biennium. Instead, Oregon Enterprise Information System staff notified the agency that they were placing the project "on hold" indefinitely pending resolution of eight project-specific issues. As a result, EIS and HECC spent the next seven months in an extended planning phase prior to HECC receiving Stage Gate Three endorsement on November 11, 2023. During the "hold" period, HECC and EIS addressed perceived risks including organizational change management, contract



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scope and responsibilities, budget transparency, staff resource availability, and other aspects of project management.

While the time “on hold” did strengthen the relationship between EIS and the HECC and improve the overall quality of the agency’s Modernization Plan, the implementation delay has seriously compressed the project schedule, required additional staffing and contractual investments over a longer period, and added unanticipated costs to the budget. HECC staff remain committed to working toward the original schedule and budget and have retained most of the \$10 million in bond funds, but there is some risk that we will not be able to absorb the added costs and may have to reduce the scope of the project.

HECC began working with the System Integrator vendor, Slalom, to clarify and prioritize requirements and design the system on January 8. We anticipate that we will know whether the compressed timeline and budget are achievable and will allow us to achieve the project goals by March, 2024.

Modernization is the agency’s number one priority, and we are committed to its success; however, the budget was not built to accommodate an additional seven months of planning at full staff or entering into unanticipated contracts. We will do whatever it takes to resolve the situation and make this project a success, namely because Oregon students, trainees, and jobseekers are depending on us, but also because our current systems are in such disrepair that they lack basic functionality.

Action Requested

The HECC requests acknowledgement of receipt of the report.

Sincerely,

Ben Cannon, Executive Director

Higher Education Coordinating Commission

HECC MODERNIZATION PROJECT:
*LIFELONG EDUCATIONAL ADVANCEMENT
RESOURCE NETWORK*
(LEARN)



January 2024

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BUDGET NOTE

The Higher Education Coordinating Commission's budget bill, Oregon House Bill 5025 (2023), included a budget note that stated:

The Higher Education Coordinating Commission (HECC) has initiated a Modernization Project designed to replace multiple legacy information systems: FAMIS (Financial Aid Management Information System), ETPL (Eligible Training Provider List System), and PCSVets (Private Career Schools and Office of Degree Authorization). HECC is directed to provide a comprehensive report on the status of the Modernization Project to the Joint Legislative Committee on Information Management and Technology (JLCIMT) during the 2024 Legislative Session. The report shall, at minimum, include updated status information on:

- *Project governance, management, and staffing*
- *Project scope, schedule, and budget*
- *Current or planned procurements/ contracts*
- *Legacy system and data conversion planning and activities*
- *Risks and challenges*
- *Completion of State CIO Stage Gate Endorsement requirements*
- *Independent quality management service contractor findings and recommendations*
- *Any other information that would inform the JLCIMT or other Legislative Committees about the status of this Modernization project.*

EXECUTIVE SUMMARY

In short, HECC's Modernization Project is currently in a good place, but the path we took to arrive has taken longer, been more difficult, and cost more than we initially predicted. Nevertheless, we have stayed the course, conserved bond funding for the project, and increased our planning efforts to ensure that the project is well positioned to succeed. To illustrate, a few of the project accomplishments HECC has achieved to date include:

- Recruited and hired a strong project team.
- Identified change leaders, product owners, and subject matter experts from within HECC's staff.
- Named members of both the project's strategic and tactical steering committees, who are now overseeing and directing the project work.
- Engaged NTT Data, an independent Quality Management Service provider.
- Contracted with Slalom, a System Integrator with a proven track record.
- Hired and onboarded an Organizational Change Management (OCM) Team.
- Completed an initial OCM Change Readiness Assessment.
- Improved HECC's working relationship with its Enterprise Information Systems (EIS) partners.
- Received Stage Gate Three endorsement from EIS to begin the Mobilization phase of the project.
- Held a successful kick-off event with the project team.
- Entered into a contract with Microsoft Project Quality Advisory (PQA) Services to provide expertise on the selected platform (Dynamics).
- Begun work on the legacy data dictionary and planning for data conversion and migration.
- Mapped current and future state business processes and completed project success metrics.
- Written initial drafts of the communications, testing, and operations and maintenance plans.
- Informed and demonstrated to staff and partners that the Modernization Project remains HECC's highest priority.

All of this occurred despite EIS placing the project "on hold" from May 23 until October 24, 2023, and withholding Stage Gate Three approval, which would have allowed the project to move forward on its original schedule. As a result, EIS and HECC spent six months in an extended planning phase prior to HECC receiving its Stage Gate Three endorsement. During the "hold" period, HECC and EIS addressed perceived risks including organizational change management, contract scope and responsibilities, budget transparency, staff resource availability, and other critical aspects of project management.

While the time “on hold” did strengthen the relationship between EIS and the HECC and improve the overall quality of the agency’s written Modernization Plan, we must acknowledge that the delay is also responsible for compressing the project schedule, inflating project costs due to the need for additional staffing and contractual investments over a longer period of time, and thereby increasing the overall risk to the successful completion of the project. HECC staff are focused on working toward the original project objectives, schedule, and budget, and we have been frugal and retained most of the \$10 million in bond funds allotted to the project throughout this process; however, it is possible, in fact even likely, that we will not be able to absorb the added costs and may have to either reduce the scope of the project or ask the Legislature for additional time and resources. HECC began working with the System Integrator vendor, Slalom, to clarify and prioritize requirements and design the LEARN system on January 8. We anticipate that we will know whether we can complete the project within the compressed timeline and current budget while still achieving all of the project’s goals by March 2024.

Both HECC and EIS are committed to this project’s success; however, we want to be transparent and let policymakers know that our budget was not built with contingency funds that would allow us to accommodate an additional six months of planning at full staff or the cost of entering into unanticipated contracts. We will do whatever it takes to resolve the situation and make this project a success, namely because Oregon students, trainees, and jobseekers are depending on us, but also because our current systems are in such disrepair that they lack basic functionality.

PROJECT OVERVIEW AND HISTORY

PROJECT OVERVIEW

The Higher Education Coordinating Commission's Modernization Project is named the Lifelong Educational Advancement Resource Network or LEARN. LEARN addresses the agency's current technology landscape, which is highly fragmented, relies on outdated and difficult-to-support technologies, and is burdened with many years of technical debt, resulting in inefficiencies, reliability challenges, and frustrating experiences for students and jobseekers, as well as HECC employees and partners.

In 2013, the legislature consolidated state-level leadership and coordination for post-secondary education, which had been previously spread across several boards and organizations to establish the HECC. Each board/organization brought with it a variety of applications to support and run its respective operations.

LEARN, referred to as the HECC Modernization Project throughout this report, is initially working to replace three separate aging and failing core legacy systems:

1. ETPL (Eligible Training Provider List System)

ETPL is the core system leveraged and managed by the Office of Workforce Investments (OWI) to provide a comprehensive list of training providers and programs that are available to participants eligible for Workforce Innovation and Opportunity Act (WIOA) funding.

2. FAMIS (Financial Aid Management Information System)

FAMIS is the core system leveraged and managed by the Office of Student Access and Completion (OSAC) to administer student financial aid for higher education and all associated fiscal processes for grants and scholarships.

3. PCSVets (Private Career Schools and Office of Degree Authorization)

PCSVets is the core system leveraged and managed by the Office of Academic Policy and Authorization (APA) to administer Private Career School (PCS) licensure, teacher registration, and private college degree program authorization.

These systems/applications were built decades ago and have ongoing and escalating technical issues that have been repeatedly criticized in audit findings. Some programs have experienced catastrophic failures and others are currently being run on spreadsheets that require time consuming, manual work by HECC staff and partners.

HECC has made concerted efforts to secure upgrades or replacement of these applications over the past ten years to help it meet new mandates, which has brought increased demands for system performance. However, over time, the ad-hoc development of the systems has resulted in highly

inefficient and complex systems that are difficult for customers and employees to use and often produces inaccurate information for policymakers and oversight bodies.

PROJECT HISTORY

The “HECC Modernization Project” was initiated in 2021 after HECC completed its Information Technology Strategic Plan. It combines three separate legacy system replacement projects, the Eligible Training Provider List (ETPL), the Financial Aid Management Information System (FAMIS), and the Private Career School and Office of Degree Authorization system (PCSVets), into one integrated project.

The long-term goal of the HECC Modernization Project is to deliver a comprehensive, flexible, multi-program solution in alignment with the HECC IT Strategic Plan that will ultimately support development and implementation of replacements for all agency legacy systems. New phases of the plan will be added after the first phase of the HECC Modernization Project has been completed and formally closed out.

To execute on the IT Strategic Plan in the most efficient manner, HECC Leadership decided to combine the three legacy system replacement projects/initiatives into a single agency Modernization Project. The HECC Modernization Project includes the procurement, development, implementation, and support of a fully integrated, cohesive, and efficient solution to meet the agencies evolving and growing needs.

When HECC decided to combine the previous legacy system replacement projects/initiatives, EIS reset the new Modernization Project to Stage Gate 1 in 2022. In mid-2022, the agency executed contracts for project management and business analysis services, as well as independent quality management services.

In May 2023, Enterprise Information Systems (EIS) issued a memo formally placing the HECC Modernization Project on hold. HECC worked with EIS for six months to resolve the issues listed in the hold memo. During this time, HECC continued project planning and requirement refinement activities, as well as hiring and onboarding a full complement of project and change management team members.

On October 24, 2023, EIS lifted the hold when the eight items specific to the project had been addressed and HECC reaffirmed its commitment to the project and articulated that it is the highest priority for the agency. On November 16, 2023, HECC received Stage Gate 3 endorsement for Phase 1 – Mobilization from EIS. The contract with the selected system integration (SI) vendor, Slalom, was executed on November 27, 2023. Mobilization is a 12-week effort (Jan – Mar). Per the Stage Gate 3 Endorsement Memo, HECC must request Stage Gate 3 re-endorsement after completion of Phase 1 – Mobilization.

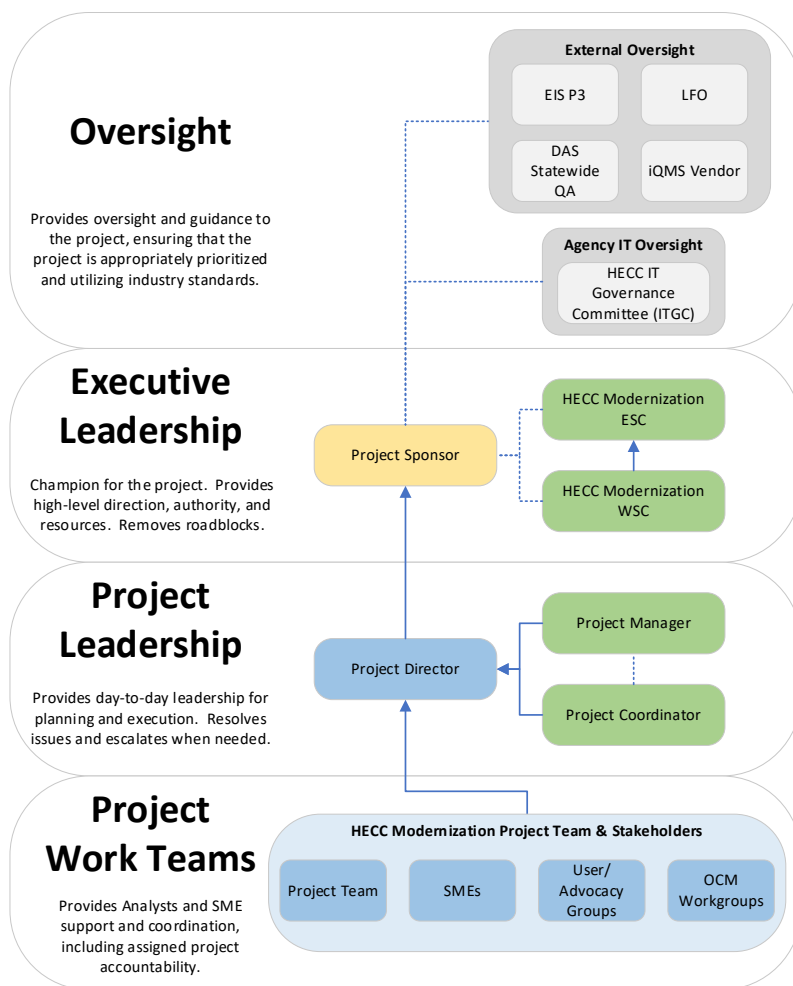
Project Leadership spent December coordinating and planning with the Slalom Leadership team. Mobilization (requirement clarification and design) started on January 8, 2024, following the agency kick-off on January 4, 2024.

After the ETPL, FAMIS and PCSVets legacy systems are replaced by the new LEARN (Lifelong Educational Advancement Resource Network) system, a new initiative (project or phase) is tentatively planned to incorporate additional legacy systems into the new solution. This next initiative will continue in alignment with the HECC IT Strategic Plan of moving all HECC's legacy systems to a modern and standard platform. How and when this new initiative will begin has not yet been determined.

PROJECT GOVERNANCE, MANAGEMENT, AND STAFFING

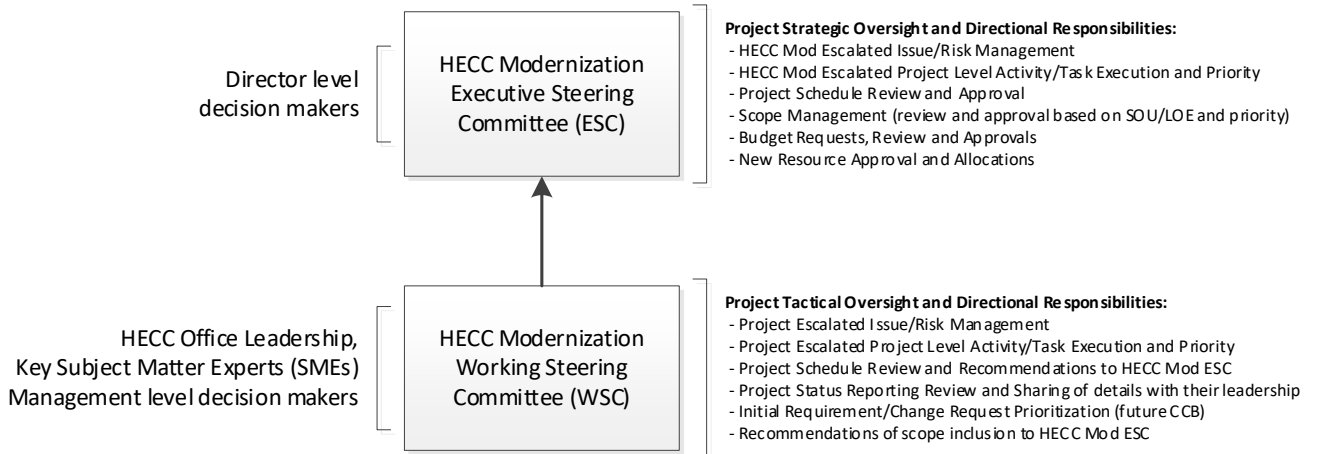
PROJECT GOVERNANCE STRUCTURE

The agency has established a functional project governance structure as shown in the following diagram. This includes additional oversight bodies, including Enterprise Information Systems, Legislative Fiscal Office, Department of Administrative Service’s Quality Assurance, and an independent Quality Management Services vendor, that interact with the HECC Modernization Project. Their collective function is to provide checks and balances that enhance the governance and/or oversight of the project.



The HECC Modernization Project uses a Governance Outline (charter) to define the oversight bodies that support the project; these are the Executive Steering Committee (ESC) and Working Steering Committee (WSC). The next diagram provides more information about the specific responsibilities of the HECC internal governance committees.

GOVERNANCE SUMMARY DIAGRAM



PROJECT MANAGEMENT

The project leadership for the HECC Modernization Project is made up of a Project Director and a third-party Project Manager. HECC was required to hire an external project manager. It is the intent of HECC that when a Project Director is assigned to oversee a project (of this size and complexity) that the Project Manager is in a support role to the Project Director. This allows the Project Manager to be more hands on in establishing project structure and controls, since the Project Director has overarching role of primary communicator to partners and internal decision makers.

While most Project Directors oversee a portfolio of projects. Due to the complexity and scope of this project, HECC has chosen to have the Project Director focus entirely on HECC Modernization. The Project Director is the primary point of contact for the Modernization Project and reports to the Sponsor.

PROJECT STAFFING

Staffing levels were determined from an analysis of the work breakdown structure and schedule, taking into consideration the roles and skill sets needed to complete tasks, project complexity, HECC IT project maturity, staffing capacity, and experience.

The chart below details how the HECC Modernization Project is staffed.

Role/Responsibility	Number of Staff Required	Timeframe Needed	% of Time Needed
Project Director (PD)	1	Project Duration	100%
Project Manager (PM)	1	Project Duration	100%
Project Coordinator (PC)	1	Project Duration	75%
Business Analyst (BA)	6	Project Duration	100%
Organizational Change Management (OCM) Analyst	1	Project Duration	100%
Product Owners (Deputy Directors/Managers)	6	Project Duration	50%
SMEs	10	Project Duration	50-75%
HECC Developers	2-3	Project Duration	100%
Change Leaders	13	Project Duration	5-10%
Business Owners (Directors)	6	Project Durations	5%

As a small agency, dedicating this many program hours to the project means that other work will not get done or will take longer to complete. HECC is committed to our core work but is balancing that with the time needed to make the Modernization Project successful in its currently compressed schedule. The agency has opted to hire a handful of Limited Duration staff to provide program coverage for existing staff spending large portions of their time on the Modernization Project.

PROJECT BUDGET, SCOPE, AND SCHEDULE

BUDGET

Initially, HECC budget projections were based on assessments and recommendations provided by consultants, Gartner and Elyon. Those estimates were primarily focused on the FAMIS portion of the project and did not consider or include the costs of combining three projects into one. When Modernization was expanded to include all parts of the current project, it required the agency to increase the size of the project team to support the increased complexity of the work. EIS required HECC to hire a third-party Project Manager and significantly increase the amount of change management work being done on the project, neither of which were included in the initial estimates. The budget below also includes EIS' requirement that total project budget include not only consulting costs that were incurred in past biennia but also sunk costs for full-time staff already included in the HECC budget and projected costs for operations and maintenance that the agency will not incur until at least next biennia. So, while some of the added costs are due to the additional time spent planning and new requirements that EIS placed on HECC during the hold, most are reflections of different time periods, funding types, components of the project, and types of expenditures that were included. For example, the budget included with the Modernization Policy Option Package that we submitted during the last Legislative session was focused on a single biennium and only the amount of "new" money the agency was requesting in Q-Bond funding. Whereas, the chart below reflects total costs, funding sources, and covers multiple biennia.

Projected Total Costs (estimated software licenses, vendor contracts, and staffing costs):

Implementation	2021-2022	2022-2023	2023-2024	2024-2025	2025	Total
	Mar-June	July-June	July-June	July-June	July-Dec	
DOJ/Procurement Support	\$ 12,000	\$ 67,000	\$ 21,000	\$ 21,000	\$ 10,000	\$ 131,000
Project Management & vendor BA	\$ 92,000	\$ 587,000	\$ 484,000	\$ 485,000	\$ 250,000	\$ 1,898,000
OCM			\$ 250,000	\$ 500,000	\$ 250,000	\$ 1,000,000
IQMS Oversight	\$ -	\$ 170,000	\$ 180,000	\$ 140,000	\$ 120,000	\$ 610,000
SI/Vendor Project	\$ -	\$ 1,250,000	\$ 3,000,000	\$ 3,000,000	\$ 1,000,000	\$ 8,250,000
Consulting	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ 250,000
Software Licensing	\$ -	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,000,000
HECC Staff	\$ 132,000	\$ 733,000	\$ 2,465,000	\$ 2,449,000	\$ 1,187,000	\$ 6,966,000
Total Implementation	<i>\$ 236,000</i>	<i>\$ 3,307,000</i>	<i>\$ 6,650,000</i>	<i>\$ 6,845,000</i>	<i>\$ 3,067,000</i>	<i>\$ 20,105,000</i>

FUNDING SOURCE

The funding for the HECC Modernization Project comes from the following sources:

• Q-Bonds sold in the ‘21-23 biennium (FAMIS replacement)	\$5,000,000
• Expected Q-Bond sales in the ‘23-25 biennium (Modernization)	\$5,000,000
• Other Funds (APA PCSVets replacement)	\$1,200,000
• Federal Funds (OWI for a system for ETPL)	\$700,000
• HECC staff time over multiple biennia (operations budget)	\$7,000,000
• Project-specific costs (operations budget)	\$1,000,000
• Consulting costs (operations budget)	\$250,000
Total funding	\$20,150,000

SCOPE

To control costs within the funding sources available to the project, HECC has limited the SI vendor budget to \$8M. This is not enough to pay for the total statement of work requested in the Request for Proposal that HECC issued. This will require HECC to prioritize its requests and determine what work must be done now and what can be deferred to a later project/phase. Base functionality for all the included systems will be addressed in this project. Prioritization is a key outcome of Phase 1 – Mobilization.

Scope of the solution functionality is documented in the Requirements Traceability Matrix (RTM). The User Stories included in the RTM were created and approved as part of a Requirement Refinement effort after the creation/vetting of the original solution requirements (in June 2022), which were themselves, derived from the original vendor Solution Analysis deliverables (created/approved in 2019 and 2020).

Requirement Refinement began in November 2022 and concluded in October 2023 – which accomplished the following objectives:

1. Standardized all project requirements into a consistent “User Story” format.
2. Summarized the original solution requirements to move from tracking and managing 891 requirements into 169 User Stories.
3. Reframed all requirements to be “future-focused” on the new solution, rather than recreating the existing systems/processes.
4. Cleaned-up all project requirements by removing duplicates or unnecessary original requirements, clarifying where needed.

At the completion of Phase 1 – Mobilization, scope will be baselined for the project. Mobilization is currently expected to end in late March/early April.

IN SCOPE

The scope of the HECC Modernization Project has been chartered to develop a comprehensive, flexible, multi-program solution to replace the following systems and associated business processes.

1. ETPL (Eligible Training Provider List)
 - a. A small ‘system’ that is really spreadsheets (list of eligible providers), Survey Monkey surveys (for training/educational provider applications to get on the list).
 - b. Accessible to the public via a basic webpage with links.
 - c. Spreadsheet for potential students to find eligible education providers.
 - d. Survey monkey links for providers to apply to get on the list to provide training/educational services.
 - e. There are also several spreadsheets (stored in shared folders, on the S-Drive) that are used to facilitate the internal OWI business processes to manage the providers.
2. PCSVets (Private Career Schools System)
 - a. A primary system that is based on a MS SQL DB back-end with a MS Access front-end; populated manually by agency staff via received application forms (forms available via HECC’s public website).
 - b. There are also several spreadsheets (stored in shared folders, on the S-Drive) that are used to facilitate and supplement the ODA business processes.
 - c. A stand-alone system (PCSTranscript) developed and accessible via a MS Access DB; used for storage and retrieval of student transcripts from closed schools.
 - d. A stand-alone web portal for PPS Student and Completion Collection information gathering site from schools used by the HECC Research & Data teams.
3. FAMIS (Financial Aid Management Information System)
 - a. A primary system (Big Blue) that is based on a MS SQL DB back-end with a MS Access front-end; available to the public and populated by two portals:
 - b. Student Portal for student financial aid and grants.
 - c. Partner Portal for high schools, private schools, colleges, donors, and other partners (DHS, DOL, Military Dept., etc.).
 - d. A stand-alone system (JobsPlus) developed and accessible via a MS Access DB; used for issuing reimbursements for program participants.

- e. A stand-alone external system (ORSAA) developed and maintained by Regent (a vendor) accessible online to students applying for financial aid outside the FAFSA.
- f. Various web-based custom-built tools used to compile/filter the data outside the system for reporting.

OUT OF SCOPE

While the solution the HECC Modernization Project implements may later be leveraged for future replacement of additional HECC legacy systems, those efforts will be done as a separate project or at least a future phase approved by governance and oversight bodies.

The HECC Modernization Project scope does *not* include:

1. Replacement of other systems not identified above.
2. Inclusion of additional requirements not identified in the approved Solution Requirements spreadsheet (or approved RTM).
3. Current, Future or Gap Analysis on business processes not completed in support of the work of the above systems.
4. Completion or management of any legacy system initiatives, such as the FAMIS Stabilization Project.

SCHEDULE

HIGH-LEVEL PROJECT MILESTONES

Below are the initial high-level project milestones. They are intentionally vague, since after planning, those activities and timeframes are entirely dependent on collaboration and negotiation with Slalom.

Stage Gate 1 Endorsement – June 2022

Stage Gate 2 Endorsement – July 2022

Release SI Vendor RFP – July 2022

Select and Onboard SI Vendor – November 2023

Stage Gate 3 Endorsement – November 2024

Production Release of Initial Go-Live Functionality – Q1 2025

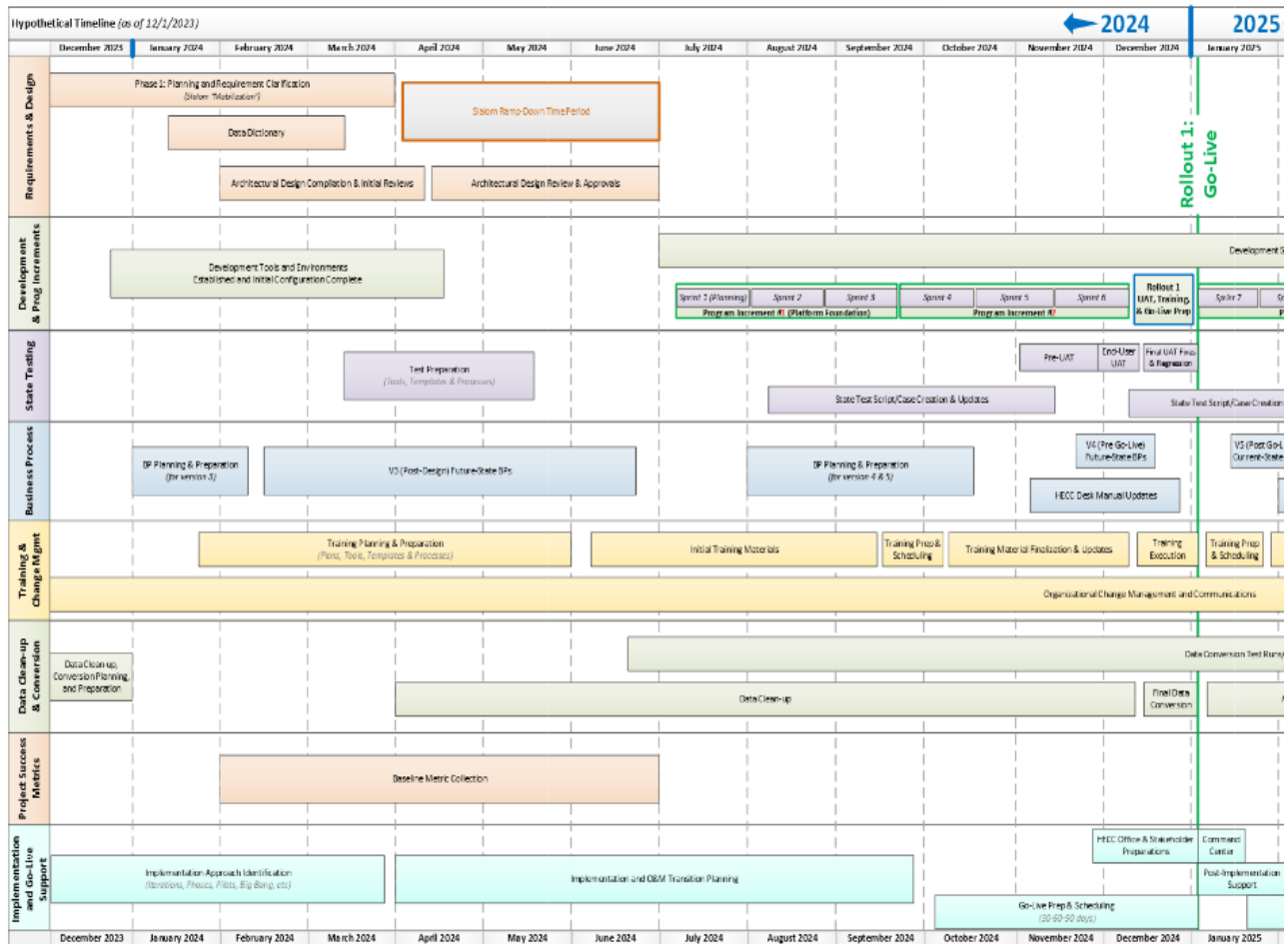
Additional Production Release(s) of Future Go-Lives – through-out 2025

Project Close-Out – Q4 2025

TIMELINE

The diagram below reflects our new, proposed timeline for 2024, which shows Phase 1 – Mobilization and tentative dates for the Phase 2 – Development/Implementation work through 2024. At the completion of Phase 1 – Mobilization, a more detailed schedule will be baselined for the project with detailed milestones and dates. Mobilization is currently expected to end in late March/early April. As mentioned before, we had intended to spend the six months that we were on hold working with staff to conduct joint application design sessions with Slalom. Because our timeline got pushed out and our programs have certain times of the year where they must focus on providing direct services to students and schools, this compressed timeline poses some significant risks to the project. Instead of having nine months for mobilization, we are left with only 3-4 months to complete the task. This will mean that we will have less flexibility and both planned and unplanned staff absences will have a greater impact on the project. Slalom will have less time to orient themselves to the work, and there is just greater room for error.

HECC Modernization Potential Timeline (2024-2025)



CURRENT OR PLANNED PROCUREMENTS/CONTRACTS

The Modernization Project has contracts with the following vendors:

- North Highland (\$1.898 million)
 - This contract provides project management and some organizational change management (OCM) services for the project.
 - The contract also contains exercisable options for additional OCM services and/or business analyst services.
- NTT Data (\$610,000)
 - This contract provides iQMS services required by the State of Oregon.
 - There is an option to add a security review and/or IV&V services if HECC determines that such services are needed.
- Slalom (\$8.25 million)
 - This contract is for the development and implementation of the new HECC system built on Dynamics 365.
 - This contract is also for Slalom to create a data dictionary of HECC legacy systems.
- Microsoft Product quality Advisory (\$250,000)
 - This contract provides expertise from Microsoft in Dynamics to assist HECC in developing Dynamics, which is a new platform for HECC.
 - This contract also provides educational workshops that can be tailored to HECC staff's needs.

The only anticipated procurement may be for additional storage or any licensing that are needed to implement the system.

LEGACY SYSTEM CONVERSION PLANNING AND ACTIVITIES

One of the HECC Modernization Project activities is Conversion and Migration. The lead and back up business analysts are actively planning and preparing for conversion and migration. There is a detailed plan for the activity that is being worked and updated as we move further into the project and learn more about the data and what the new system will look like. The project team is working with program areas to identify data that needs to be cleaned up prior to conversion. The data clean up task is another draw on program resources that needs to be completed in addition to project work.

HECC hired Slalom to create data dictionaries for the legacy systems being replaced. Those will feed directly into the work of this project activity. HECC and Slalom began coordinating on this work in early January.

Work completed to date:

1. Initial review and discovery of all legacy data systems and sources (databases, spreadsheets, shared drives, etc.).
 2. Identification and documentation of key data quality issues.
 3. Data clean-up on readily achievable data quality issues.
 4. Data discovery and source documentation transferred to Slalom.
 5. Began building the legacy data dictionaries.
-

RISKS AND CHALLENGES

The main risks in the project that need to be managed include:

Compressed schedule: The timeline, selected by HECC from Slalom’s proposed options, is extremely aggressive and includes significant risk during execution. Originally, when we expected to begin work with Slalom in April 2023, we had planned to have three major releases that were going to be spread out across seventeen months (March 2024–August 2025). Now, we must do the same amount of work in eight months, or less than half the time. This means that there will be significantly more effort/involvement required from Product Owners and Subject Matter Experts to complete the same amount of work. So instead of dedicating 10 hours per week to the tasks, the project will require at least double that. And, to make this timeline work (starting development in July 2024 and having production releases in January 2025, April 2025, and August 2025), the first three Program Increments have been shortened from 3 months to approximately 2.5 months – and the sprint cycles have been reduced to approximately three weeks. This timeline will increase the burden on Product Owners and increase the pressure on IT staff to learn and conduct agile processes without errors, a process they are just now learning. The compressed schedule also includes less time for user testing and training. This could negatively impact the “go live” experience for both staff and customers. This timeline has an overlap of Testing for a completed Program Increment (including UAT, Regression Testing, and final defect fixes) with Training. Starting training of users or partners/providers/students when there are still defects that are being identified and resolved will reduce credibility of the solution before it is released into production. In addition, some areas of the system may not be able to be trained on if the functionality isn’t working correctly. It also means that people being trained may identify new defects that may or may not effectively get routed into testing and triage processes for resolution prior to Go-Live. And, lastly, **OSAC may be forced into a Single Rollout with a compressed schedule.** Due to the nature of OSAC’s business, their Go-Live Preferences cannot be fully accommodated with a single rollout in August 2025. This means that OSAC will need to identify how/when/where to change their business operations to support a single rollout. This could cause significant disruptions to their business operations and/or ability to support partners and students.

Limited Budget Available to Complete Project: HECC estimates that the EIS hold and related requirements to hire additional Business Analyst, Organizational Change Management, and other staff before moving into the Mobilization phase of the project have added approximately \$3 million to the overall cost of this project. While HECC has been working hard to cover these requirements by repurposing vacant positions and unspent operating funds, we are at the point where we have committed the vast majority of our discretionary agency funds for the biennium.

Insufficient Staffing: Given the selected schedule, HECC’s experience with execution of projects of this scope and complexity, and the fact that the project will use Agile development processes, the

extra duties placed on impacted offices, leadership and staff may be untenable. Impacted offices are already struggling with support of participation requests, and to adhere to this new schedule, their level of participation must increase by several fold. If staffing levels and participation in project activities are insufficient, the solution may not: (1) Meet their needs (due to lack of clarity/accuracy of design); (2) Function as needed (due to lack of sufficient testing); (3) Be utilized as expected/intended (due to lack of sufficient training or business processes revisions/considerations); or, (4) Include accurate data (due to lack of dedication to data clean-up). HECC is a small agency with 185 FTE. The kick-off event included 57 participants with identified roles in the Modernization Project. HECC is dedicating an enormous amount of its staff's time and energy to supporting this project, and that will likely mean that other priorities and duties could suffer in comparison.

Scope Reduction: If project scope is reduced or deferred to future phases, the delivered solution may not be seen as sufficient or successful from a business or customer perspective. And, if users do not realize expected benefits, it will be harder to get them to use the system, let alone engage or support the project in future phases. It could also mean that we have to support duplicate systems with limited technical resources on an ongoing basis.

COMPLETION OF STATE CIO STAGE GATE ENDORSEMENT REQUIREMENTS

Due to the estimated cost and complexity, the HECC Modernization Project falls within the DAS Stage Gate – Level 3 category, which has the most compliance and artifact requirements. Generally, the Stage Gate numbers can be attributed to the following:

- Stage Gate 1 Endorsement: Project Concept/Initiation (completed on 6/23/2022)
 - Acknowledgement of the project and gaining initial approval to move into early planning.
 - This triggers/allows the agency to continue with initial planning and compile draft foundational documentation.

- Stage Gate 2 Endorsement: Project Planning (completed on 7/14/2022)
 - Approval of required foundational documentation (such as the Business Case and initial Project Management Plan).
 - This triggers/allows the agency to formally move into Project Planning and Preparation, including release of an RFP.

- Stage Gate 3 Endorsement: Project Execution (Completed on 11/16/2023 for Phase 1 – Mobilization.

HECC must re-apply for SG3 Endorsement prior to commencing Phase 2 – Development/Implementation.

- Approval of baseline Project Planning documentation (such as the baseline Project Management Plan, Cloud Workbook, System Security Plan, Organizational Change Management Plan, etc.).
 - This triggers/allows the agency to move from Project Planning into Project Execution, including execution of a SI Vendor contract. HECC executed a contract with Slalom, its SI vendor, on 11/27/2023.
- Stage Gate 4 Endorsement: Project Completion/Close-Out (planned for late 2025)
 - Approval of all Project Execution Artifacts (such as the Test Plan, Final System Security Plan, Updated/Final Project Management documents, Operations and Maintenance Transition Plan, Lessons Learned, etc.).
 - This triggers/allows the agency to move from Project Execution into Operations & Maintenance and formally close the Project.

IQMS CONTRACT FINDINGS AND RECOMMENDATIONS

NTT Data, HECC’s iLMS vendor, prepared a 2023 Year End Summary Report. Below is the Executive Summary.

The HECC Modernization Project encountered several challenges over the 2023 calendar year that, for the most part, were successfully overcome. While Project Leadership addressed the challenges, they also directed the Project Team through activities that created an excellent foundation to support the execution phase, which began in December 2023. These foundational activities will significantly improve the Project's opportunity and ability to be successful.

The table below provides a visual recap of NTT DATA’s risk assessment for the 4th Quarter of 2023, next to its evaluation from the 1st Quarter of 2023. Details are provided after the executive summary.

2023 Quarter 4 vs Quarter 1 Quality Assessment Recap of Risk Levels

Assessment Area	4th Quarter 2023	1st Quarter 2023
Project Management	Low	High
Contract Conflict of Interest	Low	High
Organizational Change Management (OCM)	Low	High
Budget Insecurity	Medium	High
Project Schedule	Medium	High
Resource Availability	Medium	High
Data Management	High	High

Project Leadership continues to provide expert project management, has developed a knowledgeable and cohesive Project Team that works well together, and continues to deploy Project Management Institute's (PMI) methodology. Hiring experienced business analysts (BAs) and other needed Project staff have resolved the Solution Integrator (SI) vendor conflict of interest concerns. Hiring a now Prosci-certified Organizational Change Management (OCM) analyst and executing a contract with North Highland to bring in two expert-level OCM staff to kick start and support OCM efforts throughout the life of the Project have mitigated the OCM concern.

There are a few areas that iQMS remains concerned about.

- The budget for the Project does not contain contingency funding. Projects of this size and complexity usually encounter change requests and schedule delays that ultimately increase the cost of the Project. Without additional funds, the HECC Modernization Project may have to make necessary trade-off decisions that could negatively impact the success of the Project.

- The Project's decision to compress the schedule to meet the original implementation date as closely as possible to the original implementation date adds complexity. There is very little room for error as the impact of missing an activity date could cascade, causing other activities to be late. However, the Project's first phase will provide additional insight into how successfully the Project and its business partners can manage within the tight timelines.
- Staffing remains a concern. Agency staff is already very busy, and there are concerns about the staff's ability to support the Project while maintaining critical ongoing operational functions. While the Project Team is fully staffed and full-time, the HECC Office's Product Owners and Subject Matter Experts (SMEs) are assigned part-time to the Project, which could make achieving the aggressive schedule difficult. Offices have assessed where temporary staff could fill in and support ongoing operational activities while their experts work on Project activities, and HECC Agency Leadership has approved hiring additional Limited Duration staff. Additionally, existing IT staff who plan to manage the operations of the modernized system after implementation need extensive technology training and to gain experience by working with the SI vendor. However, with only five IT staff to support the Agency's existing systems, iQMS is concerned that the IT staff will be unable to engage as needed.
- Data management remains a concern. There are no available data dictionaries for existing systems; inconsistent, unknown, or no data retention policies; no data governance policy; no data centralization efforts (pre-SI Vendor); and no Data Management and Governance Board to drive data centralization and consistency.

NEXT STEPS

HECC anticipated being further along in the project with more to report. The six-month long hold placed on the project took significant time to resolve. HECC did put the time to good use resulting in a better planned project but is now feeling the significant schedule constraints that resulted from the loss of that time for development/implementation. These constraints mean that the project will take more internal effort to complete in the shortened schedule. The budget constraints on the SI vendor means that the full, anticipated scope will not be delivered. HECC is exploring options to complete the full scope and move forward with the larger agency goal of bringing all systems over into the modern LEARN system.

HECC is actively involved in Phase 1 – Mobilization work and coordinating with EIS to fulfill all of the conditions in the Stage Gate 2 Endorsement. Project Leadership will soon begin work to seek Stage Gate 3 Endorsement for Phase 2 – Development/Implementation. HECC remains committed to the project and continues to devote the necessary resources, both monetary and staff.

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