UI Modernization Project Business Case

Oregon Employment Department

Modernization Program

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Business Case – Authorizing Signatures

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Agency Contact	Renee Royston, Modernization Director	Phone Number	971-304-5116

The person signing this section is attesting to reviewing and approving the business case as proposed.

This table to be completed by the submitting agency	
Executive Sponsor	
(Name)	*(Date)*
David Gerstenfeld, Acting Employment Department Director	
Signature *David Gerstenfeld*	
Sponsor	
Renee Royston, Modernization Director	
Signature *Renee Royston* Renee Royston (Jan 4, 2022 12:40 PST)	
Business Sponsor	
Lindsi Leahy, Unemployment Insurance Division Director	
Signature *Lindsi leahy* Lindsi leahy (Jan 4, 2022 15:50 PST)	
Business Sponsor	
Bill Truex, Chief Information Officer	
Signature *Bill Truex* Bill Truex (Jan 18, 2022 12:57 PST)	
Business Sponsor	
Karen Madden Humelbaugh, Paid Family and Medical Leave Insurance Division Director	
Signature *Karen Madden Humelbaugh* Karen Madden Humelbaugh (Jan 4, 2022 15:09 PST)	

Version History

Version Number	Date	Comment
1.0	December 18, 2017	Original version.
1.1	January 23, 2018	Added information on the feasibility study and clarification on "core" systems.
1.2	June 29, 2018	Incorporated information from the feasibility study, including a high-level alternatives analysis, and updates on program activity.
2.0	January 2019	Restructured content in the Modernization Background section, and added detailed content supporting initiation of the UI Modernization Project, including alternatives analysis and current state costs.
2.1	January 2019	Added process details for how we developed the summary of alternative criteria rankings, and Appendix C which provides detailed cost tables supporting Figure 6.
2.2	February 2019	Restructured content to improve the flow of the *Alternative Analysis* section and provide additional context to summary of alternative criteria rankings (Figure 11).
3.0	January 2022	Added material system impacts experienced since February 2019, including the incorporation of PFMLI contributions and benefits.

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Executive Summary

The mission of the Oregon Employment Department (OED) is to *Support Business and Promote Employment*. We accomplish this by:

- Supporting economic stability for Oregonians and communities during times of unemployment through the payment of unemployment benefits;
- Serving businesses by recruiting and referring the best qualified applicants to jobs, and providing resources to diverse job seekers in support of their employment needs;
- Developing and distributing quality workforce and economic information to promote informed decision-making; and
- Providing easily accessible Paid Family and Medical Leave Insurance benefits that help Oregon employers and workers maintain quality of life, economic stability, and peace of mind.

The immediacy of the recent economic downturn precipitated an unprecedented demand for our services. In the span of a month, Oregon went from a near record unemployment rate of 3.6% in March 2020 to a record high unemployment rate of 13.2% in April 2020. In calendar year 2020, we paid $6.7 billion in unemployment insurance (UI) benefits to 583,000 workers; this was sharply up from the $521 million benefits paid to 114,000 workers in 2019. To support the payment of benefits, in 2020 we collected 8.7 million wage records from approximately 140,000 employers. Additionally, in calendar year 2020 we provided employment services to approximately 650,000 job seekers and 8,500 businesses.

As we look to the future and assess how to provide our core unemployment insurance, paid family and medical leave insurance (PFMLI), and employment services we recognize that we must be able to meet our customers' desire for personalized and updated service delivery, and be flexible and adaptable to changing needs and requirements. We would like to take advantage of opportunities to improve how we share data and interact with our partners, while appropriately managing access to protect data, ensure confidentiality, and respond to security threats. Our ability to make these improvements, as well as the ability to sustain current services and promptly implement new mandates or programs, is constrained by our current aging tools and technology.

For these reasons, the OED is making a significant investment to replace our current unemployment insurance and employment services systems with modern technology, establish the core system for PFMLI, and transform business processes so that we can better serve our customers – Oregonians and Oregon businesses.

The OED's Modernization Program is a multi-year initiative focused on transforming the agency's business processes and core technology systems. Computer systems supporting receipt of UI taxes and PFMLI contributions, payment of UI and PFMLI benefits, and delivery of employment services will be replaced or established. Further, business processes will be transformed to take advantage of opportunities and benefits available through new system capabilities.

The primary goals identified for the Modernization Program are to:

- **Enhance customer experience** – Deliver improved services, such as online self-service, automation, access to data, and integration with partners.
- **Transform business processes** – Leverage modern system capabilities to provide improvements and efficiencies in business processes, deliver new tools for our employees, and support more effective service delivery to our customers.
- **Improve data security** – Improve our ability to anticipate and respond to data security threats and manage access.
- **Modernize technology** – Replace the agency's aging computer systems that support unemployment insurance taxes, payment of benefits, and delivery of employment services.

- **Provide expandable technology –** Deliver a system capable of supporting new programs and functionality needs.

These goals will be accomplished over the next few biennia through the execution of projects chartered to replace the agency's business processes and information technology systems. The first project, initially charted in December 2018 and forecasted through the 2023-25 biennium, focuses on transforming the UI program and initiating the PFLMI program in a phased approach starting with UI taxes and PFMLI contributions, followed by PFMLI benefits and UI benefits. Additional projects, specifically a project focusing on employment services, will be initiated as resources and capacity become available.

This version of the business case incorporates the decisions and steps taken thus far to include the technology and associated business processes supporting PFMLI contributions and benefits in the scope of the UI Modernization Project, under the agency's Modernization Program.

Purpose and Background

The Employment Department's Modernization Program is a multi-year initiative focused on transforming the agency's business processes and core technology systems. We will replace or establish computer systems supporting receipt of UI taxes and PFMLI contributions, payment of UI and PFMLI benefits, and delivery of employment services.

HB 2005 (2019) (codified as ORS chapter 657B) established the PFMLI program and assigned the OED the responsibility to create and administer the new program. Establishment of PFMLI will provide an important safety net for workers who are facing their own or a family member's serious health condition, for bonding with a new child, and for those facing domestic violence and other issues. Agency leadership decided the best way to serve Oregonians and Oregon businesses is to have a single system that supports both UI and PFMLI. Accordingly, the agency has expanded the scope of the Modernization Program to include PFMLI technology and business process needs.

The primary drivers for modernization include:

- **Risk that we cannot sustain delivery of secure and reliable services.** First and foremost, we must ensure we can continue to deliver secure and reliable services. It is becoming increasingly difficult to recruit and retain employees with the skillsets needed to support our aging computer systems. As of December 2021, 18 percent of the technical employees supporting our existing systems are eligible for retirement with an additional 19 percent eligible for retirement within five years.

- **Challenges to provide customers with personalized and updated services.** Our customers desire personalized and updated services, such as online self-service options and mobile-friendly applications, and it is not feasible to meet these needs with our current systems.

- **Constrained and inflexible systems that cannot adapt to changing business, state, and federal requirements.** There are many opportunities to be more efficient and effective in how we deliver our services. Our current systems constrain our ability to change our business processes, implement requirements due to state and federal policy changes, resolve challenges, and automate or remove manual work. These improvements will allow us to be more efficient, reduce processing time, improve the accuracy of actions and information, and be more responsive to policy changes, capabilities critically emphasized during the recent pandemic.

- **Difficulties in managing access and sharing data securely with our partners.** Our existing systems were not designed with integrated data security. Controlling data security is complex and it is difficult to manage user access appropriately. Newer technology provides opportunities for improved security measures, and would allow us to respond more nimbly to security threats and more easily manage access. Additionally, our partners wish to interact and share data with us using modern and flexible technologies.

- **Opportunity to leverage existing infrastructure and resources to develop and administer the new PFMLI program.** The directive to implement the PFMLI program comes in time to take advantage of a unique opportunity to be a part of the modernization process. Through such effort we will better achieve established goals and outcomes; advance our partnerships and systems to provide innovative services to Oregon's diverse people and businesses; make services increasingly accessible through the improved and expanded use of technology; and allow customers to easily understand the services available to them and their responsibilities for receiving those services.

Agency Background

The OED is responsible for administering the state's unemployment insurance program and public labor exchange helping connect job seekers and employers. Our Unemployment Insurance Division provides partial wage replacement to mitigate the impact of economic downturns for individuals and communities and helps retain skilled workers within their local economies. For some, the partial wage replacement is critical to cover living expenses and basic needs. Our Workforce Operations Division provides employment services to businesses by recruiting and referring qualified applicants to jobs, and provides tailored employment services to diverse job seekers to help remove barriers and support their individual career paths. The Workforce Operations Division also manages several programs including Veterans Employment Services, Work Opportunity Tax Credit (WOTC), Migrant Seasonal Farm Workers, Foreign Labor Certifications, and Trade Act Assistance among other programs. Unemployment insurance and employment services are provided to customers through the central office in Salem, three contact centers, and 39 WorkSource Oregon Centers throughout the state.

The OED is also responsible for developing and administering the PFMLI program that will provide employees with compensated time off from work to care for and bond with a child during the first year of the child's birth or arrival through adoption or foster care; to provide care for a family member who has a serious health condition; to recover from an employee's own serious health condition; and to take leave related to domestic violence, stalking, sexual assault, or harassment (safe leave). This new statewide program requires the creation of policies and rules, operational processes and infrastructure, outreach and education efforts, and the program management and governance structures to support implementation and ongoing operations.

In calendar year 2020, the Unemployment Insurance program collected 8.7 million wage records from approximately 140,000 employers and paid $6.7 billion in UI benefits to 583,000 workers. The amount of benefits paid were up sharply from the $521 million benefits paid to 114,000 workers in 2019. This reflects the countercyclical nature of demand for agency services, though the COVID-19 recession created a surge for services beyond anything seen in past recessions. Generally, service levels for unemployment insurance, as well as employment services for job seekers, tend to increase during periods of high unemployment and decrease during periods of low unemployment.

Figure 1 depicts the need for unemployment insurance from January 2007 to October 2021, covering the Great Recession of 2008 as well as the unprecedented demand during the COVID-19 pandemic. Currently, we are recovering from the worst labor force impacts of the COVID recession when 270,000 Oregonians were jobless and the unemployment rate was at 13.2% in April 2020. In November 2021, the unemployment rate (seasonally adjusted) was 4.2% and approximately 91,500 Oregonians were unemployed.

Figure 1 – Number of People Receiving Benefits and Amount Paid

Monthly Unemployment Insurance Benefits
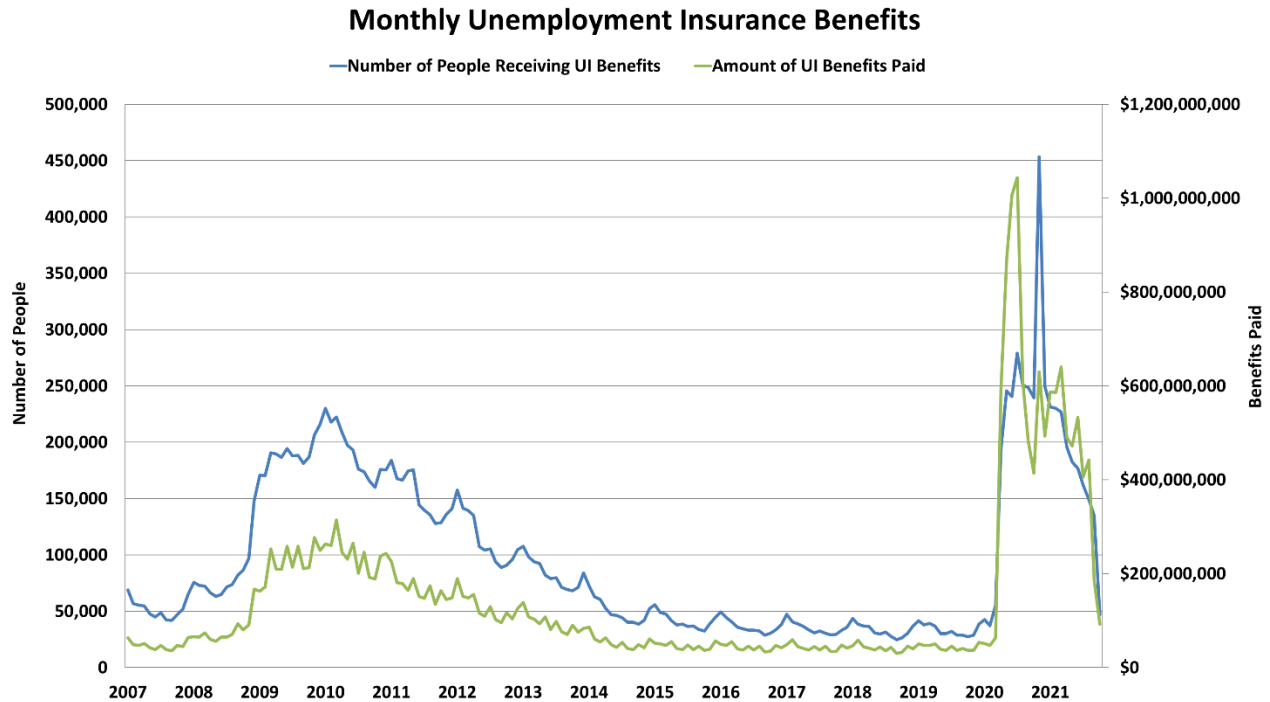
In program year 2020, WorkSource Oregon Centers served 299,060 individuals, of which 10,467 were veterans and 2,296 were migrant seasonal farm workers, and 8,254 businesses received employment services. The Trade Adjustment Assistance program – a federal program that provides services to workers negatively impacted by foreign competition – served over 1,700 affected workers, of which approximately 25 percent re-entered the workforce after completing this program during federal fiscal year 2020.

The current technical infrastructure supporting these services is comprised of many aged, disparate systems that utilize different technology platforms. Unemployment insurance benefits and tax systems, mostly a mainframe system coded in COBOL, were designed in the 1990s, long before the widespread use of the Internet to transmit information and conduct business.

Over the years, as new program requirements were passed by federal or state government, or as customer needs evolved, many subroutines or subsystems have been developed to fulfill the new requirements and serve those needs. For instance, there are currently multiple systems supporting employer quarterly wage reporting. Each system supports different functionalities that have been needed over the years, yet this "additive" approach (although responsive and necessary to meet business needs in the short term) created inconsistencies and an increased maintenance and support workload for Information Technology staff. The current environment (see Appendix A) is a complicated web of systems in a multitude of different programming languages (e.g. Apex, COBOL, ColdFusion, HTML, JavaScript, Oracle PL/SQL) that multiplies the difficulty of adjusting to new regulations and customer demand.

Employment services are supported by the WorkSource Oregon Management Information System (WOMIS). This network, or environment, supports various applications including:

- Common customer registration, where job seekers create an account that captures information to help determine eligibility for programs across state agencies and community partners under the federal Workforce Innovation and Opportunity Act (WIOA).

- Public labor exchange (iMatchSkills), a web-based system piloted in 2003 and launched in 2004 that helps connect job seekers with employers. iMatchSkills allows job seekers to create customized profiles, identify skill gaps, and search for jobs. Employers are able to set up accounts, post and manage job

listings, and view the qualifications of potential candidates. iMatchSkills is also used as part of the multi-agency Supplemental Nutrition Assistance Program (SNAP) Training and Education Program (STEP).

- Trade Adjustment Assistance Management Information System, an internal application that supports the administration of participant activity in federal Trade Act programs.

In addition to serving customers and employees, these applications support federal program reporting requirements and allow us to track operational and performance measures. iMatchSkills is linked with numerous OED systems providing information on unemployment insurance claim records, employer tax records, historical wage data, and local labor markets and occupational data. This helps employees deliver more effective, efficient, and customized services.

Service delivery of both unemployment insurance and employment services is further supported by manual processes that augment system gaps. For instance, although roughly 80 percent of new unemployment insurance claims are filed online, most claims are manually reviewed by Business and Employment Specialists. To process claims, employees often have to simultaneously use multiple mainframe screens, along with several other applications. Furthermore, we provide some of our core services without a proper case management system to adequately document and track our work.

If issues are detected with a claim, a file is manually generated and assigned to the appropriate employee. After a determination of the issue has been made, decisions are manually entered into the mainframe system and employees must take separate actions to remove stops in the system that prevent benefit payments, inactivate system line flags used to indicate the status of claims, modify answers, and/or clean up the claim file. These files serve as the official record for internal adjudication processes and subsequent hearing and appeals processes.

To assist Oregonians and Oregon businesses, the OED partners with various agencies to deliver related services and relies on data transfers to and from many agencies. We must ensure we can provide secure access to data shared between our partners. Some examples of how we coordinate with other agencies to provide core government services include:

- **Employer registration** – To register an employer in the UI tax system, the OED must process and validate data from the Secretary of State's Oregon Business Registry. We then create an employer record within the unemployment insurance tax system using the data from the Secretary of State (SOS) and the Business Identification Number generated by the Department of Revenue (DOR), and determine whether that entity is subject to UI taxes. Employers also file registrations directly with us via paper, which bypass the SOS, but still receive a Business Identification Number from the DOR.

- **Combined quarterly payroll reporting and tax collection** – The OED works with the DOR and Department of Consumer and Business Services (DCBS) to coordinate the common tax payment system, primarily administered by the DOR. The OED currently collects all quarterly payroll reports used for UI taxes, state income tax withholding, Lane Transit District and Tri-County Metropolitan Transportation District transit taxes, and the Worker's Benefit Fund; PFMLI contributions and statewide transit tax will be added to the combined payroll reporting process as part of the OED's modernization efforts. The OED also coordinates with the DOR-Other Agency Accounts on debt collection activities for delinquent UI taxes and benefit overpayments.

- **Employment services** – The Workforce Operations Division delivers employment services under WIOA in partnership with other state agencies, educational providers, and community and nonprofit organizations. WIOA encourages states to improve customer service through integrated intake, case management, and reporting systems. The agency also coordinates with the Department of Human Services to deliver employment services to SNAP recipients. To deliver services efficiently and effectively under these partnerships, the OED relies on data shared with and received from our partners. For instance, our Title 1 (job training) partners depend on the data from a job seeker's initial registration in the WorkSource Oregon Management Information System to provide consistent customer information and reduce duplicative efforts.

The agency's Workforce and Economic Research Division is also a heavy user of unemployment insurance and employment services data for various analyses and reports. Data from quarterly employer tax reports and unemployment insurance claims feed into programs such as the Quarterly Census of Employment and Wages and Local Area Unemployment Statistics – both federal-state cooperative programs with the U.S. Department of Labor's Bureau of Labor Statistics with required deliverables. From information on occupational wages and projections to current employment and unemployment numbers, output from the Research Division helps inform the decision-making of students, job seekers, businesses, policy makers, and government entities across Oregon. Unemployment insurance wage data and system integrity is critical to provide accurate and timely information.

Employer wage records also form the foundation for Oregon's workforce system's performance measures. These measures are presented as part of the Performance Reporting Information System (PRISM), which produces information about the effectiveness of workforce system programs and services. This information is presented on QualityInfo.org. These measures answer questions such as: Did the people served by the workforce system find jobs? Of those who found a job, are they earning higher wages than prior to their participation in the workforce system?

On the other side of the data equation, many state and federal agencies rely on OED data operationally. Employers' wage data, collected quarterly to assess UI taxes, is used to facilitate the collection of funds that are due to the state or to validate eligibility for needs-based programs. If new data fields need to be collected on employer wage reports, upgrading the OED's mainframe systems is often cost prohibitive and does not meet today's expectations of timeliness. For instance, the agency was unable to add new data fields for the statewide transit tax in a timely, cost effective manner, thus it was decided to have the DOR collect the tax in a standalone process with a new return that businesses must file.

The OED is also required to transmit data to the U.S. Department of Labor (DOL) through the Interstate Connection Network (ICON) hub, which is used by state workforce agencies with differing technologies to securely exchange data. This data is used to facilitate a number of processes such as UI claims between states, improper payment cross matches, new hire wages, and federal performance reporting.

Considering these connections and relationships, modernizing our systems cannot be successfully completed in a vacuum. Key stakeholders and partners from both service delivery and data sharing perspectives will need to be informed and involved throughout our modernization efforts to successfully implement and realize the full potential of our new systems. To support these engagements, we have completed a stakeholder analysis and validated it with our unemployment insurance and human resources divisions. We are now developing the specific engagement activities targeting specific external stakeholders, including employers, small and large, historically under represented populations, and tribes for our first project focusing on UI and PFMLI. We are also working closely with the PFMLI Division and their communication vendor on outreach efforts. Similar efforts will be conducted for other projects.

At the federal level, the U.S. DOL provides program guidance, oversight, and funding. At the state and local level, some of our core business and service delivery partners include:
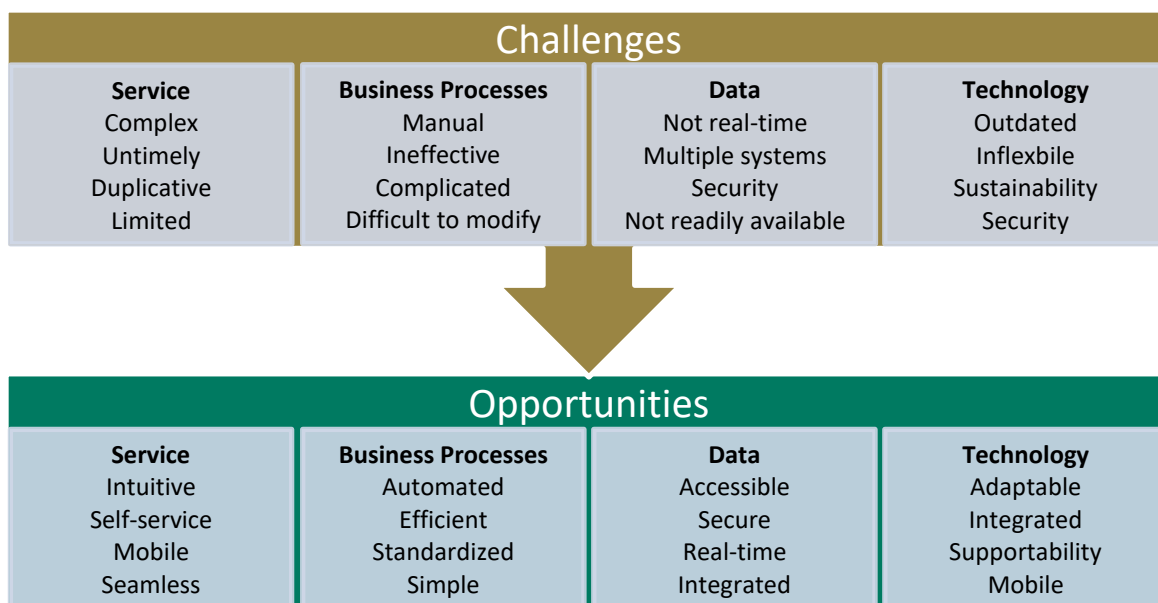
- Department of Administrative Services
- Department of Consumer and Business Services
- Department of Human Services (Vocational Rehabilitation and Self Sufficiency programs)
- Department of Justice
- Department of Revenue
- Higher Education Coordinating Commission
- Local Workforce Development Boards
- Oregon Commission for the Blind
- Oregon State Treasury
- Secretary of State

Problem and Opportunity Definition

Information technology is essential to enabling efficient service delivery. As a public agency, being responsive to Oregonians and Oregon businesses is a core value. Our business needs have outgrown our existing systems. These systems do not allow us to meet the changing needs and expectations of our customers. This is particularly true for systems that support payment of unemployment insurance benefits, the collection of unemployment insurance taxes, and matching job seekers with job vacancies.

The problems and associated opportunities addressed by system modernization cover all aspects of the agency. Through work with the Information Technology Support Center (ITSC) and Enterprise Information Services (EIS), we documented and analyzed current-state challenges and opportunities, with themes emerging around customer service, business processes, data, and technology. These challenges and opportunities have since been reinforced by the pandemic and establishment of the PFMLI program.

Figure 2 – Challenges and Opportunities

Challenges			
Service	**Business Processes**	**Data**	**Technology**
Complex	Manual	Not real-time	Outdated
Untimely	Ineffective	Multiple systems	Inflexbile
Duplicative	Complicated	Security	Sustainability
Limited	Difficult to modify	Not readily available	Security

Opportunities			
Service	**Business Processes**	**Data**	**Technology**
Intuitive	Automated	Accessible	Adaptable
Self-service	Efficient	Secure	Integrated
Mobile	Standardized	Real-time	Supportability
Seamless	Simple	Integrated	Mobile

CURRENT STATE CHALLENGES

The core technology and processes used to support the OED's mission and program requirements are becoming unsustainable, and we are struggling to keep up with technological advancements and evolving customer expectations.

Service

- **Customer service enhancements cannot be realized** – There is an ongoing business need to continually improve services and system usability to meet ever evolving technology and customer service models and expectations. Current systems offer customers, whether employers or unemployment insurance claimants, limited access to timely information and self-service functionality. Some customers also register in multiple systems to access services. For instance, a customer seeking services from both unemployment insurance and employment services interacts with at least three separate systems. Moreover, services that are available online are not well-supported on mobile platforms.

- **We are currently not meeting certain core performance measures or standards** – Our ability to meet and sustain performance levels in accordance with state and federal standards will be further stretched

during recessionary workloads, as depicted during the recent pandemic recession where performance in certain measures dropped but has since improved.

- o **First Payment Timeliness (percentage of all first payments made within 14/21 days following the first compensable week) –** U.S. DOL's acceptable levels of performance require timely first payment percentage of at least 87 percent. During calendar year 2020, OED's percent of timely first payments was 57.6 percent, below both the acceptable standard and national rate of 66.2 percent. In 2019, OED's percent of timely first payments was 87.9 percent, slightly above both the standard and national rate of 85.5 percent.

- o **Non-Monetary Determinations Timeliness (percentage of claims that are adjudicated within 21 days of issue detection)** – DOL's acceptable levels of performance require that adjudication timeliness equals or is greater than 80 percent. During calendar year 2020, OED's percent of timely non-monetary determinations was 19.2 percent, down from 64.6 in 2019.

- o **Detection of Overpayments** – DOL's acceptable levels of performance require the detection of projected overpayments to be greater than or equal to 50 percent and less than or equal to 95 percent. OED's overpayment detection rate was 40.7 percent in calendar year 2020.

- o **Timeliness of New Employer Status Determinations (percent of new status determinations completed within 90 days of the end of the liable quarter) –** For state fiscal years 2016 to 2020, the percent of registrations completed within 90 days ranged from 74 to 79 percent. This is below OED's target of 80 percent, but above the DOL target of 70 percent.

- o **Customer Service –** From state fiscal years 2017 to 2019, approximately 81 to 83 percent of customers rated overall service quality as "good" or "excellent." In fiscal year 2020, the overall rating dropped to 65 percent. All of these years were below the target of 95.5 percent. This metric is based on survey responses from unemployment insurance claimants, other job seekers, and employers who rated their satisfaction with the agency's service.

- o **Improper Payment Rate –** The DOL established a performance standard for states not to exceed an improper payment rate of 10 percent. In calendar year 2019, Oregon had an estimated improper UI payment rate, which includes both overpayments and underpayments, of 11.9 percent. Over the three-year period from July 1, 2017 through June 30, 2020, Oregon had an estimated improper payment rate of 10.9 percent.[1]

- o **Audit information** – The agency has not met the collection goal of making initial contact with employers quarterly when the balance they owe the OED is $250 or more. A secondary goal to collections is warranting accounts that have a balance of $1,000 or greater. This goal also has never been met largely due to system constraints and staffing levels.

Business Processes

- **Constraints to our partners –** As our local, state, and federal partner agencies modify their policy objectives, systems, or business processes, our inability to adapt or modify our systems, and data transfers, is a constraint to both individual and multi-agency performance. Opportunities to work together, share data, and provide services more efficiently and effectively with our partners are being lost. We must be able to more easily adapt our systems and tools to take advantage of these opportunities.

- **Systems are antiquated and unintuitive –** The structure and design of our systems creates usability challenges for our employees and customers. Employees must frequently access multiple screens and manually process information to conduct daily work, such as processing an unemployment insurance

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[1] https://www.dol.gov/agencies/eta/unemployment-insurance-payment-accuracy#OR

claim and updating employer accounts. Manual processes increase the likelihood of delays and errors. Furthermore, employee satisfaction and the pride that comes with executing our mission is negatively impacted by the time spent with duplicative and manual work. It is difficult to train new employees on these older systems, it takes people much longer to become proficient than with more modern systems, and our ability to attract and retain younger workers will be compromised by our antiquated technology environment. Comparable challenges exist for our customers, as our systems are not as user friendly as people have come to expect in this computerized age.

- **Difficulties improving processes and timeliness** – Current business processes, for both unemployment insurance and employment services, are burdened with pain points and manual, paper processes. For example, for the initial employer registration process to determine UI tax subjectivity, staff manually review registrations for possible predecessor and successor relationships, assign industry classification codes, and resolve registrations with incomplete information. Though we have improved processes over the past years through management structure changes and structured Lean evaluations, new systems will allow us to further remedy pain points and eliminate manual workarounds to be more efficient, reduce processing time, and improve accuracy and accessibility of information. As another example, the Workshare Program, which is an alternative to regular UI benefits that pays benefits to individuals whose weekly work hours have been reduced between 20 and 40 percent, expanded exponentially in use during the pandemic. The workflow to process Workshare benefits is a manual, paper-based process that required a significant expansion of staffing and created delays as new hires were being trained on the procedures.

- **Current methods of gathering information add inconvenience and delay** – During the initial UI claim process, information is collected to determine eligibility. However, sometimes additional information is needed and employees must send forms to employers and claimants requesting the information. Improving our systems to gather more of the information up front will make it more convenient for our customers and allow for more timely benefit payments, decisions, and other services.

Data

- **Difficulties expanding data fields within the current mainframe system** – The data collected by these systems is vital to properly pay UI benefits, is used by the DOR and DCBS to collect taxes, and is used by many other agencies to validate program eligibility and measure program effectiveness. The fields were designed with a fixed length that met the needs of the agency when the system was developed. Because key systems are reaching maximum capacity, it poses a critical risk staying on our current platform without modernizing our architecture.

  Current field lengths do not easily allow new or expanded employer payroll or individual wage data to be captured. The effort to expand data fields in the existing system would be significant, as multiple files, screens, and processes would need to be modified. It is expected that an effort of this kind would consume all the current mainframe resources for multiple years. For instance, a request a few years ago to modify the wage system would have required phases over a three to five year period; ultimately, we decided not to modify the wage system due to time constraints.

  As another example, our system only allows three digits in the dollar amount for benefit checks. During the pandemic with some of the additional benefit programs, there were weekly benefit payments exceeding $999. This meant issuing multiple checks for each week of benefits, an inconvenience for claimants and an administrative expense for the department.

- **Current systems have limited ad-hoc reporting and data query capabilities** – For instance, data retrieval from iMatchSkills, the employment services system, often requires technical assistance.

- **Needed information can be difficult or impossible to extract** – It is difficult for us to report on unemployment insurance financial information, such as liquidated and delinquent debt reporting, to

state stakeholders because data within our current systems is not easily accessible or available in the formats needed to support these data requests. Also, if information is saved as a comment in the source system rather than in a data field, analytics can be difficult to perform.

Technology

- **Impact of system failure to Oregonians and Oregon businesses –** The systems that support unemployment insurance and workforce business functions are decades old and rely on a myriad of disparate, aging software applications and databases that are increasingly difficult and costly to maintain. If these systems fail, it would significantly impact our ability to pay unemployment insurance benefits to Oregonians and deliver employment services.

  Even though systems largely remained functional in 2020, we were limited in our ability to assist claimants due to the unavailability of systems during the nightly batch process that integrates updated information coming from external sources. Additionally, the absence of online self-service and mobile-friendly options resulted in an inundated phone system and unprecedented amount of physical mail applications being processed in the months following the passage of the CARES Act in response to the COVID-19 pandemic.

- **Loss of institutional knowledge as Information Technology (IT) staff retire –** As of December 2021, 18 percent of the technical employees supporting our existing systems are eligible for retirement with an additional 19 percent eligible for retirement within five years. Our employees are extremely knowledgeable of the current systems and legacy programming languages. However, the ability to recruit and retain IT staff with the required skill sets is becoming progressively harder, as those programming languages are no longer widely taught. Furthermore, vendors or new hires who know legacy programming languages will not have the internal knowledge of our current systems and business requirements to efficiently assist with modification work.

  After the passage of the CARES Act on March 27, 2020, additional resources were needed to implement multiple new programs including the Federal Pandemic Unemployment Compensation, Pandemic Unemployment Assistance, Pandemic Emergency Unemployment Compensation, and Mixed Earner Unemployment Compensation. Unfortunately, to provide assistance, an individual would have needed both COBOL coding knowledge and the contextual knowledge of how to efficiently modify our aging computer system. Our only recourse was to convince former employees to come out of retirement to provide assistance.

- **Inability to modify and improve systems in a timely manner –** As a result of current technology infrastructure limitations and time spent maintaining current systems, we have been unable to implement desired enhancements. Even seemingly minor program changes are complex, lengthy, and expensive to implement, and present a risk of introducing errors in the "spider web" of sub-programs that exist today. There are also major challenges when it becomes necessary to increase system capacity to handle higher claims levels, as a number of components must be expanded rapidly and in unison. The COVID-19 pandemic has further underscored the need for an unemployment system that can be rapidly scaled and modified to support new and changed programs, and that provides an easy-to-use system for people to seek and learn about their benefits.

- **Inability to accommodate legislative changes –** The services we provide to our customers are regulated and guided by federal and state policies, which can frequently change. Due to the limitations of our current legacy systems, such as the limited ability to add or expand data fields, we have either had to greatly modify, or deny completely, legislative requests for service or program changes that impacted these systems.

  One example is the statewide transit tax authorized by the legislature in 2017. As part of the bill review and fiscal impact process during the 2017 legislative session, the OED was asked to estimate what it

would cost to collect that information via the Form OQ (Oregon Quarterly Tax Report) in order for employers to pay for their portion of the tax. However, to accommodate the new payroll tax (similar to how we collect TriMet and Lane Transit District taxes) the entire Form OQ would have had to be redesigned. This would have necessitated a change to our scanner software, quarterly reporting applications, and subsequent changes at the DOR and DCBS because of the combined reporting relationship. These changes were estimated to cost between $500,000 and $700,000, and take a minimum of 12 to 18 months to complete. Ultimately, the decision was to have the DOR collect the tax in a standalone process with a new form to ensure the implementation deadline was met. This result impacted the business community as employers have to file reports with two agencies. Through the UI Modernization Project, in partnership with the DOR, the statewide transportation tax will be incorporated into the Form OQ filing along with the new PFMLI contributions and the other existing programs.

Another more recent example is the temporary waiver of the waiting week. On April 15, 2020, Governor Brown committed to waiving the waiting week that is deeply rooted in the administration of unemployment benefits. While committing to waive the waiting week, the governor acknowledged in an April 15, 2020 letter to Oregon's Congressional delegation that "As you know, the department operates an older UI system, and it will take thousands of hours of programming to make this change." The department started making waiting week payments months later in November 2020. Moreover, the implementation of new legislative extension programs during the pandemic recession took weeks and even months in some situations.

- **Security limitations –** To deliver the necessary level of security we have had to build external or peripheral security and access programs, which makes it difficult to control and appropriately manage and monitor user access. The lack of security integration challenges our ability to easily share program data or provide access. Not all activities capture the identity of the user that performed that action, making audits difficult to perform. Access review or investigation is conducted through manual review making it difficult to respond to ever-changing security threats.

OPPORTUNITIES

Modernizing our core information technology systems and business processes will ensure we can continue to provide services to Oregonians and Oregon businesses today, and be prepared to respond to emerging future needs. Postponing the modernization effort and continuing use of legacy systems increases the severity of and exposure to risks affecting our ability to deliver key services.

Service

- **Enhanced customer experience –** By modernizing our systems and processes, the agency will improve integration across lines of business, increase the self-service options available to customers, and offer customers improved access to information. Customer enhancements (e.g., mobile access, multiple languages, phone system integration, 24x7 accessibility, and real-time updates) will improve our ability to connect with and provide services to customers in ways they expect or desire. Additionally, incorporating PFMLI in the UI Modernization Project will increase the ability of the agency to serve customers. All combined quarterly payroll reports can be filed as part of one system, one form, and one process. Similarly, by having one system to support both programs, employers will be presented with a more consistent, seamless experience while performing other functions such as employer registrations and account maintenance.

Business Processes

- **Operational efficiencies –** Improvements through process reengineering, addition of customer self-service functionality, and thoughtful automation of identified tasks can free up staff time for more value-added, impactful services. The time and resources saved can be repurposed toward improving the

timeliness with which we can serve the public. We can also repurpose resources toward improving the services we provide to our customers, increasing investigation activity to discover and reduce overpayments, and collecting debts owed to the state. These activities can bring financial benefits, as the ability to assist claimants in finding employment more quickly and every dollar recovered increases the health of the Unemployment Insurance Trust Fund.

- **Increased ability to respond to economic cycles and changes in demand for services –** Operational efficiencies gained through modernization will improve our ability to respond to fluctuations in demand, such as increased workloads during recessions. As depicted in Figure 1, demand for our services intensified during the past two recessions. To handle the sharp increase in UI claims and to accommodate unemployment extensions, additional staff were hired and processes were adjusted. However, current processes and systems make it difficult to train new employees and provide timely services to customers.

  The ability to more quickly update our processes to accommodate extensions or other programmatic changes during economic cycles will reduce the risk of unintended consequences such as higher UI overpayments. With modern systems, training times may be reduced for new staff, thus allowing the agency to adapt more quickly to changing economic cycles. Also having one system to support UI and PFMLI could decrease the amount of resources spent on training (e.g., system training material can be shared across programs) and staff supporting either program would be familiar with the system and better able to transition from one program to another. Finally, as we can never predict the certainty of our federal funding sources, the efficiencies resulting from modernization would help mitigate the effects of federal funding reductions.

Data

- **Improved data accuracy and availability for the agency, our customers, and our partners –** Business processes rely on data transfers between unemployment insurance and employment services systems, as well as with external partners. Replacing core systems allows us to improve the quality, accuracy, availability, and security of the agency's data and data exchanges, as well as the ability to collect data historically not available.

  o Any improvements to the wage system that improve the accuracy of the data, or reduce the number of records in the suspense or questionable wage files, will benefit the OED (e.g. fewer "blocked claims" that can delay benefit payments, reduction in improper payment rate, reduction in claim redeterminations, improved accessibility and accuracy of data for labor market information) and many of our partners that rely on the data for recovery efforts or eligibility determination.

  o Federal, state, and local workforce organizations share the strategic goal of integrating services across agencies. The OED works closely with the Higher Education Coordinating Commission and the state's nine Local Workforce Development Boards to improve outcomes for job seekers. In cooperation with our partners we have developed agreements to define roles and responsibilities, workflow, and shared performance measures as required by the federal Workforce Innovation and Opportunity Act. A common sign-on and the ability to share data are goals of the state workforce plan; these goals cannot be achieved until new technology is adopted.

- **Automation of reporting functions –** We are required to submit several reports informing state and federal officials of program activity and compliance with performance goals. The frequency of these reports ranges from weekly to annually, and some require multiple data queries, hand calculations, and manual data entry to complete. Failure to submit these reports in a timely manner could compromise our ability to govern programs and jeopardize agency funding. Automating, or partially automating, manual reporting functions and improving the collection and formatting of required data, could reduce staff time preparing these reports. Infrastructure and data storage costs will also be evaluated as projects are chartered and solutions identified.

Technology

- **Risk mitigation** – A key benefit of modernizing the agency's system and processes is the elimination or mitigation of the risks associated with the current systems and processes that are necessary to sustain delivery of secure and reliable services. As previously noted, a significant percentage of technical staff supporting current systems are approaching retirement and it's increasingly difficult finding employees with the skillsets needed to support legacy systems. In addition, we look to improve security by having fewer systems for which to maintain access and security rights, and improve integrity by providing more robust auditing capabilities.

- **Flexible and scalable systems** – Though modernizing our legacy systems is not a financially-driven, cost-savings effort, the ability to more easily maintain, adapt, and expand the future system will bring benefits to our customers, partners, and staff. Often the costs and resources required to modify the UI systems exceed the benefits, as most major modifications are a heavy lift due to the complexity of the programming and expertise required. Even something that appears to be a simple change requires significant expense of time and resources. For instance, changing an identification field from numeric to alpha-numeric, necessary to allow us to continuing issuing garnishments for our debt collection programs, required 1,400 hours. Modern systems will increase our ability to implement system enhancements to meet customer expectations and comply with new program requirements arising from federal or state legislation.

- **Improved security** – Modern systems offer more robust security features to prevent unauthorized access to information, as well as more intuitive and convenient means for access management. Additionally, having one system to support UI and PFMLI will help simplify our technology environment and improve security as there would be fewer separate accounts, fewer applications to monitor and patch, and fewer potential attack or breach points.

MODERNIZATION BACKGROUND

In 2015, the OED chose to invest in a modernization initiative to transform the agency's business and technology systems to innovatively meet the evolving needs of Oregon's businesses and citizens. During the 2015-17 biennium, we submitted Policy Package 101 requesting the expenditure limitation and position authority to initiate the Modernization Program.

In November 2016, we contracted with the Information Technology Support Center to conduct a feasibility study of transforming the agency's business processes and technology systems. The feasibility study expanded our knowledge of available market solutions and other states' modernization projects. This information has been helpful in constructing program plans, identifying the agency's preferences, and providing documentation as the first project is initiated. The feasibility study was completed in January 2018.

In 2017, we developed an initial business case describing the business needs, benefits, and justification for the Modernization Program. The Modernization Program Business Case V1.0 describes the business drivers, desired outcomes, and strategic alignment with the agency's strategic plan, the Governor's priorities, as well as other state priorities and initiatives.

Additionally, EIS requires statewide projects meeting established thresholds be subject to a Stage Gate review process. The Modernization Program submitted its business case and foundational documents and requested Stage Gate 1 endorsement. Endorsement was received in January 2018, and the program entered into Stage 2 focused on formal initiation of the program.

Following completion of the 2018 feasibility study and receipt of Stage 1 endorsement, we chose to focus initial efforts on modernization of the UI program beginning with UI tax. Preferring to pursue an integrated UI solution for both tax and benefits, we initiated a single UI modernization project with phases for tax and benefits. Throughout 2018 we completed the Modernization Program preparation activities and drafted the foundational documents to initiate the UI Modernization Project.

The UI Modernization Project was chartered in December of 2018, followed by the completion of the project business case and alternatives analysis. Receipt of EIS Stage Gate 2 endorsement in February 2019 moved the project into the planning phase.

During the planning phase of the UI Modernization Project, business and technical requirements were developed for the UI Solution Vendor procurement. The request for proposal (RFP) was released in August 2019 and the procurement process, which was impacted by the pandemic in 2020 and 2021, extended through the following twenty months.

In 2019, the Legislature passed HB 2005 (codified as ORS chapter 657B) to establish a PFMLI program and assigned the OED the responsibility to create and administer the new program. In 2021, while the UI Solution Vendor contract was being negotiated, agency leadership decided the best way to serve Oregon employers and businesses is to have a single system that supports both UI taxes and PFMLI contributions. Accordingly, the agency expanded the scope of the Modernization Program to include PFMLI contributions and, at the same time, expanded the UI Modernization Project to include PFMLI contributions technology infrastructure and to implement business processes and technical solutions that meet the agency needs for administering this new program along with UI tax. The Solution Vendor contract was negotiated to include the expanded scope before being finalized in April 2021. Later in 2021, the agency decided to add PFMLI benefits technology components to the Modernization Program and UI Modernization Project.

PROGRAM BUDGET

The Modernization Program is funded by unemployment insurance funds and other revenues available to the agency.

Specific one-time unemployment insurance funds were distributed by the U.S. Department of Labor in 2009. They are often referred to as Modernization Funds and reside in the Unemployment Insurance Trust Fund. Total modernization funds received amounted to $85,574,641. These funds were made available to the state under section 903(f) of the Social Security Act (42 U.S. C. 1103(f)) to be used for purposes of administering unemployment compensation law and public employment offices, and for debt service and capital improvements. The U.S. DOL issued guidelines on how this money may be spent as authorized in Section 903(c)(2) of the Social Security Act and 20 CFR Parts 652 and 667, which includes use for application development and other technology that support modernization of unemployment insurance and employment service delivery.

The OED has other funds that may be used for the Modernization Program and projects, where available and advantageous for long-term funding purposes and as allowed or required by state or federal law. Existing Other Funds sources include: Supplemental Employment Department Administration Fund (SEDAF), penalty and interest (P&I) collected from employers, penalty and interest collected from Unemployment Insurance benefit overpayments (Fraud Control Funds), and Federal Trade Act administration Funds.

The use of OED revenues for the Modernization Program will be based on agency priorities for both fund use and operating capital balances. Available SEDAF funds are planned to be used first for the Modernization Program and project teams, and the Workforce Modernization Project. The UI Modernization Project will use P&I funds when available and then available SEDAF funds when P&I funds not available. Modernization Funds are planned to be used for vendor costs and for all other expenditures when SEDAF and P&I are not available. The use of SEDAF and P&I will take into account the agency's desired operating capital balance. If the operating capital balance is insufficient, then Modernization Funds may be used primarily. If circumstances change or decisions are made to utilize funds available to the agency differently, the Modernization Budget Plan will be updated as needed to reflect those changes. If additional funding is needed for modernization activities, other sources of revenue must be identified, approved, and allocated.

The OED made the decision to include the PFMLI technology needs as part of the Modernization Program scope. The agency has developed an allocation model to determine the costs that should be charged to each program benefiting from the UI Modernization Project. The costs for PFMLI will be paid for using employer and employee contributions paid into the PFMLI fund. Prior to the collection of contributions, PFMLI costs will be paid through a loan from the General Fund that will be repaid once PFMLI contributions are being collected. Other funds may be used where available and advantageous for agency long-term business and program funding purposes, and as allowed or required by state or federal law.

PROGRAM GOALS AND OBJECTIVES

The primary goals for the Modernization Program are listed below. These goals and supporting objectives will be achieved through execution of various projects. As projects are initiated, the relevant objectives and supporting metrics will be included within the project charters.

Goal 1: Enhance customer experience. Deliver improved services, such as online self-service, automation, access to data, and integration with partners.

Supporting objectives

- Improve customer satisfaction
- New online service options
- Improve service availability through mobile applications

- Increase access to timely and accurate data for customers
- Create additional data elements that address missing data points
- Seamless service delivery with our partners

Supporting performance metrics

Workforce Operations Division

- Increase in percentage of employers using the job posting services (i.e., market penetration)
- Increase in customer satisfaction with availability of information
- Increase in returning system users

Unemployment Insurance Division – Tax

- Increase in percentage of employers utilizing online reporting methods
- Decrease in timeframe for status determinations
- Decrease in timeline to respond to stakeholder requests

Unemployment Insurance Division – Benefits

- Decrease in average adjudication timeline
- Increase in percentage of online claim filing
- Decrease in overpayment rate

Goal 2: Transform business processes. Leverage modern system capabilities to provide improvements and efficiencies in business processes, deliver new tools for our employees, and support more effective service delivery to our customers.

Supporting objectives

- Improve state, federal, and other internal key performance outcomes and metrics long term
- Minimize process pain points
- Automate repeated manual processes and reporting that do not require human judgment
- Fulfill business requirements

Supporting performance metrics

- Improve applicable state, federal, and internal performance metrics
- Eliminate prioritized pain points
- Increase the number of automated processes
- Reduce manual work to develop mandated reports
- Business requirements met or exceeded

Goal 3: Improve data security. Improve our ability to anticipate and respond to data security threats and manage access.

Supporting objectives

- Improve the extensibility and flexibility of access control administration
- Implement comprehensive audit logs
- Comply with all applicable regulatory security standards

Supporting performance metrics

- Decrease average timeframes to process access requests
- Reduce security-related audit findings
- Implement role-based access for all new system solutions

- Implement access that follows the principal of least privilege

Goal 4: Modernize technology. Replace the agency's aging computer systems that support unemployment insurance taxes, payment of benefits, and delivery of employment services.

Supporting objectives

- Replace in-scope systems and functions
- Replace in-scope interfaces
- Deliver flexible and sustainable systems
- Deliver technical requirements

Supporting performance metrics

- Replace and decommission in-scope legacy systems
- Replace in-scope interfaces and data transfers
- Deliver technical requirements
- Reduce the number of systems and interfaces within the agency's technical architecture

Goal 5: Provide expandable technology. Deliver a system capable of supporting new programs and functionality needs.

Supporting objectives

- Deliver system solutions that can be leveraged for new programs' technology needs
- Promote system standards that provide opportunity to support new and expanded functionality needs of agency programs
- Promote employer buy-in and compliance by delivering systems and processes that take into consideration input and feedback of agency customers and stakeholders
- Deliver systems that provide equitable access for Black, Indigenous and other people of color, low-wage workers, people with disabilities, and currently and historically excluded workers and employers based on ongoing identification of gaps and opportunities
- Establish systems and processes that support the administration of agency programs in a way that is customer-focused, cost-conscious, and sustainable

Supporting performance metrics

Paid Family and Medical Leave Insurance Division

- Number of new programs or functionalities supported
- Customer usage and compliance metrics improve over time
- Increased customer satisfaction for all customer groups
- Increased usage, compliance, and customer satisfaction among targeted populations
- Program timeliness, quality, and financial performance metrics improve over time

STRATEGIC ALIGNMENT

The Modernization Program is a pivotal strategic investment for the agency. Investing in the transformation of our business and technology processes will demonstrate that we are fully engaged in the 2019-2025 Oregon Employment Department Strategic Plan.

- Goal 1: Continually advance our partnerships and systems to provide innovative services to Oregon's diverse people and businesses.

- Goal 2: Engage with communities across the state to maximize awareness and use of public workforce resources.

- Goal 3: Foster an inclusive and fair work environment where employees feel valued and supported in reaching their full potential.

- Goal 4: Invite and retain talented, diverse people to help us exceed our customers' expectations.

Each strategic plan goal is combined with outcomes which harmonize with the overall vision, mission, and values. The efforts of Modernization align with and will help the agency achieve several of these goals and related outcomes.

The Modernization Program aligns with broader statewide priorities and initiatives. The unemployment insurance and employment services programs support the Governor's priority of A *Thriving Statewide Economy* and Future Ready Oregon initiative, helping to close the gap between the skills that Oregon's workers have and the skills that Oregon's growing businesses need. Unemployment insurance and employment services help provide financial stability to unemployed individuals and their communities, and help connect job seekers with employers in their communities. Modernizing our systems and processes, and establishing the PFMLI program, enables the agency to continue providing, and improve, our core services. Furthermore, the agency seeks to broaden access – allowing Oregonians and Oregon businesses to interact with the agency in the format of their choosing – that results in equitable outcomes and systems that are easy to use particularly for those in traditionally underserved populations. This includes improving self-service capabilities and making services more accessible and integrated, supporting both our customers and service-delivery partners.

Prior versions of the business case noted the alignment of the Modernization Program with the 2017-2022 Enterprise Information Resource Management (EIRM) Strategy, specifically:

- "Goal 3: Data Utility" by improving the accessibility and security of our data, as well as the flexibility to capture new data, to improve our ability to use data as a strategic asset benefiting our customers and partners; and

- "Goal 5: Capacity Management" by reducing the risks associated with our legacy systems, improving service delivery, and enhancing the ability to adapt and expand system for future needs through thoughtful and strategic planning.

The Modernization Program continues to align with EIS strategic goals, as noted in the 2020-2023 Strategic Framework as the program looks to implement reliable and user-friendly core technology systems and specifically supports Objective 2 - Establish Legacy System Modernization Strategy.

FEASIBILITY STUDY

In November 2016, we contracted with the Information Technology Support Center (ITSC) to conduct a feasibility study. The ITSC is a non-profit organization housed in the National Association of State Workforce Agencies, funded largely by grants from the U.S. DOL, and governed by state unemployment insurance and workforce leaders. The ITSC has worked with other states on their modernization efforts and is knowledgeable of unemployment insurance models and practices nationwide, including costs, risks and schedules of modernization efforts.

Key deliverables from the feasibility study included:

- Current state analysis to understand the "as is" state and desired improvements;

- High-level business and technical requirements;

- Gap analysis to help identify the gap between what we have, what we want, and what's available;

- Market research and alternatives analysis to determine which solutions already exist that could be best leveraged to fit our needs;

- Strategic planning for modernization, outlining potential timelines and sequencing scenarios, success factors, costs, risks, benefits, and lessons learned based on other states' modernization projects; and
- Readiness assessment based on the activities conducted during the feasibility study and focused on the various organizational and staffing facets of the Employment Department.

To complete these deliverables, the following activities were conducted:

- **Business needs assessment.** ITSC and agency staff conducted interviews and work sessions to develop "as-is" documentation for 50 functional areas within the agency. ITSC staff also job-shadowed agency staff to gather requirements for major agency processes.

- **System functionality and technical assessment.** ITSC staff conducted interviews with agency technical staff and managers to discuss the primary systems anticipated to be in scope for the modernization effort, and to collect, review, and analyze agency documentation describing current technology platforms. Note that the system functionality was included as part of the business needs assessment.

- **Gap assessment.** Agency employees attended 20 webinar demonstrations of other states' unemployment insurance or employment services systems to better understand the available options, functionality, and capabilities. Surveys were conducted after these demonstrations to gather agency staff feedback on new functionality desired for future systems. This information was provided to the ITSC for their gap assessment. ITSC staff utilized the information gathered from demonstrations and business needs assessment to develop baseline requirements. Agency staff worked with the vendor to categorize and rank these requirements.

  ITSC staff met with agency leadership to review the gap assessment, highlight high-level considerations on schedule and budget, and gather preferences on implementation approach, sequencing, intellectual property ownership, and maintenance and support. This activity was performed as part of the work on the strategic planning deliverable.

- **Market assessment.** Agency and ITSC staff traveled to six selected states – Idaho, Kentucky, Michigan, Mississippi, New Mexico, and Tennessee – to learn about the development and implementation approaches of unemployment insurance and employment services systems already working in other states. During the visits, states shared valuable lessons learned around project management, change management, communication, system implementation, system functionality, and ongoing maintenance and support. The gathered lessons learned were incorporated into further planning for the Modernization Program.

- **Strategic planning for agency modernization.** The ITSC met with agency leadership to discuss development approaches, possible timelines, costs, and technical preferences. The ITSC utilized this information, as well as information gathered from previous activities, to produce an overview of paths to modernization and an assessment of agency readiness to embark upon its modernization program.

Participation of employees from all sections of the agency was invaluable throughout the feasibility study. Not only did we gather input on current processes from employees whose work will need to be supported by any new system we might implement, but the activities broadened our perspectives of possibilities for the future. The lessons learned from the site visits and communications with the ITSC highlighted the type and amount of work that will be required throughout modernization from planning to system maintenance and support.

The Modernization Program achieved several successes during the feasibility study that concluded January 2018. The webinars and site visits expanded our knowledge of available market solutions and how other states resourced and approached their modernization projects. This information has been useful as we construct program plans and identify our preferred implementation approach. The current-state assessments and high-level requirements were useful starting points for the creation of requirements for the UI Solution RFP.

MARKET ANALYSIS

Oregon is not unique in its unemployment insurance and employment services modernization effort as states across the nation have replaced, or are replacing, aged mainframe systems and leveraging new technologies to better meet customer needs. These projects have expanded the available market options for replacing core systems. Analyses of and conversations with these other states has provided information on costs, risks, benefits, and best practices that have been useful for the UI Project and will be leveraged again when we plan and initiate the workforce project.

Based on information gathered from the feasibility study, below is a list of the alternative solutions, for both unemployment insurance and employment services systems, along with the baseline of maintaining the existing environment.

Maintain the Status Quo – Maintain the current state and continue use of existing unemployment insurance and employment services systems and processes. While this alternative is not preferred nor recommended, current and projected benefits, risks, and costs will be considered for comparison with other alternatives.

Custom Development – Design, develop, and implement a system that meets the OED's needs. This could be developed in-house with staff augmentation, or in collaboration with a vendor. This approach may also involve "refactoring" existing applications to retain existing business rules, while upgrading the underlying architecture.

Commercial off-the-Shelf (COTS) System – Procure a COTS product that best meets the OED's needs and has been successfully implemented in another state.

Transfer or Framework System – Leverage another state's proven system, and modify and supplement that system to meet OED's specific statutes, policies, and requirements.

Each of the alternatives have varying costs, benefits, and risks based on the vendor, functionalities desired, quantity and quality of migrated data, and amount of customization required among other items. Other factors to be evaluated include sequencing of systems and applications to be replaced, and the interoperability of systems, or how they will interface and exchange data without creating an adverse impact to service delivery or other programs.

The feasibility study and the state site visits provided examples of system costs and timelines associated with the different approaches (represented in Figure 3). These activities confirmed our assumption that "if you've seen one state, you've seen one state," meaning that each state's path to modernization was somewhat unique, as reflected in the cost and timeline ranges. Even though unemployment insurance and employment services programs are guided by federal policy, each state has different business rules, policies, and organizational structures for the delivery of services. Therefore, available systems will not be an exact match to Oregon's needs, and any system solution leveraged from another state (e.g. transfer, consortium) would require significant modifications.

Figure 3 – System Development Costs and Timelines (based on the feasibility study)[2]

System	Vendor Development Costs	Maintenance and Support Costs (Annually)	Implementation Timeline
Unemployment Insurance Benefits	$10 - $23 million	$2 - $4 million	2 - 3 years
Unemployment Insurance Tax	$4 - $27 million	$2 - $3 million	1 ½ - 2 years
Employment Services	$0.6 - $3.5 million	$0.2 - $3 million	1 - 2 years

Other project expenses, such as internal staffing, facilities, infrastructure, training, quality assurance, and other vendor services, will need to be considered as well. ITSC estimated non-vendor costs are about 40 to 66 percent of the vendor costs.

When considering total cost of ownership, it's important to evaluate the costs for ongoing maintenance and support. As we learned from the feasibility study and state site visits, some states initially struggled transitioning to a sustainable, long-term operational maintenance and support environment. Most states have planned and pursued a vendor-supported model or a shared model where vendor resources are used to augment in-house technical staff.

Maintain the Status Quo

Maintain and continue use of existing unemployment insurance and employment services systems. While this alternative is not recommended, current and projected performance metrics and costs will be considered for comparison with other alternatives and evaluation of the potential return on investment.

Benefits

- Agency staff are familiar with existing unemployment insurance and employment services systems and processes.
- No, or minimal, disruptions to service delivery.

Risks

- Existing systems do not meet our customers', partners', or stakeholders' expectations.
- It is increasingly costly and difficult to maintain and modify systems. Also as more time is spent maintaining the current systems, fewer resources are available to expand and improve the systems.
- We are unable to expand current UI systems in a cost efficient manner to meet new federal or state requirements.
- Current systems preserve known, and create new, inefficiencies and pain points in business processes.
- Staff with technical knowledge are approaching retirement, and it's difficult to hire staff with the needed technical knowledge, such as expertise in COBOL. Additionally, it can take a large amount of time to bring new hires up to speed on the system architecture and business processes.

Custom Development

Design, develop, and implement a system that meets the OED's needs. This could be developed in-house with staff augmentation, or in collaboration with a vendor. This approach may also involve "refactoring" existing applications to retain existing business rules, but upgrading the underlying architecture.

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[2] After the completion of the feasibility study we completed additional research and information gathering. These costs have been refined to reflect this additional information (see *Alternatives Analysis* section below).

Benefits

- Ability to control development process and project methodology.
- System is designed to specifically meet the agency's goals and needs.
- Ability to fully control maintenance, support, and upgrades. This includes the ability to maintain and support the system in-house, outsource support to a vendor selected through a competitive procurement process, or pursue a hybrid model that best utilizes insourced and outsourced resources.
- Agency only pays for functionality that is needed.

Risks

- Most complex of the development approaches, with the potential for longer project durations and increased costs.
- The OED lacks the technical staff capacity and expertise to design and build a system from scratch in a modern programming language, thus requiring heavy staff augmentation. Also, as learned during the feasibility study, states that have pursued custom approaches have needed to contract with vendors for technical resources.
- Keeping the new solution modern would involve additional major IT projects, compared with implementing updates developed by a vendor.
- Benefits from business process reengineering may not be fully realized.
- Inefficiency of time and resources spent designing and building components that already exist on the market, i.e. "reinventing the wheel."
- Unless maintenance and support is outsourced, requires the agency to recruit, hire, and retain sufficient technical staffing. This includes keeping employees' skills and qualifications up to date.
- Challenges with developing and implementing system changes or upgrades in a timely manner.
- All potential risk is assumed by the agency.

Commercial Off-the-Shelf (COTS) System

Purchase a commercial off-the-shelf (COTS) product that best meets the OED's needs and has been successfully implemented in another state. COTS products are commercially available software designed for specific applications that can be used with little or no customization beyond agency specific configuration. As realized from the feasibility study, the availability of configurable COTS, or COTS-like, unemployment insurance and employment services solutions has expanded over the years as more states have modernized.

Benefits

- Ability to leverage an existing, proven solution that can shorten the development and implementation timeline.
- Provides a collection of reusable functional assets and components; potentially providing the precise fit promised by custom development without having to "start from scratch."
- Allows flexibility through component configuration, though the degree of configuration varies by vendor.
- Partnership with vendor allows for continual improvement (e.g. version upgrades and service packs) and access to national experiences and practices. There is also the potential to collaborate with other states using the same system to share ideas, questions, and potential enhancements.
- Vendor maintains the system to reflect federal legislative and policy changes as well as major technology updates.
- Provides a predefined overall architecture in terms of its composition and interaction of its components.

- Allows the agency to reengineer business processes to improve efficiencies based on processes built into these systems based on knowledge and experience of other states.
- Potential for a hybrid maintenance and support model that best utilizes in-house and vendor technical staff.
- Risk is shared with the vendor.

Risks

- Staff "buy in" and adjustment to the new system(s) and processes.
- Solution requires more configuration or customization than initially planned, increasing project schedule and costs.
- Vendor owns the core code, creating a long-term reliance on vendor for support, modifications, and upgrades. Also the agency's ability to accept and schedule system upgrades, whether major or minor, may be limited. Agency business continuity is dependent on vendor success and continued support of product and market.
- Integration with existing systems or other potential vendor systems.

Transfer or Framework System

Leverage another state's proven system and supplement that system to meet the OED's specific policies and requirements.

Benefits

- Ability to leverage an existing, proven solution that can shorten the development and implementation timeline compared to custom developments.
- Provides a collection of reusable functional assets and components, thus potentially providing the precise fit promised by custom development without having to "start from scratch."
- Provides a predefined overall architecture in terms of its composition and interaction of its components.
- Potential of significant productivity gains and cost savings with any "out-of-the-box" functionality offered within the framework.
- Potential to own the core code, thus providing the agency the ability to control maintenance, support, and upgrades.
- Depending on the maintenance and support model, partnership with the vendor or transfer state(s) allows for continual improvement and upgrades of common components or functionalities.

Risks

- Staff "buy in" and adjustment to the new system(s) and processes.
- The fit of the framework or transfer system is overestimated, creating development challenges such as increased customization, lengthened timelines, and additional costs.
- Extensive technical analysis is needed prior to implementation to determine the re-configurability of the architecture and solution, as well as how well it meets state's architectural needs and preferences.
- Integration with existing systems or other potential vendor systems.

ENTERPRISE ARCHITECTURE

Another key planning activity has been solidifying our knowledge of and documenting our current processes, systems, data exchanges, and interfaces. This work was principally facilitated internally, along with assistance from EIS. The agency leveraged these conversations and documents to identify our desired "future state" and architectural changes that must be made to achieve the desired outcomes.

Engagement with Enterprise Information Services

In May 2017, the OED began work with EIS through its former Enterprise Alignment Program to supplement work being performed by the ITSC. During this effort, we conducted visioning sessions that looked to answer the following questions: Where do we want to go? What do we want our future to look like? What problems would we like to solve?

As part of this process, current-state "customer journey maps" were created that provide a high-level visual representation of current processes, including identification of current pain points and system interactions. Additionally, business canvases were created for each business area that provide the context of "Why" we do "What" we do and for "Whom." The canvases reflect key business services, goals, metrics, and outcomes, and the resources and partners needed to deliver these services.

Additionally, the OED engaged with the EIS Chief Technology Officer to evaluate the current-state agency architecture with an Enterprise Architecture Assessment. Tasks for this assessment included mapping current business functions to system capabilities, modeling data flows and system relationships, and documenting technology and security standards. This assessment complements the business case and was submitted to EIS.

Workgroups

The Employment Department's Modernization Steering Committee authorized the formation of workgroups, with representatives throughout the agency, to gather and document information about our systems, data exchanges, and interfaces. The inventories created by these workgroups have been foundational in defining the scope of modernization and determining the impact on employees, customers, partners, and stakeholders.

- **Data and Systems Workgroup –** The purpose of this workgroup was to gather and document information about the agency's current systems and data shared with agency partners. The workgroup reviewed existing enterprise architecture documentation and ensured agency data and systems inventories were updated with needed information. This workgroup completed its tasks in March 2018.
- **Interfaces and Access Workgroup –** The purpose of this workgroup was to document information about our current interfaces with external partners and systems, as well as document entities that have direct access into OED systems.
- **Data Assessment Workgroup –** The purpose of this workgroup was to document all data sources and data flows used throughout the agency and maintained by our Information Technology Services section, as well as to craft a data strategy to guide agency decision making.
- **Process and Constraints Workgroup –** The purpose of this workgroup was to identify existing UI processes, customer inputs and outputs, and legal prescriptions which are either likely or necessary to change.
- **Legacy Planning Workgroup –** The purpose of the Legacy Planning Workgroup was to assess the impact to our existing IT infrastructure of modernizing UI tax.

PROJECT SELECTION AND ROADMAP

After the completion of the feasibility study and receipt of our Stage Gate 1 endorsement in January 2018, work was focused on initiating the Modernization Program, defining the goals and objectives for the program, and constructing program plans to guide future projects. In April 2018, we selected UI tax as the initial focus for modernization. To inform this decision, a workgroup comprised of representatives from key agency programs and functions was formed to analyze each program and bring a recommendation to the Modernization Steering Committee for decision.

The workgroup considered the following factors for each program—unemployment insurance tax, unemployment insurance benefits, and employment services:

- Readiness

- Complexity of programs in each area
- Strategic alignment with statewide initiatives and priorities
- Risk of delay
- Value to our customers and efficiencies to be gained
- External factors, such as a future recession or changes in law or policy

The workgroup presented their findings to the Modernization Steering Committee, who reached a unanimous decision that UI tax will be the first focus of our modernization efforts.

Some of the primary reasons for selecting UI tax as the initial focus area include:

- These systems contain the oldest components, with some dating back to 1985.

- This program collects approximately $2 billion in revenues per biennium that support the payment of benefits to unemployed workers and provide funding for many agency programs.

- Data collected by this program serves as the foundation for many of the agency's core business functions (economic research, unemployment insurance benefits, and employment services), as well as for some key external partners. However, we are currently unable to make many modifications requested by both internal and external partners due to the age and complexity of the current system.

- Many of the processes are manual and inefficient. There are opportunities to enhance the experience for our customers and improve processes and workflows for our employees.

- Unemployment insurance tax processes are well documented, and therefore, more readily converted into business requirements.

- Unemployment insurance tax systems provide extremely limited self-service options for our customers.

- The unemployment insurance tax system is essential to our good stewardship of the Unemployment Insurance Trust Fund on behalf of Oregon employers and the federal government.

As part of our feasibility study, agency preferences were identified and documented. One of these preferences is to pursue an integrated UI solution that supports both tax and benefits. While the decision was made to focus first on UI tax, the approach for procuring an integrated solution required defining scope and requirements for both UI tax and benefits. Our approach is a single UI project, with phases for tax and then benefits.

As of this version of the business case, two distinct projects are anticipated. A project focused on UI tax and benefits, recently expanded to include PFMLI contributions and benefits, will be initiated first, followed by a workforce project initiated as schedule concurrency and resource capacity are considered. Also additional projects may be necessary as scope and delivery options are evaluated.

Figure 4 – Program Timeline

Modernization Program
Projected Timeline

Revised: 12/2021
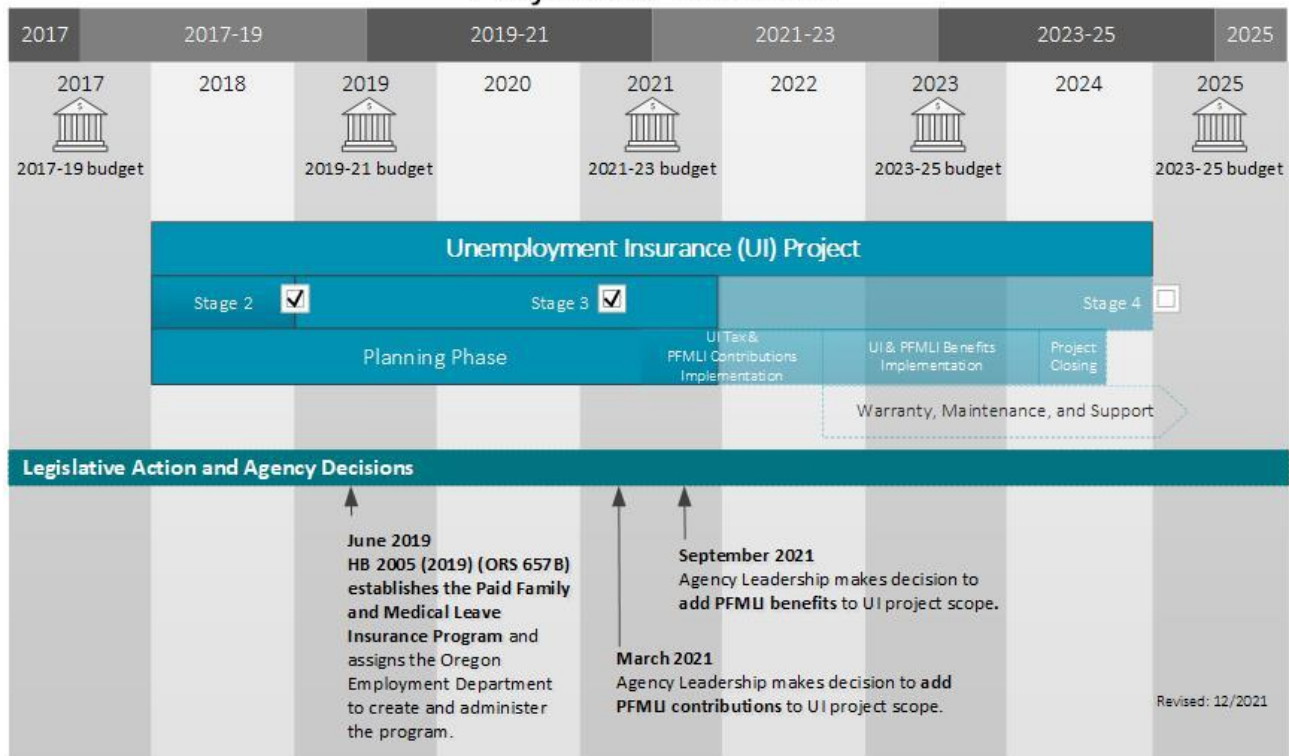
PREFERENCES

As the Employment Department moves forward with the Modernization Program and its associated projects, planning and decision-making are framed by the following preferences:

- **"Buy" not "build"** whenever possible, understanding that adjustments will be necessary to adapt any product to meet the agency's requirements.
- Select and implement an **integrated unemployment insurance** system that meets the required functionality for both benefits and tax programs.
- **Leverage existing solutions** and consider enterprise-level investments as a possible means to leverage capabilities and functions implemented by partner agencies.
- **Pursue customer-centric solution(s)** that can be scaled, maintained, and updated to evolve with technology.
- Mature an architecture that promotes future growth and configurability.
- Select a **maintenance and support model that utilizes a combination of internal and outsourced support**. Desire is for support to shift from greater reliance on contracted resources to internal staff over time.

APPROACH

The following principles will be incorporated into how the Modernization Program and its associated projects are managed:

- **Utilize an inclusive and participatory process** with representation from employees, key customers, partners, and stakeholders.
- **Learn from the experience of others**, seek best practices, and obtain lessons learned.
- **Follow project management standards, best practices, and oversight requirements** for all modernization projects.
- **Deliver incremental value early and often**, focused on highest value components first, and allow for iterative development that incorporates continuous input from business users as components are developed.
- **Continue to maintain and operate current systems through implementation** to minimize disruption of services to Oregonians and Oregon businesses.
- **Include communications and change management strategies** to engage and support employees through this significant transition.

The decision to initiate the unemployment insurance project with the first phase focused on unemployment insurance tax reflects the agency's desire to eliminate or minimize risks, improve services that rely on manual, inefficient processes, and enhance program data that significantly informs core service functions both internally and externally. Based on information gathered from the feasibility study and internal discussions, we decided to pursue an integrated unemployment insurance system including tax and benefit program functions.

SCOPE AND REQUIREMENTS

To define scope for the UI project, we utilized the system, data, and interface inventories completed by the workgroups noted in the Workgroups section. These inventories help document the size and impact of potential changes. We also leveraged work completed with the ITSC, EIS, and subsequent participation from employees, partners, customers, and other stakeholders. Analysis was then performed to identify the agency-supported systems that should be replaced with a new UI solution, those systems that are not in scope for replacement but will require changes or be impacted, and systems that will not be replaced and will not be impacted. Of the 100 plus agency-supported systems, over 30 of these are in scope for replacement with a new UI solution, and almost 60 will need to be adjusted to interface with a new solution.

Figure 5 – Unemployment Insurance Modernization Project Scope Measures[3]

Unemployment Insurance Modernization Project Scope Measures	
Legacy systems to be replaced	35 systems
Legacy systems impacted	59 systems
External data transfers	119 total
Internal data transfers	234 total
External system accesses	55 access points (24 stakeholders)
Mandatory reports	117 (64 state and federal reports | 53 financial reports)
Business requirements	1,572 business requirements
Technical requirements	196 technical requirements

The system relationships diagram in Appendix A provides a glimpse into the number and complexity of the agency's information technology systems, including databases and applications potentially in scope for the Modernization Program.

The agency is not modernizing its systems for the sole purpose of replacing systems. We are thoughtfully re-engineering core processes to improve how we deliver services and interact with our customers and partners. The business and technical requirements for an unemployment insurance solution must focus on the services we provide, rather than the current processes and systems. However, there are certain functional and non-functional requirements that must be met for the agency to conduct business. This includes ensuring compliance with federal (e.g. U.S. DOL) and state statutes, policies, regulations, and reporting requirements.

Primary business functions that must be supported by a new unemployment insurance solution include:

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[3] These scope measures reflect those identified in the UI Modernization Project Scope v3.0 document.

Unemployment Insurance Tax Functions

- **Employer Accounts:** Registration, Determination, Account Maintenance, Blocked Claims, Suspense, Closings
- **Accounting:** Cashiering, Accounting, Fund Accounting, Recovery
- **Wage Reporting:** Quarterly Reporting, Wage Records, Questionable Wages, Amended Reports
- **Audit:** Field Audit, Special Investigations, Suspense
- **Appeals:** Appeals Management, Schedule Resources, Supporting Documentation

Unemployment Insurance Benefits Functions

- **Claims:** Claim Intake, Monetary Eligibility, Weekly Claims, Additional Claim/Reopen, Benefit Payment, Benefit Charging, Charge Relief, Claim Redetermination, Special Claims
- **Issue Resolution:** Adjudication, Investigations, Overpayment, Recovery, Pre-appeal Review, Appeal Management
- **Administration:** Benefits Accuracy Measurement, Benefits Timeliness Quality, Federal Reporting, Management Reporting, Workload Forecasting, Financial Reporting

To identify the business requirements to support the required business functions and envisioned future state, we began with the draft requirements developed during the feasibility study with the ITSC. The Modernization business analysts reviewed and revised these draft requirements, considering best practices from other states, to arrange them in a revised template, and ensure the format and style of the requirements were consistent between UI tax and benefits. These draft requirements were used as a basis for the requirements workgroup to review and finalize. The agency contracted with a vendor, Elyon Enterprise Strategies, Inc. (Elyon), to facilitate the requirements work sessions and finalize the business and technical requirements for inclusion in a RFP; these requirements were finalized in 2019.

As we move forward, we continue to engage with our key partners – DCBS, DOR, and SOS – to assist us in developing our future state and to ensure that their needs are addressed for how we share data and connect between our agencies. Through these conservations we intend to validate our understanding of current processes and how we share data, and discuss how we can improve delivery of services to our common customers. We also plan to reach out to customers through our customer satisfaction survey to gather feedback on how we can improve their experience. These engagements will provide input on how we can structure the solution to improve services for our customers and partners.

Changes to the UI systems will impact the interfaces and data transfers that occur regularly with internal programs and systems not in scope for the UI project. Specifically, this includes systems that support the agency's employment services, research, and financial services divisions. For example, data from UI systems, such as employer wage records and weekly claims, are key inputs for federal-state research programs. To account for any impact on these systems and programs, scope will be tracked and monitored by the following components: systems, interfaces, reports, data transfers, external access rights, and requirements (both business and technical). The program's Scope Management Plan provides information on the processes involved in defining and managing scope and how scope will be monitored and reported for the modernization projects. The UI Modernization Project Scope document specifically identifies scope components and the scope baseline for the UI Modernization Project.

ALTERNATIVES IDENTIFICATION

Based on information gathered from the feasibility study and the agency's preferences, the alternatives under evaluation for the UI project are listed below. "Maintain the status quo" is included to establish a baseline against which the other alternatives can be compared.

- **Alternative 1 – Maintain the status quo (current state).** Maintain use of existing unemployment insurance systems.

- **Alternative 2 – Vendor solution.** Procure an unemployment insurance domain-specific solution, whether considered a commercial off-the-shelf or framework solution, that best meets the agency's needs and has been successfully implemented in another state.

- **Alternative 3 – Consortium.** Enter into an inter-state agreement to procure and leverage a shared unemployment insurance system. This could involve joining a current consortium or working with another state, or group of states, to form a consortium.

ALTERNATIVES EVALUATION CRITERIA

The following high-level criteria were identified to measure and analyze the different alternatives. These criteria differentiate the alternatives along the different phases from initial procurement and project risks to long-term maintenance and support.

- **Degree of Fit –** This criterion evaluates the extent to which the alternative meets the needs, such as the required business and technical functionality and preferences, of the OED.

- **Implementation Timeline Risks –** This criterion evaluates the potential timeline risks of each alternative. Considerations include the ease of implementation, estimated timeframe to deliver value to customer, length of timeline and the potential time needed to continue maintenance and operation of legacy systems, the ability to mitigate and/or manage risks, and whether or not the solution has been implemented in another state.

- **Project Risks –** This criterion evaluates the project risks, such as risks to resources and scope, of each alternative during the project phases (e.g., development, testing, training, etc.). Considerations include project governance, complexity, the ability to mitigate and/or manage risks, and whether or not the solution has been implemented in another state.

- **Long-term Support –** This criterion evaluates the ability of the agency to support and sustain the alternative after implementation. Considerations include the options (e.g., insource versus outsource, multiple tiers, etc.) for maintenance and support, governance model, stability, operational risks, opportunity risk and potential cost savings, and sustainability.

- **Degree of Flexibility –** The criterion evaluates the flexibility and expandability of the alternative after implementation. Considerations include business rule configurability, availability of additional functionality, and ease of upgrades and modifications (with or without vendor support) that support continual improvement in business processes and customer experiences.

- **Strategic Alignment –** This criterion evaluates how well each alternative aligns with the agency's goals and objectives, EIS strategy and goals, broader enterprise efforts and the ability to be leveraged across the enterprise, and alignment with federal policy and guidance.

- **Total Cost of Ownership –** The total cost of ownership is comprised of the initial system costs, implementation costs, and ongoing maintenance and support costs. These costs depend on factors such as the development methodology, vendor, amount of customization, modules or functionalities selected, level of integration, data migration, staffing needs, and the ongoing maintenance and support model.

ALTERNATIVES ANALYSIS

The evaluation of each alternative is based on information gathered from the feasibility study, market research, and information received from discussions with other states and partners. The criteria reflect the agency's preferences, goals, and the ability to deliver the best value for the state and our customers. As observed during

the feasibility study, all modern solutions offer benefits to customers, staff, and partners, and could provide the agency with the required functionality. The key is finding the solution that will provide the best fit, minimize risks, and offer the greatest benefit to our customers, partners, and staff.

Figure 6 provides a summary of the total estimated project costs for the vendor solution and consortium alternatives (see Appendix C for more detail). These estimates provide only an "order of magnitude" perspective that helped inform the path forward for procuring a new solution. The estimates helped identify potential cost elements and ranges to assist with the evaluation of each alternative. The estimates for the UI Modernization Project were developed using information gathered during the feasibility study and other market research. The agency must maintain and operate current systems through implementation to minimize disruption of services. Costs associated with maintaining the current operating environment will continue to be incurred until the new operational environment is normalized and in scope systems are replaced and decommissioned.

Figure 6 – Summary of Estimated Project Costs in Thousands (FY2018 – FY2025)[4]

(Cost estimates were prepared in January 2019. Updated costs estimates, reflecting vendor selection and PFMLI functions, are noted below.)

Estimated Project Costs - FY2018 to FY2025 ($ in 1,000s)	Vendor Solution		Consortium	
	Low	High	Low	High
Personal Services Costs (Salaries & Benefits)[5]				
Modernization Program Staff	(12,800.0)	(15,000.0)	(12,800.0)	(15,000.0)
UI Modernization Project Staff	(30,900.0)	(37,700.0)	(30,900.0)	(37,700.0)
Other Staff	(800.0)	(1,500.0)	(800.0)	(1,500.0)
Services & Supplies/Capital Outlay Costs				
Software Costs				
Software Purchase/Installation Services	(20,000.0)	(40,000.0)	(16,000.0)	(32,000.0)
Hardware Costs				
Hardware Purchase/Upgrade	(300.0)	(600.0)	(300.0)	(600.0)
Professional Services				
Independent Quality Management Services	(3,000.0)	(8,000.0)	(2,400.0)	(6,400.0)
Organizational Change Management Services	(2,200.0)	(3,700.0)	(2,200.0)	(3,700.0)
IT Professional Services	(2,300.0)	(3,800.0)	(2,300.0)	(3,800.0)
Other Contracted Services	(300.0)	(300.0)	(2,400.0)	(3,800.0)
Other				
Facilities	(4,500.0)	(5,400.0)	(4,500.0)	(5,400.0)
Travel	(100.0)	(150.0)	(400.0)	(700.0)
DAS/DOJ fees	(200.0)	(300.0)	(100.0)	(200.0)
Contingency	(3,400.0)	(6,800.0)	(3,100.0)	(6,100.0)
Total	(80,800.0)	(123,250.0)	(78,200.0)	(116,900.0)

As of 01/03/2019

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[4] Figure 6 does not include ongoing maintenance and support costs once the solutions are fully implemented. For the vendor solution alternative, annual software maintenance and support vendor costs were estimated to range from $3 to $6 million. For the consortium alternative, annual software maintenance and support vendor costs were estimated to range from $2 to $5 million.

[5] These figures were estimated with the assumption that staffing needs may change when we initiate planning with the solution vendor, understand their approach, and prepare for project implementation. The program's staff management

January 2019 Notes and Assumptions for Project Cost Estimates

- Costs are estimated from the 2017-19 biennium to the 2023-25 biennium to capture all phases of the project from initiation to closeout. Implementation of a new tax system will last approximately 18 months, with a projected go-live date in the first half of 2021. Implementation of a new benefits system will last approximately 24 months, with a projected go-live date near the end of fiscal year 2023.

- Cost estimates for the alternatives are based on the UI Modernization Project scope, and focus on what's going to change, or be replaced, as a result of implementing a new UI benefits and tax system.

- Estimates of project scope, schedule, budget, and resource needs are within a +/-50% margin, as is expected for Stage Gate 2.

Description of line items include:

- **Modernization Program Staff** – Comprised of agency employees with technical, project management, and business subject matter expertise. These employees will serve for the life of the Modernization Program and be involved in, or assist with, all modernization projects.

- **UI Modernization Project Staff** – Comprised of dedicated project managers, business analysts, technical staff, trainers, and expanded team members focused on the delivery and execution of the UI project. Included in the UI Modernization Project staffing costs are operational and administrative positions that will be brought onto the project team as expanded team members at various times to provide subject matter expertise, perform user-acceptance testing, and other activities; these will not be dedicated positions for the program or project. We anticipate that a number of project staff will stay onboard for up to 18 months after the UI benefits system goes live to support project closeout, stabilize and refine the system, and support the transition to ongoing maintenance, support, and operations.

- **Other Staff** – Includes UI program staff hired during the tax and benefits go-live phases to support the projected increase in calls and inquiries from claimants and employers, and to provide additional support for staff who are getting used to the system. In addition, because Oregon operates in a combined payroll tax environment, it will be important to evaluate the staff necessary for other agencies to modify their systems.

- **Software Purchase/Installation Services** – Includes initial software acquisition, or license, costs for the UI solution as well as the cost of vendor services for design, development, configuration, integration, and implementation.

- **Hardware Purchase/Upgrade** – Includes hardware for agency and project staff. As we learn more about the capabilities that vendors have to offer, an imaging project may be part of the UI Modernization Project or a separate project; the variance between the low and the high estimates is attributed to the potential cost of new scanners.

- **Independent Quality Management Services (iQMS)** – Vendor will be contracted to start prior to the solution vendor and is projected to continue services until three months after the full system implementation.

- **Organizational Change Management Services** – Vendor may be contracted to start prior to the solution vendor and will continue services up to six months after the full system implementation.

- **IT Professional Services** – Vendors may be utilized on projects (e.g., data cleanup, data conversion, interfaces to existing systems) when state staff do not possess the necessary skillsets for specific bodies of work, are not available (capacity constraints), or the services and/or expertise needed are of an

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plan provides further details on the staff management approach, planning and hiring strategies, and staff release and transition among other items. Appendix B provides additional information on program and project staffing.

urgent or temporary nature. This also could include payments to existing vendors to make system modifications. At the time of this cost analysis, the full extent of services potentially required was unknown until we gathered responses from a request for information and contracted a solution vendor.

- **Other Contracted Services** – Includes costs for the feasibility study vendor and requirements vendor. The consortium alternative includes a vendor to provide independent project management services for the consortium.

- **Facilities** – Includes build costs and rent for project space.

- **Travel** – Includes in-state and/or out-of-state travel costs. For the consortium alternative, this includes travel to other states in the consortium.

- For each alternative, **contingency funds**, calculated at 12.5 percent of the estimated total contracted costs, were added to the project costs.

Alternative 1 – Maintain the status quo (current state)

Maintain use of existing unemployment insurance systems.

To establish a baseline against which the other alternatives can be compared it's necessary to evaluate the current state of the agency's unemployment insurance systems and processes. The "status quo" alternative assumes the agency will maintain current systems and processes, with enhancements developed and implemented as needed to maintain compliance with state and federal policies. These estimates do not anticipate substantial future enhancements to legacy systems. Continuing with current systems significantly increases risks to being able to support our business needs into the future.

It costs roughly $8.5 million annually to maintain the current technical operating environments supporting unemployment insurance. This includes costs for agency staff, software, hardware, and IT professional services. It is expected these costs will continue to increase as it's becoming progressively harder to recruit and hire individuals with the required skillsets, and major modifications are challenging due to the complexity of the programming and needed expertise. If we were to maintain these systems at the current operating level, with no modifications or enhancements, over an eight-year period (the estimated timeframe for the project cost estimates) operating costs would total almost $70 million.

Figure 7 – Estimated Current Annual Operating Costs in Thousands

Estimated Annual Operating Costs ($ in 1,000s)	Status Quo (Current State)
Personal Services Costs (Salaries & Benefits)	
IT Staff	(3,500.0)
Non-IT Staff	(1,000.0)
Services & Supplies/Capital Outlay Costs	
State Data Center Costs	
DAS Data Processing Fee	(1,670.0)
Software Costs	
Software Maintenance and Support	(1,550.0)
Hardware Costs	
Hardware Ongoing Maintenance	(50.0)
Professional Services	
IT Professional Services	(660.0)
Total	(8,430.0)

As of 01/02/2019

Notes and assumptions for the cost estimates include:

- Estimates are based on January 2019 workload levels. At that time, we were in a period of low unemployment. The agency's workload follows a counter-cyclical pattern, increasing during economic downturns. A significant economic event will impact agency staffing and costs.

- Cost estimates are based on the UI Modernization Project scope, and focus on what's going to change, or be replaced, as a result of implementing a new UI benefits and tax system. Current-state cost estimates represent staffing and expenditures required to maintain and support current unemployment insurance systems as of January 2019, and do not include overhead costs or non-related IT staff or expenditures.

- **IT Staff (Legacy)** – 2017-19 IT section personal services budgets were used to compute IT staff costs, based on a unemployment insurance cost allocation percentage of approximately 40 percent of agency staffing.

- **Non-IT Staff** – Includes non-IT staff who spend an identified percentage of their time on IT-related duties, such as system maintenance and support and end-user support.

- **IT Professional Services** – Includes technical services contracted for programming support, system enhancements and modifications, and system maintenance. From 2015 to January 2019, approximately $2.7 million in professional services contracts were identified.

Figure 8 – Benefits and Risks of Status Quo Alternative

Benefits	Risks
- Agency business and technical staff are familiar with existing unemployment insurance systems and processes. - No, or minimal, disruptions to service delivery.	- Current systems do not meet our customers' and partners' expectations. - Current systems preserve known, and create new, inefficiencies and pain points in business processes. - Unable to expand current UI systems in a cost efficient or timely manner to meet new federal or state requirements, which require the program to request changes to pending legislation due, or cause impacts to partners due to our inability to fulfill the requests. - As more time is spent maintaining current systems, fewer resources are available for expansions or enhancements. - It's difficult to hire staff with the needed technical knowledge, such as expertise in COBOL, and as of December 2021, 18 percent of the technical employees supporting our existing systems are eligible for retirement with an additional 19 percent eligible for retirement within five years. - It can take a large amount of time to bring new employees up to speed on the system

Benefits	Risks
	architecture, usage, and business processes.

Alternative 2 – Vendor solution

Procure an unemployment insurance domain-specific solution, whether considered a commercial off-the-shelf or framework solution, that best meets the agency's needs and has been successfully implemented in another state.

This alternative involves procuring, through a RFP, an existing, commercially available unemployment insurance solution that is modified, configured, and developed to meet the agency's policies, procedures, and required functionality. As other states have modernized, or are looking to modernize, their unemployment benefits and tax systems, the number of potentially viable solution vendors has grown. Vendors that have worked with, or are working with, other states include, but not are limited to, Capgemini, Deloitte, Fast Enterprises, HCL America, Geographic Solutions, Netacent, On Point Technology, Tata Consulting Services (TCS), and Sagitec.

Total project cost for this approach was estimated to be approximately $80 to $123 million over an eight-year period (FY2018 to FY 2025). Besides the vendor costs for software acquisition and implementation services, this estimate includes costs associated with agency staffing, other software and hardware costs, iQMS, and organizational change management services. After implementation, vendor costs for ongoing maintenance and support is projected to range from $3 to $6 million annually. At the time of the analysis it was unknown how other long-term operating costs, such as agency business and technical staffing levels, would be impacted by this approach, as the maintenance and support models vary by vendor. However, a modern solution will provide a higher level of service which could increase the overall costs to support and maintain our systems.

Figure 9 – Benefits and Risks of Vendor Solution Alternative

Benefits	Risks
• Acquire the best-value and best-fit solution through a competitive procurement. • Ability to leverage an existing, proven solution that can shorten the development and implementation timeline. • Provides a collection of reusable functional assets and components; potentially providing the precise fit promised by custom development without having to "start from scratch." • Allows flexibility through component configuration, though the degree of configuration varies by vendor. • Partnership with vendor allows for continual improvement (e.g. version upgrades and service packs) and access to national experiences and best practices. • Potential to collaborate with other states using the same system to share ideas, questions, and potential enhancements.	• Solution may require more configuration or customization to meet the agency's needs, increasing project schedule and costs. • Vendor owns the core code, creating a long-term reliance on vendor for support, modifications, and upgrades. • Requires business and technical employees to learn and adapt the new system. • Requires business process changes to conform to vendor solution and/or best practices. • May cost more to maintain and support in the future due to increased service provision and greater functionality than current systems provide. • Partner agencies will need to participate in the project to ensure cross-agency transactions continue, impacting their resources and business.

Benefits	Risks
• Allows the agency to reengineer business processes to improve efficiencies based on best practices and the experience of other states built into these systems. • Vendor maintains the system to reflect federal legislative and policy changes as well as major technology updates. • Provides a predefined overall architecture in terms of its composition and integration of components. • Potential for a hybrid maintenance and support model that best utilizes in-house and vendor technical staff. • Implementation risk is shared with the vendor. • Procuring a vendor-based solution is consistent with EIS direction and strategy.	

When considering vendor solutions, we recognized that there might be value in using the UI solution offered by the vendor for the DOR's Core Systems Replacement Project, as well as the Department of Transportation Division of Motor Vehicle's Service Transformation Program. DOR is a key partner, and several of our business processes involving tax collection, payment processing, debt collection, and fraud detection overlap. As part of our Data and Systems and Interface and Access workgroups, 26 data transfers were identified with DOR, and DOR staff have direct access to several OED systems. Thus there is potential to improve how data is shared and enhance a partnership in service delivery. This solution may leverage existing capabilities and resources, and provide benefits for the state. While this option was considered, the agency desired a competitive bidding process and evaluation of the best solution available to meet the needs of the UI program for both tax and benefits. Therefore, this option was not considered as a separate alternative.

Alternative 3 – Consortium

Enter into an inter-state agreement to procure and leverage a shared unemployment insurance system. This could involve joining a current consortium or working with another state, or group of states, to form a consortium.

The consortium approach to modernization has evolved over the years as states have sought to collaborate to reduce the development and maintenance costs of unemployment benefits and/or tax systems, and as the U.S. Department of Labor Employment and Training Administration (ETA) has offered support through supplemental funding opportunities. As the ETA noted in UIPL 22-17, "the consortia strategy promotes the following principles:

- Development of a core system for multiple states that is only customized as needed for individual states to accommodate state laws and that can be maintained and improved jointly, thus reducing costs;

- Limited use of proprietary products and use of open software products where feasible to enable ease of transfer of the system architecture and code base to other states;

- Leveraging all of the products developed by existing consortia for other individual states or other consortia of states moving forward; and

- Positioning the consortia that complete their projects to on-board additional states or to enable the consortia to transfer their code to other states or consortia."

Current and past consortiums include ReEmployUSA (Mississippi, Rhode Island, Maine, Connecticut, and Oklahoma), MW (Maryland and West Virginia), Southeast Consortium for Unemployment Benefits Integration, or SCUBI, (North Carolina, South Carolina, and formerly Georgia), and formerly iUS (Idaho, North Dakota, and Vermont) which dissolved in 2020. States in active consortiums are in different stages of planning or development, with a few states in operations and maintenance. Other consortiums have been formed, yet dissolved due to lack of funding or misalignment of needs.

Total project cost for this approach was estimated to be approximately $78 to $117 million over an eight-year period (FY2018 to FY 2025). Besides the vendor costs for software acquisition and implementation services, this estimate includes costs associated with agency staffing, other software and hardware costs, iQMS, and organizational change management services. After implementation, vendor costs for ongoing maintenance and support is projected to range from $2 to $5 million annually. As noted with the vendor solution alternative, at the time of the analysis it was unknown how other long-term operating costs, such as agency business and technical staffing levels, would be impacted by this approach, as the maintenance and support models vary by consortium. However, a modern solution will provide a higher level of service, which could increase the overall costs to support and maintain our systems.

Figure 10 – Benefits and Risks of Consortium Alternative

Benefits	Risks
• Ability to leverage information, experience, and resources among consortia states. • Leverage similarities among states to potentially reduce development and maintenance costs. • Potential to realize economies of scale in system development and maintenance and support. • Potential for federal supplemental funding.	• Increased project management complexity with the involvement of more stakeholders. • Potential governance issues and the ability to reach agreement among states on core functionality and system changes. • Communication difficulties as states' project teams are not co-located. • More complicated and extensive administrative review processes. • Differences in states' laws, policies, procedures, organizational structures, and cultures could extend the project timeline and add project risks, as well as reduce or eliminate any economies of scale. • Reliance on shared resources lengthens implementation timeline, thus increasing costs and delaying the realization of benefits from a modern system. • Potential that joining a consortium will not actually cost less in system development and/or maintenance and support. • Lack of evidence on long-term maintainability and cost savings. • Requires business and technical employees to learn and adapt the new system.

Summary of Alternative Rankings

The qualitative evaluation summarized above highlights the benefits and risks of each alternative. To validate this assessment and to provide a more comprehensive analysis that helped protect against any inherent biases, we also created and used a numeric scoring approach incorporating the evaluation criteria. The approach and structure of the analysis were assembled by the Modernization team and reviewed by the Steering Committee for approval to proceed. After the approach was approved, the Modernization team initially ranked the alternatives, considering input from the feasibility study, state site visits, and additional information. These rankings were then reviewed with the Steering Committee for consensus. Figure 11 provides a summary of the rankings of each alternative.

Figure 11 – Summary of Alternative Criteria Rankings

Criteria	Status Quo (Current State)	Vendor Solution	Consortium
Degree of Fit 0 = Does not meet business and technical needs	0	6	3
3 = Meets business and technical needs with significant customization 6 = Meets business and technical needs with minimal customization 9 = Meets business and technical needs with no customization	*Does not meet current business and technical needs*	*OED has the ability to ensure a best-fit solution through a request for proposal under our direct control*	*Consortial solution may require additional customization if significant differences exist in states' laws, policies, procedures, and processes*
Implementation Timeline Risks 0 = Unknown 3 = High	0	6	3
6 = Medium 9 = Low	*N/A*	*Predictable timeline based on solutions having been successfully implemented in other states*	*Reliance on shared resources is likely to extend the timeline and reduce predictability*
Project Risks 0 = Unknown 3 = High	0	6	3
6 = Medium 9 = Low	*N/A*	*Solutions have been successfully implemented in other states*	*Involvement of multiple states increases complexity and introduces new governance and logistical risks*
Long-term Support Risks 0 = Unknown 3 = High	3	6	3
6 = Medium 9 = Low	*Unsustainable, increasingly costly and*	*OED will assess for proven vendor support and optimize a*	*Long-term maintainability unknown as solutions*

Criteria	Status Quo (Current State)	Vendor Solution	Consortium
	difficult to maintain systems	*strategy of using agency and vendor resources for long-term support*	*are not yet implemented or only recently implemented; OED has less ability to ensure an optimal support strategy*

Degree of Flexibility
  0 = Unknown
  3 = Low
  6 = Medium
  9 = High
	0	9	6

	Increasingly costly and difficult to modify systems	*OED will evaluate systems for their ability to efficiently implement changes (e.g. through a rules engine, configuration, or custom site code). OED will have direct control of changes following our own decision process.*	*Consortium solution may increase the complexity and duration of decision-making through shared governance and review processes, thus limiting flexibility.*

Strategic Alignment
  0 = None
  3 = Low
  6 = Medium
  9 = High
	3	6	3

	Limited ability to improve services and align with enterprise efforts	*OED has increased ability to align solution with agency, partner, and EIS strategy and goals*	*Aligns with federal policy and guidance, though a consortial approach could offer challenges by aligning, managing, and prioritizing the needs of the consortium over the needs of Oregon, OED, and partner organizations*
Total	**6**	**39**	**21**

PREFERRED ALTERNATIVE

Based on the benefits and risks, estimated costs, and evaluation criteria rankings, we decided to pursue a vendor solution, selected through a request for proposal, to minimize risks and allow the agency to procure the best-fit, best-value solution. Compared with the current state, this approach fulfills the goals of modernization and provides a higher level of service to our customers. Compared with the consortium alternative, this approach reduces project risk and complexity; also the total estimated costs of the two alternatives are not significantly different.

As depicted in Figure 11, the vendor solution alternative ranked highest out of the chosen alternatives. This alternative offers proven solutions, as other states have implemented systems offered by the various vendors in the unemployment insurance market. This alternative also offers configurable solutions and options for maintenance and support, with different levels of vendor involvement. The consortium approach ranked lower

due to concerns around project complexity, such as governance and project management risks due to the involvement of multiple states and the differences among states' laws, policies, and procedures. Additionally, consortia are a relatively new approach and the long-term viability and sustainability of maintenance, support, and system changes have yet to be determined.

BENEFITS AND RETURN ON INVESTMENT

Modernizing the core unemployment insurance systems will provide the agency with significant benefits. While some benefits may be quantifiable and financially measureable, most are qualitative and mitigate risks, improve customer experience, provide new capabilities, and increase flexibility to ensure we can continue to sustain and enhance our core services into the future.

The agency will measure project success according to the goals, objectives, and metrics identified above. These metrics will define the project's success in enhancing customer service, improving key UI performance indicators, reducing or eliminating manual processes and pain points, improving system security, and simplifying the agency's technical architecture. These metrics highlight the range of benefits expected and the strategic importance of modernization. A few of these metrics will translate into cost savings for the agency.

Based on information gathered from the feasibility study and from conversations with other states, areas where we could potentially realize savings are listed below. However, at this time there are too many unknowns to quantify these savings.

- **Staff productivity –** As more employers utilize online reporting methods and more claimants file online, the amount of manual data entry performed by employees for these processes will decrease.[6] Similarly, improvements, such as enhanced workflow, that increase the number of automated processes, eliminate pain points, and reduce the hours spent developing mandated reports will free up staff time for higher-value tasks such as collecting debts owed to the agency (for fiscal year ended June 30, 2020 the OED reported $145.8 million in liquidated and delinquent debt).[7] This will also positively impact performance measures, as timeliness is captured by several federally mandated measures. New systems and new functionality will also create new work that does not exist today, thus as staff roles change, positions might need to be re-classified to align with the new business processes.

- **Decrease in unemployment insurance overpayments –** Modern systems offer greater functionality in fact finding and gathering information at the time the initial claim is filed, improving the accuracy and timeliness of benefit payments. Also, as staff productivity increases, employee time can be repurposed towards decreasing the overpayment rate. For calendar year 2019, the agency had an overpayment rate of 11.9 percent. Considering that benefits administration totals were recently at a record high, each percentage point improvement represents several million dollars in erroneous overpayments prevented.

- **Reduction in postage and mail processing –** A modern system will enable the transition to a paperless environment as employers and claimants will be able to receive letters and notifications electronically. Not only will this allow our customers to receive messages more promptly, but allow the agency to save on costs associated with postage, printing, and processing paperwork.

Most of the benefits to be achieved are qualitative and align with the primary drivers for modernization. These benefits include:

- **Risk mitigation –** Modernization is a necessary investment in the agency's infrastructure in order to maintain service delivery. The escalating costs and difficulties associated with maintaining and modifying

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[6] In 2021 (through December 17, 2021), approximately 83 percent of initial claims were filed online.

[7] Department of Administrative Services. *Fiscal Year 2020 Statewide Accounts Receivable Management Report*. https://www.oregon.gov/das/Financial/Acctng/Documents/FY2020%20AR%20Management%20Report.pdf

existing systems increase the risk of system failure and the ability to pay unemployment insurance benefits.

- **Improved customer service –** Modernization will improve our ability to connect with and provide services to customers in ways they expect or desire. These benefits include mobile access, greater availability of information, and improved self-service functionality for both employers and claimants. For instance, other states that have modernized have seen significant efficiencies in employer account maintenance activities (e.g., updating address, contact information, owner, power of attorney, etc.), where 80 to 100 percent of the activities are performed by employers online; currently, most of these activities require manual staff intervention.

- **Usability –** Compared with current systems, modern systems are generally more intuitive and user friendly, facilitating the ability to train new employees more quickly. For some positions, it can take six months to a year to fully train an employee on current systems; with a modern system more time can be spent training new staff on program processes, rules, and regulations rather than system workarounds.

- **Flexible and scalable systems –** Modernizing our core UI systems and business processes will provide the agency with the flexibility to respond to external changes in a manner not available with current systems. This includes the ability to more easily modify our systems and adjust business processes to comply with changes to state and federal policies and regulations, including unemployment insurance extensions that arise during economic downturns.

- **Enhanced data collection, reporting, and sharing –** Replacing our UI systems allows us to improve the quality, accuracy, availability, and security of the agency's data and data exchanges, as well as the ability to collect data historically not available. For instance, improvements to the wage system that improve the accuracy of the data, or reduce the number of wage records in the suspense or questionable wage files, will benefit the OED (e.g. fewer "blocked claims" that can delay benefit payments, reduction in improper payment rate, reduction in claim redeterminations, improved accessibility and accuracy of data for labor market information) and many of our partners that rely on the data for recovery efforts or eligibility determination, resulting in better informed decision-making and program effectiveness.

- **Improved system security –** Modern systems offer more robust security features to prevent unauthorized access to information, as well as more intuitive and convenient means for access management.

PFMLI Integration

Oregon Revised Statute chapter 657B was enacted in 2019, creating a Paid Family and Medical Leave Insurance (PFMLI) program to be administered by the OED. The PFMLI Program provides employees with compensated time off from work to care for and bond with a child during the first year of the child's birth or arrival through adoption or foster care; to provide care for a family member who has a serious health condition; to recover from an employee's own serious health condition; and to take leave related to domestic violence, stalking, sexual assault, or harassment (safe leave).

The agency initiated the PFMLI Implementation Program with a directive to establish the PFMLI Program as promulgated under ORS chapter 657B. The scope of the PFMLI Implementation Program includes:

- Creation of administrative programs, including administrative rules, policies, and business processes; contributions collection management; benefits claims management; employer equivalent plans review; and small employer assistance grants;

- Public engagement and outreach to increase awareness and guide development of the PFMLI program, solicit input for administrative rules and policies, and inform employees and employers about program benefits and requirements;

- Development of accounting, cash management, forecasting, and actuarial analysis processes to support successful program administration;

- Facilities, staffing, and resources; organizational change management; and

- Development of program management, project management, and governance structures needed to support the implementation of PFMLI.

As originally enacted, ORS chapter 657B established the following operative dates for the PFMLI program:

- Rules for certain aspects of PFMLI will be established no later than September 1, 2021.

- Contributions will be collected beginning January 1, 2022.

- Benefits are payable beginning January 1, 2023.

This schedule was revised by HB 3398 (2021), adjusting the key operative dates as follows:

- Rules for certain aspects of PFMLI will be established no later than September 1, 2022.

- Contributions will be collected beginning January 1, 2023.

- Benefits are payable beginning September 3, 2023.

Successful implementation and ongoing administration of the PFMLI program requires technological systems capable of receiving employer payroll reports and contributions paid to the PFMLI Fund as well as managing benefit claim applications and payments to eligible employees. To define the scope of IT investment(s) needed to administer the program, decisions to be made included:

- Whether PFMLI contributions and reporting will be part of the combined payroll reporting process as UI tax is modernized through the ongoing Modernization Program;

- Whether to have a third party administer some or all of the PFMLI benefits program, as permitted by ORS 657B.350;

- Whether the agency decides to implement PFMLI contributions technology and associated business processes under the Modernization Program, using the same technology that will support UI tax functionality; and

- Whether the agency decides to implement PFMLI benefits technology and associated business processes under the Modernization Program, using the same technology that will support UI benefits functionality.

The department conducted planning and analyses to address these decisions and define the solutions needed to implement PFMLI. These analyses considered schedule (including PFMLI statutory timelines and the status of the UI Modernization Project), scope and requirements, and costs (including project costs and long-term maintenance and support costs) as well as customer experience and strategic alignment. Additionally, ORS 657B.340 mandates that "Wherever possible, the director shall use existing employer and public infrastructure to maintain records, conduct outreach and facilitate contributions made to the program," and ORS 657B.150(12) notes that employers "shall make and file a combined quarterly report of wages earned and contributions paid under this section on a form prescribed by the Department of Revenue." Analyses and information supporting these decisions are documented in the PFMLI Implementation Program Business Case v1.0 and PFMLI Alternative Analysis – Procurement and Implementation of Benefits Technology Solution v1.0.

One of the first analyses evaluated the options for combined reporting. As a result of this effort, a shared whitepaper was drafted by the OED and DOR with input and agreement provided by the DCBS. The paper assessed potential future-state options for combined reporting service delivery, including PFMLI contributions and the statewide transit tax administered by DOR. The cross-agency workgroup recommended maintaining the current approach, with the OED collecting data for most tax programs and DOR collecting payments, while continuing to explore opportunities to enhance services, efficiency, and improve the customer's experience in the future. OED's Executive Team approved the workgroup's recommendation in August 2020. The UI Modernization RFP was developed assuming this approach, therefore this approval did not impact the UI Modernization Project scope.

Pursuant to ORS 657B.350, the agency is authorized, through a competitive bid process, to enter into an agreement with a third party to implement the PFMLI benefits program and to serve as the program's administrator, in full or in part. The agency issued a request for information (RFI) for functions related to the administration of PFMLI benefits in order to identify entities who might be interested in and capable of implementing and administering PFMLI benefits. The agency received and reviewed three responses to the RFI. Based on review of the responses to the RFI, consideration of PFMLI Advisory Committee advice, and analysis as documented in the Third Party Administration (TPA) Memo Final, the agency decided that a third-party administrator for benefits will not be used and the agency will self-administer benefits.

Agency leadership subsequently decided, over a series of decisions spanning several months, that the best way to serve Oregon employers and claimants is to have a single system that supports both UI and PFMLI programs.

- In January 2021, OED Executive Team decided to pursue the addition of PFMLI contribution technology needs to the scope of the UI Modernization Project.
- In March 2021, the Modernization Executive Steering Committee voted to expand the Modernization Program scope to include PFMLI contributions and to expand the UI Modernization Project to include the PFMLI contributions technology infrastructure, and to implement business processes and technical solutions that meet the agency needs for administering this new program, along with UI tax. The addition of PFMLI contributions was included in contract negotiations with the UI solution vendor prior to contract execution.
- In April 2021, the OED Executive Team decided to pursue the addition of PFMLI benefits technology to the scope of the Modernization Program.
- In June 2021, the PFMLI Implementation Executive Steering Committee decided to adopt the OED Executive Team decision that the agency should pursue the addition of PFMLI benefits technology components to the Modernization Program, thus removing them from the scope of the PFMLI Implementation Program.
- In September 2021, the Modernization Executive Steering Committee approved the change request recommended by the UI Modernization Project Change Control Board to add PFMLI benefits technology and business processes to the scope of the Modernization Program and UI Modernization Project.

- The Modernization Program, with support from DAS Procurement Services, has initiated the processes to negotiate contract amendments for the relevant vendor contracts for iQMS and Solution Vendor services to accommodate the increased scope of work for the UI Modernization Project.

The sections below summarize the scope, budget, and schedule impacts of these decisions on the Modernization Program and UI Modernization Project.

SCOPE

The high degree of alignment between UI and PFMLI requirements, business processes, and stakeholder groups enables the agency to deliver a shared solution that enhances the customer experience of both programs and allows for more efficient implementation and administration. Modernization and PFMLI analysts cross-walked UI Modernization Project core requirements included in the RFP for the UI Solution procurement with PFMLI. The existing 113 core UI requirements meet the needs of PFMLI (including benefits) with the addition of three unique requirements for PFMLI contributions. The cross-walk of the UI and PFMLI detailed requirements, including PFMLI benefits, was completed prior the start of the project in July 2021, and the complete set of core requirements are included in the statement of work developed as part of the completed solution vendor contract negotiations.

Primary business functions for PFMLI contributions and benefits include:

Paid Family and Medical Leave Insurance Contributions Functions

- **Employer Accounts:** Registration, Determination, Account Maintenance, Small Employers, Equivalent Plans, Suspense, Closings
- **Accounting:** Cashiering, Accounting, Fund Accounting, Recovery
- **Wage Reporting:** Quarterly Reporting, Wage Records, Amended Reports
- **Audit:** Field Audit, Special Investigations, Suspense
- **Appeals:** Appeals Management, Schedule Resources, Supporting Documentation
- **Small Business Grants:** Registration, Determination, Accounting

Paid Family and Medical Leave Insurance Benefits Functions

- **Claims:** Claim Intake, Benefit Eligibility, Managing Continuous and Intermittent Benefits, Benefit Payment
- **Issue Resolution:** Appeal Management, Case Management, Overpayment Processing and Collections
- **Administration:** Account management, Reporting, Accounting (Cash, Fiscal and Fund), System and Program Audit Functionality, Monitoring Compliance and Integrity (Fraud Detection), Managing Customer Relations, Online Services, Workflow Automation
- **Small Business Grants:** Administration

Changes and enhancements to existing systems, including imaging/scanning and the data warehouse, are already in scope for UI Modernization and will also be required for PFMLI. PFMLI phone system, hardware and software needs, are not in scope of the UI Modernization Project. Interfaces and data transfers that occur regularly with internal programs and systems, including the agency phone systems, and external partners will be impacted and are in scope for the UI Modernization Project. To account for any impact on these systems, scope will be tracked and monitored by the following components: systems, interfaces, reports, data transfers, external access rights, and requirements (see Figure 5 above).

BUDGET

There are opportunities to having both the UI and PFMLI programs as part of a shared project. Managing a single solution for both programs reduces overall acquisition and implementation costs, rather than having two

separate projects to manage through procurement and implementation. In Modernization, when the PFMLI program receives benefit from the same activities and costs as the UI program those costs will be allocated according to the benefit to each program. Therefore, some efficiencies and cost sharing will occur from adding PFMLI into the Modernization Program and UI Modernization Project.

Expanding scope of the UI Modernization Project to include PFMLI increases the project costs. These costs include the solution vendor (FAST implementation services and warranty), personnel services, iQMS services, translation services, and other vendors such as Impression Technology to enhance the scanning software for PFMLI imaging and data capture needs. However, incorporating PFMLI into the UI Project reduces overall agency costs compared to managing and executing two separate projects, and makes it easier to align and coordinate UI and PFMLI work.

The biggest increase in project costs will be the solution vendor services for the addition of PFMLI benefits to the existing contract for the project. A preliminary estimated price for the inclusion of PFMLI benefits includes one-time costs of $4,000,000 uplift for implementation plus an added $1,000,000 for a one-year warranty, and ongoing costs for software maintenance of $250,000 annually, declining by 12 percent after five years.

The initial baseline budget for the UI Modernization Project is $106,121,029. If budget baselines change by +/-10 percent, EIS must be notified. The total increased costs due to the inclusion of PFMLI benefits are expected to be less than this 10 percent threshold.

PFMLI program expenditures are initially funded through a loan from the General Fund that statutorily must be repaid by June 30, 2023 from the PFMLI Trust Fund (HB 3398). After that, PFMLI program will become 100 percent self-funded using revenue from PFMLI contributions to pay for program related costs. These funding streams for PFMLI are in addition to the existing funding streams the project is authorized to use for the UI Modernization Project. Existing Modernization funding streams cannot be used to support PFMLI implementation. PFMLI and UI funding streams need to be used for the benefit of their respective programs. As such, an allocation model was developed to ensure costs are appropriately allocated to UI and PFMLI funding streams for the UI Modernization Project. The cost allocation model established relies on use of the established core requirements for the project and the benefit to each program. Based on the number of core business requirements that apply to each program, currently 56 percent of costs are allocated to UI and 44 percent to PFMLI. This allocation calculation will be revisited quarterly for adjustment in the event that core requirements change over the course of the project.

SCHEDULE

Adding PFMLI contributions and benefits technology infrastructure to the UI Modernization Project allows the agency to implement a single solution for UI and PFMLI without impacting the UI Modernization Project implementation schedule. The UI solution vendor has agreed to implement PFMLI contributions functionality with the UI tax rollout. The UI tax rollout is scheduled to last 14 months. Additionally, the solution vendor has proposed a modified implementation plan, adding PFMLI benefits to the UI benefits rollout in a way that will ensure timely delivery to meet the PFMLI benefits statutory date without impact on the existing project schedule.

Conclusions, Consequences, and Next Steps

CONCLUSIONS

Our systems and processes need to be more effective, efficient, and flexible to enhance our services for Oregonians and Oregon businesses. This became even more apparent during the COVID-19 pandemic as the demand for our services rapidly increased to unprecedented levels putting strain on our staff, systems, and Oregonians. Our agency needs to adjust from more transactional-based services to customer-centric services. The risks of our systems becoming unsustainable or unstable are escalating. It is time to mitigate these risks and ensure we can continue to provide and improve unemployment insurance and employment services.

Modern systems implemented in other states have demonstrated improved efficiencies and innovation through greater automation, integration, and customer usability. Replacing our unemployment insurance and employment services computer systems and reengineering business processes will improve how we provide services to Oregonians and Oregon businesses, and will demonstrate that the Employment Department is responsive, trustworthy, and solves problems in a sustainable way, supporting the Governor's priorities of creating good jobs and providing career training. Making this investment supports managing the costs of state government and delivering good value and service.

CONSEQUENCES OF FAILURE TO ACT

Postponing the modernization effort and continuing to use legacy systems increases the severity of and exposure to risks that would affect our ability to deliver key services to Oregonians and Oregon businesses:

- Risk that we cannot sustain delivery of secure and reliable services.
- Challenges to provide customers with personalized and updated services.
- Constrained and inflexible systems that cannot adapt to changing business, state, or federal requirements, or fluctuating workloads during economic cycles.
- Difficulties in managing access and sharing data securely with our partners.
- Forego the opportunity to leverage existing infrastructure and resources to develop and administer the new PFMLI program.

NEXT STEPS

As we proceed with modernization, work for the remainder of the current biennium and future biennia will focus on the initiation and execution of projects to achieve the program's goals. The first project focuses on UI and PFMLI, with the first rollout implementing UI tax and PFMLI contributions, proceeded by PFMLI and UI benefits in the second rollout. Figure 12 highlights key activities for the first rollout. This project will be followed by a workforce project, initiated as schedule concurrency and resource capacity are considered.

As the Modernization Program continues, other agency business and information technology improvement efforts will be initiated and continue as well. The agency's IT Governance Committee (ITGC) will review initiatives for authorization, value, return on investment, prioritization, and impact on and alignment with modernization efforts. To ensure continuity of business operations, some technology upgrades will be critical to carry out during modernization. As the agency seeks to continually improve service delivery for customers, projects throughout the agency will be strategically aligned. This involves reviewing the portfolio of projects and their expected benefits and timelines to identify whether projects should be initiated, modified, or paused in order to align with modernization efforts.

Figure 12 – Unemployment Insurance Modernization Project Timeline

Rollout 1: UI Tax & PFMLI Contributions
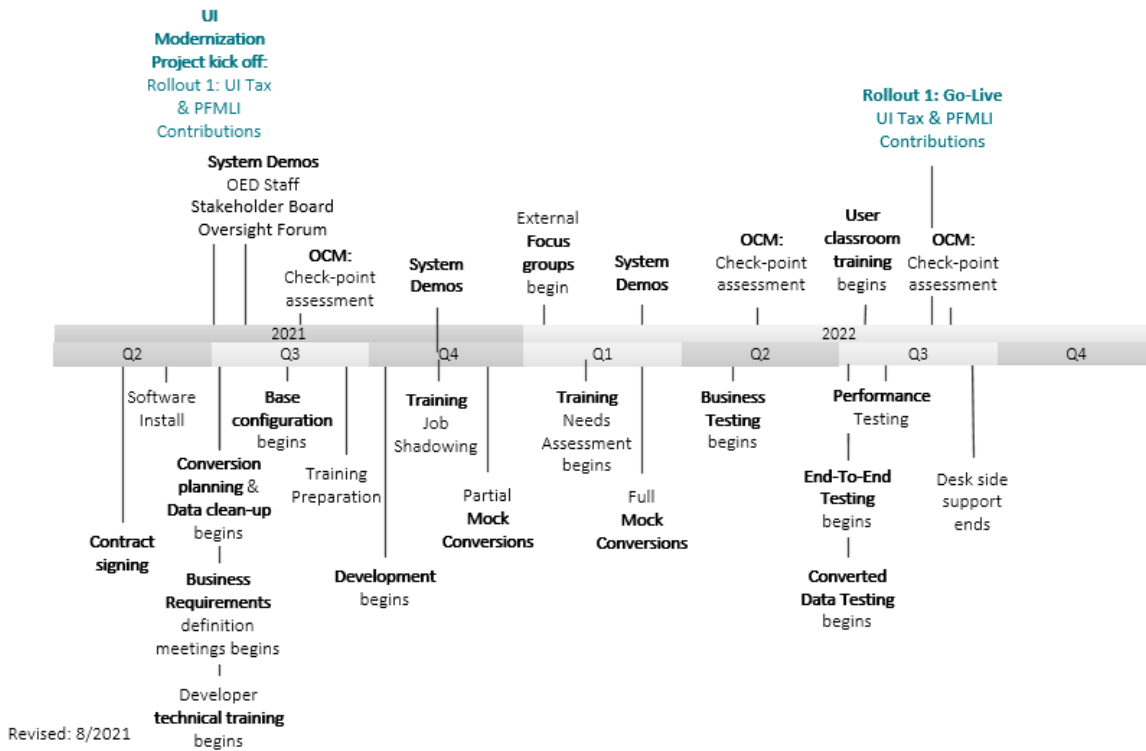
To ensure success of the Modernization Program, we will continue to involve all sections of the agency and key stakeholders. This includes working with the Oregon Legislature in the current and future biennia to obtain authorization of resources to support the program and projects. We will continue to collaborate with EIS for guidance; engage with the Modernization Oversight Forum and UI Modernization Stakeholder Board; work with EIS, Chief Financial Office, and Legislative Fiscal Office; pursue endorsements throughout the Stage Gate review process; and utilize the Enterprise Project and Portfolio Management system for all program and project reviews, approvals, and status, and quality assurance reporting activities throughout the life of the Modernization Program. We also have contracted with an independent quality assurance vendor, CSG Government Solutions, for the UI Modernization Project. Other critical success factors include ongoing executive support, active engagement from employees, strategic communication, change management, and project management expertise.

The Modernization Program is a priority of the agency and its outcomes will touch every aspect of our organization, from processes to people. Project performance measures and oversight requirements have been established to ensure the Modernization Program and UI Project deliver the expected outcomes and benefits, and baselines for scope, schedule, and budget will be measured and reported.

Appendix A – System Relationships

This graphic illustrates the how our multiple internal systems are related.

Figure 13 - OED Systems Relationship Diagram (as of December 2021)
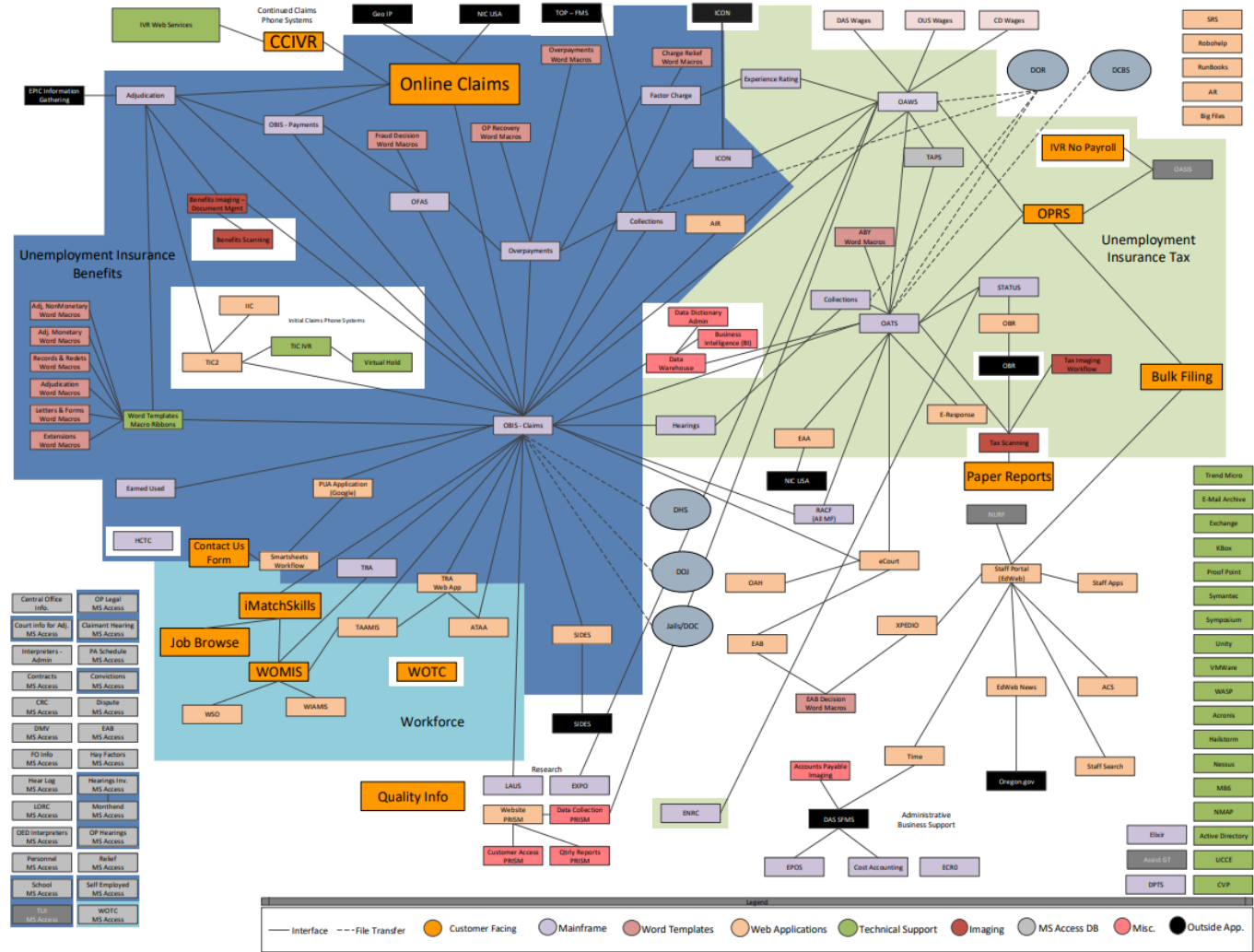
APPENDIX B – PROGRAM AND PROJECT STAFFING

Throughout the duration of the Modernization Program, staffing needs (number of positions and durations) will be planned and position authority requested. The Modernization Program Staff Management Plan details the Modernization Program's human resource needs, and describes the process to identify and acquire key resources to support modernization projects and subsequently release and transition resources. The Modernization Program has a dedicated core program team that provides the foundational structures and support for modernization projects. This team will participate for the life of the program and provide services to underlying projects, ensuring consistency in practices and ensuring dedicated resources are available to support the administrative, oversight, and operational needs for the program and its projects.

As specific projects are initiated for the program, staffing needs will be assessed and resources acquired to support each specific project's needs. Resource needs will be analyzed after considering the project's scope, timeline, and needed skillsets and expertise. The UI Modernization Project team, comprised of dedicated business analysts, technical staff, and solution vendor staff, is responsible for the implementation of the new UI and PFMLI technology solution and supporting impacted business processes.

Agency operational staff will be brought onto project teams as expanded team members at various times throughout a project to provide subject matter expertise, conduct user-acceptance testing, and perform other activities. These will not be dedicated positions for the Modernization Program or projects; however, additional capacity must be created to allow for this additional operational role in support of the Modernization Program. Further administrative support will be necessary to support the Modernization Program within the agency. To create this capacity in operations, additional position authority and limitation was authorized by the legislature.

As of November 2021, the Modernization Program and UI Modernization Project has a total of 79 authorized positions, including some positions that are needed for the agency to create operational capacity. Figure 14 illustrates the dedicated Modernization positions and reporting relationships.

Figure 14 – Modernization Organizational Chart

Modernization Program

Key Partners and Stakeholders

Employment Advisory Council	Employees
Oregon Workforce Investment Board	Businesses
Local Workforce Development Boards	Citizens
Legislature	Governor's Office
State Agencies	Advisory Committees

Governor

Agency Director

Agency Deputy Director

PEMG – Modernization Director

Oversight and Support

Enterprise Information Services (EIS)
Oregon Chief Financial Officer (CFO)
Legislative Fiscal Office (LFO)
Modernization Executive Steering Committee
Modernization Operations and Policy Team
Modernization Stakeholder Boards
Modernization Oversight Forum (legislative)
Independent Quality Management Services
US Department of Labor (USDOL)

OPA4 – Sr. Quality and Risk Analyst
PAS2 – Communications Specialist
ESS2 – Executive Support Specialist

Vendors

Solution vendor(s)
Independent quality management services
Advisory services
Technical professional services

PEMF – Deputy Modernization Director

Program Team

ISS8 – Program Manager
ISS8 – Legacy PM
ISS8 – Implementation PM
PM2 – Schedule PM
PM2 – Contract PM
OPA3 – Business Analyst
OPA3 – Business Analyst/Scope
OPA3 – Business Analyst/Processes
OPA3 – UX Analyst

PEMD – OCM & Training Manager

OCM Team

OPA3 – OCM Analyst
OPA3 – OCM Analyst
OPA3 – OCM Analyst

Training Team

OPA2 – Training Coordinator
OPA2 – Training Coordinator
OPA2 – Training Coordinator
OPA2 – Training Coordinator

UI Modernization Project

PEME – Business Team Manager

PEME – Technical Team Manager

Business Team

OPA3 – Business Analyst
OPA3 – Business Analyst
OPA3 – Business Analyst
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OPA3 – Business Analyst
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OPA3 – Business Analyst
OPA3 – Business Analyst
OPA3 – Business Analyst
PAS2 – Correspondence Analyst
ISS6 – Testing Analyst
ISS6 – Access Security Analyst

Technical Team

ISS8 – Conversion
ISS8 – Application Administrator
ISS8 – Senior Developer
ISS8 – Senior Developer
ISS8 – Senior Developer
ISS7 – Developer
ISS7 – Developer
ISS7 – Developer
ISS7 – Developer
ISS7 – Developer
ISS7 – Developer
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Expanded Team: Agency operational staff will provide subject matter expertise, conduct user-acceptance testing, and perform other activities such as training and instruction activities as part of the project's expanded team. Numbers of employees, timing, and duration of assignment will be determined based on needs of the project.

Revised: 12/21/2021

Appendix C – Estimated Project Cost Tables

Figure 6 above under the alternatives analysis provides a summary of the estimated project costs for the vendor and consortium solutions. These estimates provide an "order of magnitude" as of January 2019. The estimates helped identify potential cost elements and ranges to assist with evaluation of each alternative.

To prepare the estimates summarized in Figure 6, we utilized information from the feasibility study and site visits, and conducted additional market research, including contacting other states. This information, along with projected actuals for the 2017-19 biennium and budgeted figures for the 2019-21 biennium, was used to construct detailed cost estimate tables from which the summarized estimates could be extracted.

The estimates represented in the following tables are based on the information known as of January 2019. Estimates for the UI Modernization Project have since been refined as we have executed a contract with the solution vendor.

Figure 15 – Vendor Solution - Low Estimates

COST ITEMS (outflows)	2017-19		2019-21		2021-2023		2023-25		TOTAL*
	Jun 30 2018	Jun 30 2019	Jun 30 2020	Jun 30 2021	Jun 30 2022	Jun 30 2023	Jun 30 2024	Jun 30 2025	
Personal Services Costs (Salaries & Benefits)									
Modernization Program Staff	(1,100.0)	(1,700.0)	(1,530.0)	(1,530.0)	(1,606.5)	(1,686.8)	(1,771.2)	(1,859.7)	(12,800.0)
Modernization UI Project Staff	-	-	(2,790.0)	(5,706.0)	(5,991.3)	(6,290.9)	(6,605.4)	(3,467.8)	(30,900.0)
Other Staff	-	-	-	(86.6)	(43.3)	(211.2)	(422.3)	-	(800.0)
Services & Supplies/Capital Outlay Costs									
Software Costs									
Software Purchase/Installation Services	-	-	(3,000.0)	(7,500.0)	-	(9,000.0)	-	-	(20,000.0)
Hardware Costs									
Hardware Purchase/Upgrade	-	(25.0)	(271.0)	(6.0)	-	-	-	-	(300.0)
Professional Services									
Independent Quality Management Services	-	-	(700.0)	(700.0)	(700.0)	(700.0)	(175.0)	-	(3,000.0)
Organizational Change Management Services	-	-	(487.5)	(487.5)	(487.5)	(487.5)	(243.8)	-	(2,200.0)
IT Professional Services	-	-	(562.5)	(562.5)	(562.5)	(562.5)	-	-	(2,300.0)
Other Contracted Services	(175.1)	(144.0)	-	-	-	-	-	-	(300.0)
Other									
Facilities	(30.0)	(242.5)	(1,245.4)	(594.0)	(594.0)	(594.0)	(594.0)	(594.0)	(4,500.0)
Travel	(67.0)	(7.0)	(30.0)	-	-	-	-	-	(100.0)
DAS/DOJ fees	-	-	(200.0)	-	-	-	-	-	(200.0)
Contingency	-	-	(593.8)	(1,156.3)	(218.8)	(1,343.8)	(52.3)	-	(3,400.0)
Total Costs	(1,372.1)	(2,118.5)	(11,410.1)	(18,328.8)	(10,203.8)	(20,876.6)	(9,863.9)	(5,921.5)	(80,800.0)

Due to rounding, the sum of each line item may not equal the stated total.

As of 01/03/2019

Figure 16 – Vendor Solution - High Estimates

COST ITEMS (outflows)	2017-19 Jun 30 2018	Jun 30 2019	2019-21 Jun 30 2020	Jun 30 2021	2021-2023 Jun 30 2022	Jun 30 2023	2023-25 Jun 30 2024	Jun 30 2025	TOTAL*
Personal Services Costs (Salaries & Benefits)									
Modernization Program Staff	(1,100.0)	(1,700.0)	(1,870.0)	(1,870.0)	(1,963.5)	(2,061.7)	(2,164.8)	(2,273.0)	(15,000.0)
Modernization UI Project Staff	-	-	(3,410.0)	(6,974.0)	(7,322.7)	(7,688.8)	(8,073.3)	(4,238.5)	(37,700.0)
Other Staff	-	-	-	(173.3)	(86.6)	(422.3)	(844.6)	-	(1,500.0)
Services & Supplies/Capital Outlay Costs									
Software Costs									
Software Purchase/Installation Services	-	-	(6,000.0)	(15,000.0)	-	(18,000.0)	-	-	(40,000.0)
Hardware Costs									
Hardware Purchase/Upgrade	-	(25.0)	(271.0)	(306.0)	-	-	-	-	(600.0)
Professional Services									
Independent Quality Management Services	-	-	(1,875.0)	(1,875.0)	(1,875.0)	(1,875.0)	(468.8)	-	(8,000.0)
Organizational Change Management Services	-	-	(812.5)	(812.5)	(812.5)	(812.5)	(406.3)	-	(3,700.0)
IT Professional Services	-	-	(937.5)	(937.5)	(937.5)	(937.5)	-	-	(3,800.0)
Other Contracted Services	(175.1)	(144.0)	-	-	-	-	-	-	(300.0)
Other									
Facilities	(30.0)	(242.5)	(1,522.1)	(726.0)	(726.0)	(726.0)	(726.0)	(726.0)	(5,400.0)
Travel	(67.0)	(7.0)	(72.0)	-	-	-	-	-	(150.0)
DAS/DOJ fees	-	-	(300.0)	-	-	-	-	-	(300.0)
Contingency	-	-	(1,203.1)	(2,328.1)	(453.1)	(2,703.1)	(109.4)	-	(6,800.0)
Total Costs	(1,372.1)	(2,118.5)	(18,273.2)	(31,002.3)	(14,176.9)	(35,226.9)	(12,793.0)	(7,237.4)	(123,250.0)

Due to rounding, the sum of each line item may not equal the stated total.

As of 01/03/2019

Figure 17 – Consortium - Low Estimates

COST ITEMS (outflows)	2017-19 Jun 30 2018	Jun 30 2019	2019-21 Jun 30 2020	Jun 30 2021	2021-2023 Jun 30 2022	Jun 30 2023	2023-25 Jun 30 2024	Jun 30 2025	TOTAL*
Personal Services Costs (Salaries & Benefits)									
Modernization Program Staff	(1,100.0)	(1,700.0)	(1,530.0)	(1,530.0)	(1,606.5)	(1,686.8)	(1,771.2)	(1,859.7)	(12,800.0)
Modernization UI Project Staff	-	-	(2,790.0)	(5,706.0)	(5,991.3)	(6,290.9)	(6,605.4)	(3,467.8)	(30,900.0)
Other Staff	-	-	-	(86.6)	(43.3)	(211.2)	(422.3)	-	(800.0)
Services & Supplies/Capital Outlay Costs									
Software Costs									
Software Purchase/Installation Services	-	-	(750.0)	(7,500.0)	-	(7,500.0)	-	-	(16,000.0)
Hardware Costs									
Hardware Purchase/Upgrade	-	(25.0)	(271.0)	(6.0)	-	-	-	-	(300.0)
Professional Services									
Independent Quality Management Services	-	-	(575.0)	(575.0)	(575.0)	(575.0)	(143.8)	-	(2,400.0)
Organizational Change Management Services	-	-	(487.5)	(487.5)	(487.5)	(487.5)	(243.8)	-	(2,200.0)
IT Professional Services	-	-	(562.5)	(562.5)	(562.5)	(562.5)	-	-	(2,300.0)
Other Contracted Services	(175.1)	(144.0)	(375.0)	(375.0)	(375.0)	(375.0)	(375.0)	(187.5)	(2,400.0)
Other									
Facilities	(30.0)	(242.5)	(1,245.4)	(594.0)	(594.0)	(594.0)	(594.0)	(594.0)	(4,500.0)
Travel	(67.0)	(7.0)	(75.0)	(75.0)	(75.0)	(75.0)	(37.5)	(37.5)	(400.0)
DAS/DOJ fees	-	-	(100.0)	-	-	-	-	-	(100.0)
Contingency	-	-	(343.8)	(1,187.5)	(250.0)	(1,187.5)	(95.3)	(23.4)	(3,100.0)
Total Costs	(1,372.1)	(2,118.5)	(9,105.1)	(18,685.1)	(10,560.1)	(19,545.3)	(10,288.2)	(6,170.0)	(78,200.0)

Due to rounding, the sum of each line item may not equal the stated total.

As of 01/03/2019

Figure 18 – Consortium - High Estimates

| COST ITEMS (outflows) | 2017-19 | | 2019-21 | | 2021-2023 | | 2023-25 | | |
	Jun 30 2018	Jun 30 2019	Jun 30 2020	Jun 30 2021	Jun 30 2022	Jun 30 2023	Jun 30 2024	Jun 30 2025	TOTAL*
Personal Services Costs (Salaries & Benefits)									
Modernization Program Staff	(1,100.0)	(1,700.0)	(1,870.0)	(1,870.0)	(1,963.5)	(2,061.7)	(2,164.8)	(2,273.0)	(15,000.0)
Modernization UI Project Staff	-	-	(3,410.0)	(6,974.0)	(7,322.7)	(7,688.8)	(8,073.3)	(4,238.5)	(37,700.0)
Other Staff	-	-	-	(173.3)	(86.6)	(422.3)	(844.6)	-	(1,500.0)
Services & Supplies/Capital Outlay Costs									
Software Costs									
Software Purchase/Installation Services	-	-	(1,500.0)	(15,000.0)	-	(15,000.0)	-	-	(32,000.0)
Hardware Costs									
Hardware Purchase/Upgrade	-	(25.0)	(271.0)	(306.0)	-	-	-	-	(600.0)
Professional Services									
Independent Quality Management Services	-	-	(1,500.0)	(1,500.0)	(1,500.0)	(1,500.0)	(375.0)	-	(6,400.0)
Organizational Change Management Services	-	-	(812.5)	(812.5)	(812.5)	(812.5)	(406.3)	-	(3,700.0)
IT Professional Services	-	-	(937.5)	(937.5)	(937.5)	(937.5)	-	-	(3,800.0)
Other Contracted Services	(175.1)	(144.0)	(625.0)	(625.0)	(625.0)	(625.0)	(625.0)	(312.5)	(3,800.0)
Other									
Facilities	(30.0)	(242.5)	(1,522.1)	(726.0)	(726.0)	(726.0)	(726.0)	(726.0)	(5,400.0)
Travel	(67.0)	(7.0)	(125.0)	(125.0)	(125.0)	(125.0)	(62.5)	(62.5)	(700.0)
DAS/DOJ fees	-	-	(200.0)	-	-	-	-	-	(200.0)
Contingency	-	-	(671.9)	(2,359.4)	(484.4)	(2,359.4)	(175.8)	(39.1)	(6,100.0)
Total Costs	(1,372.1)	(2,118.5)	(13,445.0)	(31,408.6)	(14,583.2)	(32,258.2)	(13,453.2)	(7,651.5)	(116,900.0)

Due to rounding, the sum of each line item may not equal the stated total.

As of 01/03/2019

Notes

- **Modernization Program Staff** – Comprised of agency employees with technical, project management, and business subject matter expertise. These employees will serve for the life of the Modernization Program and be involved in, or assist with, all modernization projects. Projected estimates, as of October 2018, for the 2017-19 biennium and 2019-21 budget projections were used as starting points for the 2017-19 and 2019-21 biennia. Estimates were then increased at a 5 percent annual rate for the 2021-23 and 2023-25 biennia. The low and high estimates were obtained by giving a plus or minus 10 percent adjustment.

- **UI Modernization Project Staff** – Comprised of dedicated project managers, business analysts, technical staff, trainers, and expanded team members focused on the delivery and execution of the UI project. Included in the UI Modernization Project staffing costs are operational and administrative positions that will be brought onto the project team as expanded team members at various times to provide subject matter expertise, perform user-acceptance testing, and other activities; these will not be dedicated positions for the program or project. Estimates from the 2019-21 budget were used as starting points, and then inflated at a 5 percent annual rate for future biennia. The low and high estimates were then adjusted down or up by 10 percent, respectively. We anticipate that a number of project staff will stay onboard for up to 18 months

after the UI benefits system goes live to support project closeout, stabilize and refine the system, and support the transition to ongoing maintenance, support, and operations.

- **Other Staff** – Includes UI program staff hired during the tax and benefits go-live phases to support the projected increase in calls and inquiries from claimants and employers, and to provide additional support for staff who are getting used to the system. In addition, because Oregon operates in a combined payroll tax environment, it will be important to evaluate the staff necessary for other agencies to modify their systems.

- **Software Purchase/Installation Services** – Includes initial software acquisition, or license, costs for the UI solution as well as the cost of vendor services for design, development, configuration, integration, and implementation. To construct the estimates for the vendor solution, we utilized information on UI modernization projects in Michigan (benefits and tax), Nebraska (benefits and tax), New Mexico (benefits and tax), Pennsylvania (benefits), South Carolina (tax), Tennessee (benefits and tax), and Washington (benefits). For the consortium alternative, we utilized information on the UI modernization projects in Maryland-West Virginia (benefits and tax), Vermont (benefits and tax), Connecticut and the ReEmployUSA consortium (benefits and tax), and the Southeast Consortium for Unemployment Benefits Integration (SCUBI) involving South Carolina, North Carolina, and Georgia. The timing of the estimates reflects the project phases as represented in the program timeline revised in December 2018.

- **Hardware Purchase/Upgrade** – Includes hardware for agency and project staff, as budgeted for the 2019-21 biennium. As we learn more about the capabilities that vendors have to offer, an imaging project may be part of the UI Modernization Project or a separate project; the variance between the low and the high estimates is attributed to the potential cost of new scanners.[8]

- **Independent Quality Management Services (iQMS)** – Vendor will be contracted to start prior to the solution vendor and is projected to continue services until three months after the full system implementation. The low estimate is calculated at 15 percent of the software purchase/installation services cost, and the high estimate is 20 percent of the software purchase/installation services cost.

- **Organizational Change Management Services** – Vendor may be contracted to start prior to the solution vendor and will continue services up to six months after the full system implementation. To help corroborate the estimates, information on Maine, which contracted organizational change management services, was utilized.

- **IT Professional Services** – Vendors may be utilized on projects (e.g., data cleanup, data conversion, interfaces to existing systems) when state staff do not possess the necessary skillsets for specific work, are not available (capacity constraints), or the services or expertise needed are of an urgent or temporary nature. This also could include payments to existing vendors to make system modifications. At the time of the analysis, the full extent of services potentially required was unknown until we gathered responses from a request for information and eventually contracted with a solution vendor.

- **Other Contracted Services** – Includes costs for the feasibility study vendor and requirements vendor. The consortium alternative includes a vendor to provide independent project management services for the consortium.

- **Facilities** – Includes build costs and rent for project space. Estimates from the 2019-21 budget were utilized as a starting point and adjusted up or down by 10 percent for the high and low estimates, respectively.

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[8] The original intent was to include scanning in scope for the UI Project, but no proposals were received during the procurement process that included scanning. Thus scanning functions are not in scope of the project.

- **Travel** – Includes in-state and/or out-of-state travel costs. Actual costs from the state site visits in FY2018 were used to help construct the estimates. For the consortium alternative, this includes travel to other states in the consortium.
- **Contingency** – Calculated at 12.5 percent of the estimated total contracted costs (software purchase/installation services, independent quality management services, organizational change management services, and IT professional services).

UI Modernization Project Business Case V3.0

Final Audit Report   2022-01-18

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