

A Report for State of Oregon Public Employees Retirement System

Deliverable 1.1.1: SB1049 Program Initial Risk Assessment Report Detailed Findings & Recommendations

29 January 2020

Engagement: 330060058

Table of Contents

Introduction	1
1. Strategy and Leadership	4
1.1 Governance	5
1.2 Executive Support	7
1.3 Vision, Goals & Objectives	8
1.4 Business Case & Benefit Realization	9
1.5 External Dependencies	10
1.6 Sourcing.....	11
1.7 Vendor Management.....	12
2. Project Controls	13
2.1 Scope.....	14
2.2 Schedule	15
2.3 Budget	17
2.4 Resources.....	18
2.5 Risks & Issues.....	20
2.6 Project Communications & Collaboration	22
2.7 Quality Assurance	23
3. Solution Development & Implementation	24
3.1 Business Process & Requirements	25
3.2 Architecture & Design.....	26
3.3 Development & Configuration.....	27
3.4 Testing	28
3.5 Interfaces & Integration	29
3.6 Deployment.....	30
4. Foundational.....	31
4.1 Infrastructure & Operations	32
4.2 Security	33
4.3 Regulatory.....	34
5. Data Management	35
5.1 Data Controls	36
5.2 Data Model.....	37
5.3 Data Conversion	38
5.4 Reporting & Analytics	39
6. Business Change	40
6.1 Organizational Change Management	41
6.2 Training & Knowledge Transfer	43

6.3 Customer Perception.....44

7. Maintenance & Support 45

7.1 Support46

Appendices 47

Appendix A: Data Gathering48

Documents Reviewed48

Interview Participants49

Appendix B: Risk Category Definitions50

Introduction

Document Purpose

The purpose of this Initial Program Risk Assessment Report deliverable is to identify the current status of the SB1049 Program and the associated projects, to identify Program and project risks and their likelihood of occurring, and to provide an independent evaluation of the planned schedule, fiscal status, resource sufficiency, and Program and project management processes.

This document presents detailed findings and recommendations within each Risk Category in Gartner's Risk Assessment Framework (see Figure 1). Risk Category definitions are provided in Appendix B. This document is a companion to the Initial Program Risk Assessment Report Executive Summary (MS PowerPoint) and provides additional detail to support the conclusions and recommendations of the executive summary.

Risk Assessment Framework and Risk Rating Definitions

In order to support a comprehensive and disciplined assessment, Gartner utilizes a standard risk assessment framework with defined and measurable risk ratings. The Risk Assessment Framework is outlined in Figure 1. Categories for this initial risk assessment were selected based upon the overall status of the Program. Gartner's risk ratings conform to the color-coded risk rating criteria established in Figure 2. These risk ratings reflect Gartner's observations that include risks, issues, and statements of fact as well as the anticipated lead times for risk mitigation.

Figure 1. Gartner's Risk Assessment Framework

Domain	Risk Category	Domain	Risk Category
1. Strategy & Leadership	1.1 Governance	3. Solution Development & Implementation	3.1 Business Process & Requirements
	1.2 Executive Support		3.2 Architecture & Design
	1.3 Vision, Goals & Objectives		3.3 Development & Configuration
	1.4 Business Case & Benefit Realization		3.4 Testing
	1.5 External Dependencies		3.5 Interfaces & Integration
	1.6 Sourcing		3.6 Deployment
	1.7 Vendor Management	4. Foundational	4.1 Infrastructure & Operations
2. Project Controls	2.1 Scope		4.2 Security
	2.2 Schedule		4.3 Regulatory
	2.3 Budget	5. Data Management	5.1 Data Controls
	2.4 Resource		5.2 Data Model
	2.5 Risks & Issues		5.3 Data Conversion
	2.6 Project Comm & Collaboration		5.4 Reporting & Analytics
	2.7 Quality Assurance	6. Business Change	6.1 Organizational Change Management
			6.2 Training & Knowledge Transfer
			6.3 Customer Perception
		7. Maintenance & Support	7.1 Support

Figure 2. Risk Rating Definitions

Risk Levels	Risk Rating Definitions
Low	Green — Risk area is being managed according to applicable best practices and there is no material impact from this risk area on project success at this time.
Medium	Yellow — Risk area is being managed according to some of the applicable best practices, but others are missing, or the inherent risk can only be mitigated to a limited extent. There is a potential material impact from this risk area on project success that needs to be addressed proactively at this time.
High	Red — Risk area is in need of applicable best practices to avoid downstream ramifications, or there is significant inherent risk that cannot be reasonably mitigated. There is a definite material impact from this risk area on project success if this area is not addressed now.

1. Strategy and Leadership

1.1 Governance

Risk Rating

MED

Findings

- A 21-person SB1049 Steering Team has been established, including 6 voting members and 2 oversight team members from Enterprise Information Services (EIS).
 - The Steering Team reports to the Executive Leadership Team (ELT), per the Program Structure, however, the Steering Team membership includes the majority of the Executive Leadership Team.
 - The SB1049 Steering Team is tasked with ensuring that the Program complies with the requirements of SB1049 and directs high-level Program decisions – e.g., external stakeholder relationships, Program budget, allocation of Program resources, Program/Project scope, Program/Project strategy, etc.
 - The SB1049 Steering Team meets twice a week, every Tuesday and Thursday, and is consistently well-attended by stakeholders to ensure progress and forward momentum of the Program. Steering Team Meetings are used to escalate risks/issues requiring executive attention and resolution, as well as to provide decision briefings by the projects or team members who seek, and often receive, near real-time decisions.
- 5 teams report to the SB1049 Steering Team:
 - Building Acquisition Team.
 - Human Capital Management Team.
 - Policy Team.
 - Communications/Change Management Team.
 - Core Team, which includes the PERS Enterprise Architect Team (PEAT) and 5 Projects.
- The Program has developed and communicated a comprehensive RACI (Responsible / Accountable / Consulted / Informed) Matrix (dated Jan 14, 2020).
 - In a few instances, the person 'Accountable' for an activity and/or task is not a resource assigned to the Program. This may lead to confusion in decision-making authority and reporting relationships, posing a hinderance in effective and efficient Program execution.
 - Business Owners articulate responsibility for Project decisions, however this is not reflected in the RACI Matrix.
 - The complexity and size of the RACI might make understanding of roles and responsibilities difficult. Further, there may be opportunity to streamline responsibilities inside the Program for faster execution.
- A Decision Log is maintained and included in the Program Status Report.
- Outside of a formal governance body, there is a perception that decisions are often “decision by committee” which delays the ability to make timely progress. This

approach may be in part due to the organizational culture or concern of being held accountable.

Recommendations

1. Review reporting relationships and work processes that combine standard operations and Program activities. Where possible, streamline ways of working, lines of authority, and decision making to Program dedicated resources.
2. Streamline and re-define decision making authorities and clearly document and communicate decision-making owners across all levels of the Program. Empower decision makers to avoid bottlenecks and speed Program execution.

1.2 Executive Support

Risk Rating

LOW

Findings

- The Executive Sponsor is exhibiting the right behaviors and providing strong leadership to the SB1049 Program. This includes responding to resource requests and supporting timely decision making and issue resolution as requested from the project teams.
- There is a strong commitment from the Program and Project team members to the SB1049 Program. They are motivated to do the work necessary to ensure Program success.
- There is support and commitment to the success of the SB1049 Implementation Program by external stakeholders.
 - EIS has an oversight analyst dedicated to SB1049 Program 3 days / week to:
 - Ensure the Stage Gate process does not pose a hinderance to achieving Program timelines.
 - Provide guidance on Program/Project best practices.
 - EIS providing support to recruit resources to supplement Program leadership – e.g., Program Director and System Integration Lead.
- Executive leadership frequently provides status reporting to external stakeholders. However, in the absence of a detailed, baselined Program schedule concerns have been raised about the visibility into the amount of progress being made and the ability of the agency to meet deadlines. It is Gartner's understanding that a high-level Implementation Roadmap is under development and is anticipated to be presented to external stakeholders in January 2020.

Recommendations

1. Continue the ongoing engagement with external stakeholders (e.g., EIS, Legislative Fiscal Office, Governor's Office, etc.), addressing their top of mind questions:
 - **What is coming up?** Communicate key upcoming milestones and report on Program progress (planned versus actuals), being transparent into any key risks or issues. Utilizing a baselined Program schedule as the "measuring stick" will allow PERS to demonstrate progress against an existing schedule.
 - **How much does and will it cost?** Communicate any budget assumptions, expenditures, and forecasts.

1.3 Vision, Goals & Objectives

Risk Rating

LOW

Findings

- The vision of the SB1049 Implementation Program is driven by the legislative mandates outlined in Senate Bill 1049, which was approved by the 2019 Oregon Legislative Assembly on May 30, 2019 and signed by the Governor on June 11, 2019.
- Program goals are similarly driven by SB1049 and articulated in the Program Charter.
- While the primary objective of the SB1049 Implementation Program is to reform IAP within the PERS system in accordance with the legislative mandates, measurable objectives to determine if and when the goals have been achieved are absent.
- There is a shared understanding of the high-level objectives of the SB1049 Implementation Program. However, there is a lack of understanding and clarity of the scope and level of effort required to implement the full intent of SB1049.
- The Product Owners, Business Owners, and Project Managers do not have a unified collective understanding of how the vision and scope of each project will eventually be implemented to achieve the vision of SB1049.

Recommendations

1. Identify, document and communicate measurable objectives for the Program including mechanisms to track and report on progress towards the objectives and the anticipated benefits of the legislation.

1.4 Business Case & Benefit Realization

Risk Rating

LOW

Findings

- The business case is envisioned and directed by the Legislature. The legislation is intended to address the increasing cost of funding Oregon's Public Employees Retirement System, reduce system Unfunded Actuarial Liability (UAL) obligations, and provide relief to escalating contribution rate increases for public employers.
- PERS was engaged in the development of the Senate Bill language including limited involvement in the timelines but extensive involvement in the business case and strategy. Employers were not involved in development of the legislation.
- The SB1049 Implementation Program Business Case artifact was developed to establish the business case for structuring the implementation as a *Program* versus *separate projects*. It includes an alternatives analysis on the 2 options, the respective strengths and weaknesses of each option, and ultimate recommendation to establish a Program.
- The Business Case reflects key assumptions, constraints, dependencies and the estimated Program budget.
- The Program has not established a vision or completed analysis to understand the benefits that can be achieved by improving business processes and/or practices as a result of the changes introduced by SB1049.

Recommendations

1. Establish and document a baseline for operations/performance improvement and set Key Performance Indicators (KPIs).

1.5 External Dependencies

Risk Rating

MED

Findings

- Program scope and timelines are driven by externally driven legislative mandates.
- There is heavy reliance on third-party contractors (e.g., LanceSoft, Provaliant) to provide resources with the appropriate skillsets.
- 2 of the 5 Projects – Member Redirect and Member Choice (TBD) – must follow the State’s Stage Gate process, which is managed by the Department of Administrative Services (DAS)/EIS. The remaining 3 Projects – Employer Programs, Salary Limit, and Work After Retirement – must receive endorsements after the Project Planning phase.
- Under the direction and leadership of the PERS Executive Director, PERS is working to establish trust and transparent communication with LFO and EIS.
- Success of the SB1049 Program depends upon the approval and acceptance of the overall strategy to implement an initial Minimal Viable Product (MVP) and all work packages for each project within SB1049. In some cases, this is comprised of mostly manual processes with little to no automation or systems development and implementation. The automation is planned for later, subsequent work packages. Currently there is not a common understanding between PERS and external stakeholders on the definition of “success” for SB1049.

Recommendations

1. Provide and communicate an overall strategy and high-level schedule (i.e. a Road Map) for fulfilling the SB1049 Program requirements with external agencies that includes the definition of MVP’s and subsequent work package implementations.
2. Continue the ongoing engagement with external stakeholders (e.g., EIS, Legislative Fiscal Office, Governor’s Office, etc.), and escalate risks/issues in a timely fashion and with full transparency.
3. Request support of critical stakeholders to remove barriers and/or roadblocks and articulate the downstream implications if risks/issues are not resolved timely.

1.6 Sourcing

Risk Rating

MED

Findings

- PERS made the decision to complete and direct all work internally and to contract resources to supplement internal staff versus engaging the services of a Systems Integrator or software development agency to be fully accountable for the complete implementation of SB1049.
- The SB1049 Implementation Program resources include third-party contractors to supplement PERS staff. PERS leverages existing State of Oregon Master Price and Services Agreements, managed by DAS Procurement Services, to source these third-party contractors (e.g., LanceSoft, Provaliant).
- Third-party contractors are engaged through executed deliverable-based work order contracts.
- There is an ongoing challenge to expeditiously hire resources with the appropriate skillsets. This is in part due to insufficient planning at the onset to determine the quantity and types of resources required for each project and compounded by state hiring rules that require non-permanent status and a competitive labor market.
- EIS oversight has made the recommendation to contract several additional staff. At this time, it is unclear what contract vehicle will be used or the timeliness of these sourcing activities.

Recommendations

1. In alignment with the creation of the Program Schedule, develop a detailed Resource Management Plan, which identifies the quantity of resources by role and requisite skillset. Determine which role(s) require third-party services / contractors and execute procurement processes.
 - Although an IT Resource Management Plan does exist, this document does not address Program wide resources and does not address when what resources will be needed and for how long.
2. In collaboration with DAS Procurement Services, identify additional existing contracting vehicles and sourcing alternatives that may be available to PERS to quickly engage third-party services.

1.7 Vendor Management

Risk Rating

LOW

Findings

- PERS has existing vendor relationships with LanceSoft and Provaliant for contract staff.
- The Program secured key resources from the original jClarety implementation (bought/sold by Prospecta) for the SB1049 implementation.
- Performance of third-party contractors is managed by the contractors' ability to complete deliverables, by stated due dates and acceptance criteria, as defined in the deliverable-based work order contracts (WOCs).
- Contractor deliverables are captured in the respective Project schedule and status report with contractual due dates, however the planned versus actual due date is not documented.
- Contractor deliverables follow the QCP process once ready for approval. As of Dec 19, 2019:
 - 27 deliverables submitted, 19 of which were submitted *later than* the contractual due date:
 - 3 of which decided as 'Do Not Accept'
 - 19 of which decided as 'Accepted As Is'
 - 1 of which decided as 'Accept with Agreed Changes'
 - 4 of which do not have a decision documented
- Gartner observed generally positive sentiments in the working relationships between PERS staff and third-party contractors. PERS expressed appreciation for the external perspective and experience brought to bear by the contracted Program and Project managers.

Recommendations

1. Monitor and track contractors' performance against contractual obligations. If performance issues arise, such as failure to deliver deliverables in accordance with WOC due date, document and escalated according to predefined processes.

2. Project Controls

2.1 Scope

Risk Rating

HIGH

Findings

- Program scope, at a high-level, is defined by SB1049.
- Legislative mandates of scope and timeframes do not reflect PERS capacity for adoption associated with the complexity of the change.
- The full scope of changes (i.e., system functionality, business processes, etc.) have not yet been defined.
- PERS has taken an incremental approach to defining Project scope, with a primary focus on determining functionality and delivering against a minimum viable product (MVP).
- PERS has a preliminary understanding of the scope and implementation schedule of Work Packages that follow MVP releases but these are not well understood by stakeholders, or impacted internal staff. Note: In some cases, PERS MVP functionality does not meet the Gartner definition of the term MVP¹, but it does convey the agency's approach to prioritize essential processes or functionality in order to meet Legislative expectations.

Recommendations

1. Continue the use of the MVP approach in providing essential functionality and solutions by legislative deadlines.
2. Effectively communicate to PERS external partners the purpose of the MVP approach as well as all plans to define subsequent Work Packages, including timelines.
3. Define full scope of changes required and prioritize development timelines, ensuring functionality dependencies are understood and documented as well as providing the ability to proactively plan resources (i.e., staff, budget, etc.) for downstream work.

¹ A minimum viable product (MVP) is the release of a new product (or a major new feature) that is used to validate customer needs and demands prior to developing a more fully featured product. To reduce development time and effort, an MVP includes only the minimum capabilities required to be a viable customer solution. (Minimum Viable Product (MVP), *Gartner Glossary*, <https://www.gartner.com/en/marketing/glossary/minimum-viable-product-mvp->)

2.2 Schedule

Risk Rating

HIGH

Findings

- The lack of a Master Program Schedule contributes to the project teams not fully understanding the interdependencies and constraints of schedules, project tasks, potential and real conflicts with elaboration, development, testing, and implementation including resource assignments.
- The schedule for SB1049 was aggressive when established by the Legislature and PERS has struggled to ramp up Program outputs sufficient to meet the mandated schedule without focusing on minimal scope, or the MVP(s). For example, the Program had difficulty in hiring staff to fill limited duration positions which hampered PERS' ability to establish a complete project team and meet Program deadlines.
- Program and projects regularly update plans and provide access to Program team members. Schedule updates included regular status reports.
- SB1049 has bolstered the expertise of program management resources by adding a resource with significant program/project management skills and previous PERS experience. Through the efforts of this resource, project plans and reports are increasingly standardized, and the Program has improved its ability for insight across projects.
- Project teams are working with the agency release coordinator to coordinate:
 - Release capacity for the target date.
 - Schedule of necessary release activities.
 - Release prerequisites are met.
- To date, the five individual project teams have developed and managed project schedules independent of each other despite the reliance on shared resources (e.g. Product Owners). The SB1049 Program is currently in the process of developing an integrated project schedule,
- There is concern that not all dependencies between projects have been identified and documented, such as changes in data elements, internal processes or employer reporting requirements. The current schedule does not include planned activities to address these cross-project impacts. This also includes concerns about understanding downstream implications if prerequisite activities or milestones are delayed.
- Program and project schedules are duration based and do not include work level required by resource (i.e. resource loading). There are several key team members with responsibilities across projects (e.g. Product Owners, PEAT team, EIS oversight, etc.).
- At the time Gartner developed its draft Initial Program Risk Assessment Report, the Program did not have a summarized, comprehensive Roadmap that could be used to communicate key milestones across the Program, within the agency and to external stakeholders. Since initial draft submission, a final Roadmap has been created.

- Within the Risk Register, the Program has identified schedule delays as a Program and Project risk.

Recommendations

1. Develop a Master Program Schedule across all projects that includes resource assignments in order to enable the tracking of activities against a planned baseline and allow for the identification of resource constraints. The Master Program Schedule should include not only the development of the initial MVP solutions, but the full scope solutions for achievement of legislative outcomes.
2. Identify resource and/or technical constraints across the Program and within each Project to determine the implications to and reasonableness of current schedules. As an example, Member Redirect has an effective date of July 1 and yet elaboration/future state business definition have not begun. It is expected that the resources to complete this effort are at capacity working on other projects.
3. Develop a high-level Roadmap with key outcomes and dates to use a communication tool within the Program, the agency and with external stakeholders.

2.3 Budget

Risk Rating

MED

Findings

- The Legislature provided \$39,059,714.00 for completion of SB1049. As of 12/06/19, only \$551,186.63 has been used; approximately 1.4% of the project budget. A straight-line spending projection for an 18-month project would indicate that the Program would have spent between \$10-\$11 million within the first five months.
- PERS provided input into the budget provided by the Legislature through the fiscal impact statements with the Legislature largely funding the Program in accordance with the PERS input.
- Program participants believe that based on currently available information, sufficient funds are allocated to complete the scope of SB1049. Additional information will be available over the coming months as project teams solidify their approach and to fully meeting SB1049 requirements.
- Despite the team's belief that the budget is sufficient, the project does not currently have a unified view of project expenditures, a baseline plan for when funds will be expended and communication with project stakeholders (particularly EIS and LFO) as to when and how the funds will be expended. Additionally, activities and responsibilities for budget definition, management and communication are not currently included in the Program RACI Matrix.
- Neither the Program Manager nor individual project managers are responsible for the budgets associated with their workstreams. Budget management responsibilities are held within Program and agency leadership.

Recommendations

1. Develop a baseline expenditure plan with appropriate levels of contingency and communicate with project stakeholders in order to increase visibility within the Program and address stakeholder concerns.

2.4 Resources

Risk Rating

MED

Findings

- SB1049 has engaged and committed team members who are working diligently to deliver the required processes and functionality.
- PERS has made a significant investment in SB1049 by developing a dedicated a Program team. Though this team has taken time to be developed, key participants including project managers and Product Owners are now engaged.
- Undocumented resource contentions exist between projects causing capacity and prioritization bottlenecks. For example, the contribution of Product Owners and the PERS Enterprise Architecture Team (PEAT) members.
- PERS culture is more familiar with operational and minor project management activities rather than large process and/or technology improvement initiatives. Because of this, PERS has to go outside the organization to identify key participants including project managers and system development staff. This has led to time expended to identify these resources and bring them up to speed.
- Product Owners were difficult to identify due to the HR structure of these positions. These challenges have been addressed and three Product Owners are now onboard. However, two of these individuals are still ramping up and it is anticipated that there will be resource constraints across the three projects.
- Program leadership has identified and documented a risk that Limited Duration (LD) positions may require an extension as project timelines appear to be extending beyond the initially planned 18-month timeline.
- The experience of current Project Managers varies widely leading to concern about consistent quality of project management activities.
- Program oversight from EIS recommended on December 12, 2019 adding resources to the Program. However, their respective responsibilities and relation to current Program resources is unclear. Additional resources recommended include:
 - Program Director
 - System Integration Lead
 - Additional Project Implementation resources
- The SB1049 Program relies heavily on third-party providers (e.g. LanceSoft and Provaliant) to provide necessary resources including programmers and project managers. Difficulty in recruiting resources through these avenues has caused the Program to lag behind initial schedule milestones.

Recommendations

1. Reassign Project Managers to projects based on their respective experience with projects of similar scope and complexity. This runs the risk of requiring additional time for these resources to transition, but this may be offset by increased effectiveness of the resources.

2. Work with EIS to clarify the intent of the recommendation for additional resources and exactly how these resources will impact the roles and responsibilities of other Program team members prior to moving forward.

2.5 Risks & Issues

Risk Rating

MED

Findings

- The Program is appropriately tracking and addressing both project and Program risks. These risks are tracked at both the project and Program level with some overlap of issues between the Program and project levels. As of December 10, 2019, the Detailed Risk Assessment and Register contained 152 open or executed risks with their associated potential impact. These risks are break down as follows:
 - Program level risks: 45 risks (High: 18, Medium: 9, Low: 10, Unassigned 8)
 - Salary Limit risks: 29 risks (High:16, Medium: 11, Low: 2, Unassigned 0)
 - Work After Retirement: 44 risks (High:26, Medium: 10, Low: 6, Unassigned 2)
 - Employer Programs: 20 risks (High:11, Medium: 8, Low: 1, Unassigned 0)
 - Member Redirect: 14 risks (High:10, Medium: 3, Low: 1, Unassigned 0)
 - Member Choice: No risks currently documented
- Despite tracking and addressing risks and issues, significant shortcomings in addressing several key risks and issues exist, namely:
 - Resource contention
 - Requirements definition focusing on MVP and not including full scope
 - Lack of consistent understanding of Program status and objectives across the organization
- Concerns raised that current status reports do not capture all high impact issues and thus are not tracked or effectively communicating to Program leadership for resolution.
- Current SB1049 litigation distracts from the Legislatives mandates. For example, projects teams discuss how to roll back a SB1049 change if the litigation is successful as well as diverting resources from policy writing to litigation discovery tasks.

Recommendations

1. Establish an issue management discipline to continuously identify, document, track and communicate/escalate high impact issues to Program leadership and external stakeholders (e.g. EIS and LFO).
2. As Member Choice represents a new line of business for PERS, identify implications to current state operations and document associated risks for mitigation.

3. Determine the prioritization of litigation versus SB1049 activities and assign resources accordingly. Include litigation and impacts in reports to external stakeholders.

2.6 Project Communications & Collaboration

Risk Rating

MED

Findings

- The Program communication team is experienced, nimble and dedicated to supporting the Programs' needs.
- PERS has developed websites to communicate with members and employers specifically on SB1049.
- Communication activities are included in each project schedule
- Planned Communication activities are considered across all projects,
- The Project schedules for Member Choice and Salary Limit indicate missed communication dates. However, this appears to be due to insufficient maintenance of the project schedules rather than missed communication deadlines.
- The Employer Programs project schedule indicates that planned external communications are complete. However, additional communications are planned – e.g., in the Employer Monthly Newsletter, GovDelivery.
- The Communication team is in the process of adding two additional resources, a dedicated employer communications resource and a dedicated member communications resource.
- Program participants indicated concern that the communication and adoption plan for the over 900 employers will be problematic. Member Redirect will require a change in the employer reporting format and will require individual communication and coordination with each employer.
- A Program Communication Plan exists that clearly articulates the roles, methods and standards for communication initiated by the Program. However, the plan does not include communication objectives (e.g. employer recognition of required reporting format changes) or how the Program will target specific audiences (e.g. employers, PERS members, etc.).
- Efforts are underway to communicate Program schedule and progress within the Program and with external stakeholders.
- Consistency and focus on vision and the plan require better internal communication to ensure scope and schedule is understood and that internal and external stakeholders are on the same page.
- Communication team is lacking firm information to include in project communications and to update external stakeholders.

Recommendations

1. Make a focused effort to communicate Program/project schedules, status and outcomes within the Program, the agency and external stakeholders.
2. Ensure project personnel understand the schedule, scope, objectives, and the definition of success for each SB1049 project.

2.7 Quality Assurance

Risk Rating

LOW

Findings

- The SB1049 Program is developing a Quality Management Plan with the current draft dated December 2, 2019.
- PERS utilizes an internal quality process called the Quality CheckPoint Process (QCP)
- Budget notes associated with House Bill 5032 which provides funding for PERS requires the SB1049 Program to use the Oregon Stage Gate oversight process.
- To address PERS concerns that the Stage Gate process would cause delays, EIS has provided an onsite analyst to assist PERS in the SB1049.
 - EIS onsite analyst has assisted PERS in identifying Program and Project management items to improve. These improvement suggestions have been well received by SB1049 PM team.
 - EIS has provided recommendations via memo, but the objectives of the recommendations to add a Program Director and System Integration Lead are not clearly understood by PERS Program leadership
- The Program has adopted Qmetry as the test case management solution in preparation for defining and completing testing scenarios.
- It is difficult to fully assess Quality Assurance plans and processes without a clear understanding of how each project will fulfill SB1049 mandates and the associated documentation of requirements, test plans, test results etc.

Recommendations

1. Complete the Quality Management Plan and communicate within the Program.
2. Include methodology for external stakeholder testing (i.e. employer reporting) to the Quality Management Plan.

3. Solution Development & Implementation

3.1 Business Process & Requirements

Risk Rating

HIGH

Findings

- Project teams are using an elaboration process whereby Product Owners are eliciting and documenting business processes and requirements.
- Two of the five projects (WAR & Salary Limit) are at the stage of elaboration where future state business processes are being defined. The remaining three projects are not yet at this point.
 - Work Packages Short Term for Member Redirect are targeted for completion by early June 2020, which may be insufficient time to complete at the level of quality and scope envisioned.
- The Product Owners, Business Owners, and Project Managers do not have a unified collective understanding of how the vision and scope of each project will translate to requirements and eventually be implemented.
- The SB1049 Program has shifted initial requirement elicitation and documentation responsibilities from IT resources to business resources to address concerns identified during the previous IAP effort. This has caused longer initial requirement definition timelines as participants become accustomed to the new responsibilities.

Recommendations

1. Develop a comprehensive, consolidated list of new and changed business processes such that full end-to-end test cases are developed as part of UAT, and that the full business processes are included as part of training and Change Management activities.
2. The Program Director should ensure that all project managers, business owners, and product owners fully understand the requirements of each project.

3.2 Architecture & Design

Risk Rating

MED

Findings

- The PEAT team is actively involved in the Program and is providing guidance in a timely fashion (comprised of the business architect, data architect, application architect, and security architect).
 - The team currently lacks a technical architect but is currently recruiting to fill the role.
- Given the potential of yet unknown required updates to jClarety for SB1049, and the potential prerequisite to implement any required technical debt, there are no integration dependencies documented between SB1049, jClarety, and other potential system upgrades (middleware, database, and other).
 - PERS is aware of some integration dependencies, but these dependencies are not included in either the Program or project schedules.
 - Known dependencies include a) EAP and MS SQL Server 2017, and b) Long Term Redirect will introduce some new low-level technologies to support EPSA within ORION.
- External parties such as EIS and LFO may not understand or know of any required technical updates that must be included as part of the project implementations.

Recommendations

1. Update the Master Program Schedule to include any additional technical upgrade requirements and activities and show the dependencies of each. Note this could also be included as part of the individual project plans to ensure the individual project teams understand the interdependencies.
2. Clarify and communicate with all stakeholders, internal and external, any potential technical upgrades or modifications necessary for SB1049 to be successful.

3.3 Development & Configuration

Risk Rating

MED

Findings

- A separate physical location has been established for the project team.
- Co-development occurs in different locations and does not appear to be a detriment to the development team.
- The code line implementation methodology appears to be well thought out and coordinated (separate branches and merging strategy).
- The potential required system upgrades and timing of such upgrades, if any, with SB1049 related projects is unclear.
- JIRA is the tool used internal for development productivity tracking including bug tracking and communication processes.

Recommendations

1. Update the Master Program Schedule to include technical upgrade requirements and the implementation activities/timing for all phases (including any future planned work packages) to identify development and configuration critical path items.

3.4 Testing

Risk Rating	MED
--------------------	------------

Findings

- It is unclear as to when test resources will be needed for each testing phase of each SB1049 project. There may be conflicts with the availability of testing resources.
- It is unclear if a comprehensive list of full lifecycle or end-to-end test cases are developed for each iterative UAT that would satisfy testing any new or changed business processes.

Recommendations

1. Complete the Master Program Schedule to include all testing cycles enabling the planning of test resources.
2. Incorporate the new or changed business processes to be part of end-to-end testing and as part of change management preparation including training activities.

3.5 Interfaces & Integration

Risk Rating

LOW

Findings

- The integration and coordination of any potential interfaces with jClarety or other systems may need more definition.
- It is unclear how the required changes for Member Redirect can be accomplished in the desired timeline.

Recommendations

1. Complete the Master Program Schedule to include any potential interfaces with internal or external systems including any dependencies.

3.6 Deployment

Risk Rating	MED
--------------------	------------

Findings

- Tasks for Stage Gate steps are not always included in project plans.
- PERS is planning and striving to follow their internal QCP and external Stage Gate processes.
- In some cases, timelines for development, testing, and implementation activities seem unrealistic.
- The deployment of MVP's for WAR and Salary Limit does not appear to have been effectively communicated with EIS and LFO causing external skepticism as to the initial solution and as to the plan for full implementation of additional work packages.
- Keeping Member Choice internal with PERS (instead of VOYA) represents more work internally and needs defined in detail in the project plan.
- The PEAT team and the Communication Team appear to be nimble and react quickly to last minute questions and concerns.

Recommendations

1. Define the full work package implementation plan for each component of SB1049 and reflect in the project plans. Communicate to stakeholders, including LFO and EIS.
2. Include Stage Gate tasks in the SB1049 detailed project plans so that proper time and resources are allocated to the Stage Gate process.

4. Foundational

4.1 Infrastructure & Operations

Risk Rating

LOW

Findings

- As SB1049 functionality is being added to existing PERS systems, Infrastructure and Operations baseline is already established.
- PERS systems have outstanding technical debt (deferred system improvements or enhancements) which may limit PERS ability to implement SB1049 functionality.

Recommendations

1. Where existing technical debt limits the ability to provide SB1049 functionality, identify the technical debt and communicate the need, scope and implications (if unaddressed) with critical stakeholders and resolve as appropriate.

4.2 Security

Risk Rating

LOW

Findings

- As SB1049 functionality is being added to existing PERS systems, the security posture will not materially change.
- SB1049 functionality is being overseen by the PERS Enterprise Architecture Team (PEAT) which includes the agency Security Architect.

Recommendations

- None at this time.

4.3 Regulatory

Risk Rating

LOW

Findings

- SB1049 does not introduce any additional regulatory requirements for PERS and the organization appears to understand and address existing regulatory requirements.

Recommendations

- None at this time.

5. Data Management

5.1 Data Controls

Risk Rating

LOW

Findings

- The PEAT team, which includes a business architect, data architect, application architect, and a security architect, is actively involved the project and providing guidance in a timely fashion.

Recommendations

- None at this time.

5.2 Data Model

Risk Rating

LOW

Findings

- PERS has hired outside jClarety expertise to assist in the upgrades and integration with the jClarety data model.
- The PEAT team includes a resource with the responsibility for overseeing the data model who is reviewing proposed solutions. Some concern was expressed that the data model is difficult to “defend” as it has been extensively modified.

Recommendations

- None at this time.

5.3 Data Conversion

Risk Rating

LOW

Findings

- SB1049 requires the addition of functionality or modification of existing systems.
- It appears that little to no data conversion is required for each project. One exception appears to be with Member Redirect. As this project is following the MVP process, there may be some conversion of voluntary contributions that are initially manually processed but will need to be later converted to the future automated process. The Program is aware of this situation and is planning for any required conversion.

Recommendations

- None at this time.

5.4 Reporting & Analytics

Risk Rating

LOW

Findings

- The initial implementations of the WAR and Salary Limit projects included manual processes and limited reporting.
- Initial review of reporting specifications including report layout, field definition, and purpose of reports appears detailed and comprehensive.

Recommendations

- None at this time.

6. Business Change

6.1 Organizational Change Management

Risk Rating

HIGH

Findings

- Organizational Change Management (OCM) is embraced in principle, but there is not a clear vision or path on how OCM is integrated with making sure the “people side of change” is adequately prepared and implemented.
- A Program resource, who is Prosci certified, is dedicated to OCM efforts.
- PERS underestimates how OCM can improve project outcomes. Specifically, OCM is viewed as “touch-feely” activities rather than assisting PERS staff and external stakeholders to understand and adopt revised processes and functionality.
- Organizational resistance is not documented and likely not fully understood and is a potential impediment to the success of the roll-out of SB1049.
- As part of the go-live criteria, an Organizational Readiness Assessment should be completed that includes both the ADKAR Readiness Assessment and the Business Process Change Readiness Assessment. New or changed business processes are not fully understood nor documented, and thus an integral part of the OCM plan is absent. As such, business process impact to the organization may not be adequately addressed in OCM efforts (the “people” side of change that compliments the technical changes).

Recommendations

1. Consider adding professional OCM resources to the PERS OCM team. This will provide the necessary experience and knowledge to effectively apply OCM to the Program and improve the likelihood of success.
2. Identify desired OCM outcomes (e.g. employers adopting new file requirements, employees adopt new process) and develop OCM plans to achieve objectives.
3. Reflect key and new OCM activities and responsibilities into the Master Program Schedule, ensuring Program dependencies are captured and understood.
4. Consider building a Change Management Communication Network by adopting a “Change Champion” team with existing personnel to support the OCM plan and activities, and to support the ADKAR methodology. The effectiveness of communicating the “why, when, and how” of each SB1049 component can be effectively communicated through a Change Champion team.
5. Measure the readiness of PERS and external stakeholders (employers, members, etc.) regarding the new and changed business processes.
6. As part of the Change Management Charter and mission, consider developing common talking points and language with SB1049 communication. This will provide a common vision for both internal and external stakeholders. As an example, this may include talking points that answer
 - Why are we doing this?
 - When are we doing this?

- How are we doing this?
- What's changing?
- What's staying the same?
- What's in it for me? (as seen from various stakeholder positions and includes the new or changed business processes)

6.2 Training & Knowledge Transfer

Risk Rating	MED
--------------------	------------

Findings

- PERS has experience providing, developing and delivering employee training in order to adopt new processes and functionality.
- Training activities and requirements are not well planned, and responsibilities are not clearly defined.

Recommendations

1. Clarify and communicate training and knowledge transfer activities and responsibilities.

6.3 Customer Perception

Risk Rating

LOW

Findings

- Despite current external communication efforts, a portion of the employers and members are confused about the impacts of SB1049 and contact PERS for clarification.
 - In many instances, the Program does not have answers to these questions.
 - In other instances, the employers and/or members have not read nor understood existing communications and PERS addresses.
- Neither employers nor members are involved in business requirement definition.
- This initial assessment did not include discussions with employers or members.

Recommendations

1. Develop a working group of employers and establish regular checkpoints in order to:
 - Gain employer perception of current SB1049 Program status.
 - Allow employers to provide their perspectives on requirements and schedule.
 - Provide an audience for the communications team to refine employer communications.

7. Maintenance & Support

7.1 Support

Risk Rating

LOW

Findings

- Ongoing support model is not anticipated to change given the system enhancements.
- Resource planning to determine whether additional capacity is required beyond current state not completed.
- Ambiguity in respective Project go-live dates, posing challenges to plan appropriately for post go-live support.
- Ongoing maintenance releases for 2020 not yet schedule but anticipated. The absence of the plan may pose challenges to the Program (e.g., schedule, dependencies) and resource availability.

Recommendations

1. Establish the Program Schedule, which identifies go-live dates (by Project and Work Package).
2. Determine 2020 maintenance releases and confirm in the Change Schedule.
3. Determine the Resource Plan, identifying additional resource requirements – if applicable – needed to support the future state.

Appendices

Appendix A: Data Gathering

Documents Reviewed

Document
1- SB1049 PERS Program Structure org chart
121719 SB 1049 Steering Team meeting minutes
13- Employer Programs
14- Salary Limits
2- Steering Committee Org Chart
3- Core team Org Chart
Communications Change Management team Org Chart
Detailed Risk Assessment and Register Doc v0.01
Employer Programs Project Schedule 12-17-2019
Employer Programs Project Team Org Chart
Human Capital Management team Org Chart
Member Choice Project Schedule 12_18_2019
Member Choice Project Team
Member Redirect Project Schedule 12_18_2019
Member Redirect Project Team
PERS Enterprise Architect team Org Chart
PERS SB 1049 Implementation Program Oversight Model
Requirements Traceability Matrix Sample
Salary Limit Project Team
Salary Limits Project Schedule 12_17_2019
SB 1049 Implementation Program Schedule 12_17_2019
SB1049 Implementation Program Communication Management Plan v1.00
SB1049 Program Requirements Management Plan v0.07
SB1049 Program Status Report Dashboard 12_06_2019
SB1049 Salary Limits Status Report 12_15_2019
SB1049_Implementation_Program_Charter_v1.0
SB1049_Status_Report_20191215
WAR Project Team
Work After Retirement Project Schedule 12_17_2019

Interview Participants

Name	Role
James Allen	Assistant Program Manger
Ed Arabas	Oversight Analyst, Enterprise Information Services (EIS)
Brandon Armatas	Business Owner, Salary Limit
Johnna Bergman	Product Owner, Finance
Carole Anne Boal	Change Management
John Borden	Sr. Legislative Analyst
Dean Carson	External Communication Lead
Tim Carter	PERS Quality CheckPoint Process (QCP
Bob Cummings	Principal Legislative (IT) Analyst
Jim Duckering	Enterprise Application Support Manager
Yvette Elledge-Rhodes	Program Business Owner/Program Sponsor
Laurel Galego	Business Owner, Work After Retirement
Christa Harrison	Program Manager
Richard Horsford	Chief Financial Officer
Cynthia Kirkwood	Business Owner, Member Choice
Wendy Luttrell	Product Owner, Pension/IAP
Amanda Marble	Business Owner, Employer Programs
Jordan Masanga	Chief Information Officer / Chief Architect
Susan Mundell	Project Manager, Work After Retirement
Elaine Nance	PEAT, Systems Analyst/Development
Mo Naser	PEAT, Data Architect
Abilgail Ofstedahl	PEAT, Business Architect
Kevin Olineck	Director & Executive Sponsor
Pallavee Pandey	PEAT, Application Architect
Sam Paris	Business Owner, Member Redirect
Shane Perry	PEAT, Security Architect
Elli Probasco	Product Owner, Pension/IAP
Bruce Rosenblatt	Project Manager, Salary Limit
Elizabeth Rossman	Director of Communications
Jason Stanley	Chief Compliance, Audit & Risk Officer
Lydia Uribe	Release Manager for Maintenance & Enhancements to ORION
Christine Vanderhoof	Business Systems Analyst Lead, Member Redirect
Joli Whitney	Project Manager, Employer Programs / Member Choice
Heidi Zinsmann	Sr. IT Portfolio Manager, Enterprise Information Services (EIS)

Appendix B: Risk Category Definitions

Strategy & Leadership

Readiness Category	Definition
1.1 Governance	The extent to which the project accountability and decision-making frameworks are established and adhered to. Governance addresses the proper identification and management of decisions and defines who makes them as well as how they should be made and acted upon. This risk area assesses the structure, effectiveness and efficiency of the decision-making framework as it relates to critical strategic decisions relating to project scope, schedule, budget and/or resources and influence the successful implementation of the solution.
1.2 Executive Support	The extent to which the project has executive sponsorship committed to the success of the project and executive (business and IT) leadership is bought-in and engaged. Executive support considers the extent to which there is internal and external project support that takes action and removes barriers to help enable the successful delivery of the project. This risk area assesses sponsorship and accountability, executive understanding, buy-in and commitment, ability and willingness to support the project and the actual effectiveness of such support.
1.3 Vision, Goals & Objectives	<p>The clarity of definition and alignment of:</p> <ul style="list-style-type: none"> ▪ Vision –which defines the broad, high-level end-state of the solution. ▪ Goals –which define specific business end-states (i.e. long-term outcomes) to be achieved. ▪ Objectives –measurable specifications that help determine if / when goals have been achieved. <p>This risk category also considers the breadth and consistency of understanding of the vision, goals & objectives by the project stakeholders and team, and the extent to which they provide clear guidance to the project.</p>
1.4 Business Case & Benefits Realization	The extent to which project benefits (quantitative and qualitative), costs and risks have been articulated, are linked to the project scope, and vetted with key project stakeholders. This risk area assesses the project's alignment to the business case as well as managing expectations for achieving benefits, the accountability and metrics for measuring benefits and the framework for ensuring they are achieved throughout the life of the project.
1.5 External Dependencies	The extent to which project benefits (quantitative and qualitative), costs and risks have been articulated, are linked to the project scope, and vetted with key project stakeholders. Benefits realization includes managing expectations for achieving benefits, the accountability and metrics for measuring benefits and the framework for ensuring they are achieved throughout the life of the project.
1.6 Sourcing	The extent to which to the project leadership and team is obtaining / has obtained required services from third parties when necessary (e.g., hardware, software, services, etc.). This risk area assesses the sourcing approach (including the third-party organizations' capabilities as it pertains to the project specific needs), service agreements and the ability to utilize existing relationships.

1. Strategy & Leadership (cont'd)

Readiness Category	Definition
1.7 Vendor Management	The extent to which the project leadership and team is engaging, building and maintaining vendor relationships. This risk area assesses the ability to manage vendors including key vendor processes, roles and responsibilities, service level agreements and the ability to utilize existing relationships.

2. Project Controls

Readiness Category	Definition
2.1 Scope	The extent to which the project scope, to the degree required for the scale and complexity of the project, is defined, planned and managed for the solution being implemented. Scope considers functionality, workflows, process changes, data conversion, interfaces, applications being replaced, reporting / analytics, infrastructure, impacted stakeholders, business units, etc. This risk area assesses the clarity, adequacy, and specificity of the stated scope as well as the ongoing management of scope, such as, identifying, justifying and managing any changes to project or solution scope (e.g., Change request processes).
2.2 Schedule	The extent to which project schedule, to the degree required for the scale and complexity of the project, is effectively defined, planned and managed for the solution being implemented. Schedule considers the project's work breakdown structure, its inputs to project schedule, especially critical path activities and milestones as well as the extent that these schedule deliverables exist and are sufficiently defined, estimated, scheduled, communicated, maintained, managed, and updated. This risk area assesses the reasonableness, comprehensiveness, duration, dependencies and resourcing that pertain to scheduling as well as alignment to scope, resources, budget, etc.
2.3 Budget	The extent to which project budget, to the degree required for the scale and complexity of the project, is effectively defined, planned and managed for the solution being implemented. Budget considers original funding, ongoing budget management, taking into account the timing of supply and demand, level of certainty of funding requirements, processes for releasing funds, and other factors that influence the project's ability to pay for required services, resources (internal and external), software, hardware and any other required materials. This risk area assesses the completeness of the existing budget, the ability to track and monitor the budget, as well as the extent to which the project is current adhering to the budget and alignment to program scope, schedule, resources, etc.

2. Project Controls (cont'd)

Readiness Category	Definition
2.4 Resources	The extent to which project resourcing, to the degree required for the scale and complexity of the project, is effectively defined, planned and managed for the solution being implemented. Resources considers the ability to plan for and create an efficient and effective project team capable of delivering the planned solution and including / accounting for the appropriate density (full-time, part-time), mix (business, technical) and source (internal, external) for project resources. This risk area assesses the appropriateness (e.g., comprehensiveness, capacity, and skillset) of resource plans and degree of alignment to other critical project areas (e.g., project scope, schedule, budget, etc.).
2.5 Risks & Issues	The extent to which project risks and issues, to the degree required for the scale and complexity of the project, are effectively planned for and managed for the solution being implemented. Risk considers processes for actively identifying, monitoring, communicating and mitigating potential events that could have a negative impact on the delivery of the project solution and/or benefits. Issues considers processes to actively respond to / mitigate unplanned events that occur and must be actively managed or mitigated in order to ensure the delivery of the project solution and benefits. This risk area assesses the proactive assignment, development and execution of mitigation and response plans, and applying quantitative risk analysis where appropriate. This risk area also assesses the ability to prioritize and successfully resolve issues in a timely manner and the degree issues arise that are in no way connected to previously identified risks.
2.6 Project Communication & Collaboration	The extent to which the project collaboration is proactively facilitated and is executed on a project to the degree required for the nature and complexity of the project. Communication considers planning and executing clear internal communication and collaboration, as well as using the appropriate mechanisms / tools. This risk area assesses the effectiveness of project communication structures and tools (e.g., e-mail, document management site, scrums, etc.) across the project team, including cross-work stream and cross-partner collaboration.
2.7 Quality Assurance	The extent to which the project is at risk for potential losses due to quality level that doesn't meet the project's goals. This risk area assesses the vendor's and client's abilities to have internal and external quality measures and acceptance processes in place and, as necessary, have controls in place to make adjustments when required.

3. Solution Development & Implementation

Readiness Category	Definition
3.1 Business Process & Requirements	The extent to which the project's business processes and requirements are defined, documented, elaborated, traced, prioritized and managed through all project phases. Business processes and requirements assesses the completeness of the effort, how requirements are elaborated or changes are communicated and approved, potential presence of hidden requirements and the overall alignment to scope and scope management.
3.2 Architecture & Design	The extent to which the project has an understanding of the overall composition of the solution architecture and system components, including how they address specific solution requirements, level of customization vs configuration and how they fit together. Architecture and design assesses the project's understanding of how the various solution components will actually be developed or configured and integrated, as well as validates that the technical quality (i.e. maintainability, extensibility, scalability, and robustness) of the solution are taken into account.
3.3 Development & Configuration	The extent to which the project has defined and implemented a development approach and delivery style, including outlining the software development lifecycle methodology (i.e. approach, principles / standards, roles and responsibilities, tools, etc.). Development and configuration assesses the project's ability to successfully plan, execute and demonstrate progress on these activities in based on the project timeline and solution's architecture and design, and alignment to available resources.
3.4 Testing	The extent to which the project plans and executes the complete breadth of solution testing, including the appropriate phases(e.g., unit, functional, integration, performance, security, UAT, etc.).Testing assesses the entry and exit criteria for each of the testing phases, test coverage, test automation, provisioning of test environments and data, timeline, resources, test cycles, and defect management and resolution process.
3.5 Interfaces & Integration	The extent to which the project is planning, building and implementing the interfaces of the new solution with other applications, internal or external to the organization. Interfaces and integration assesses the clarity and completeness of the interface's purpose, de
3.6 Deployment	The extent to which the project has a plan, a process and is able to move a new solution (or new version of a solution) across environments (i.e. change and release management, technical change management) and into production and/or to a new set of users. Deployment assesses the procedures leading up to Go Live (including legacy decommission), the stability of the solution after Go Live, potential roll-back or contingency procedures (e.g., run book, business continuity, disaster recovery, etc.) as well as alignment to user support and transition to production support.

4. Foundational

Readiness Category	Definition
4.1 Infrastructure & Operations	The extent to which the project has planned, procured, developed and is able to support the required infrastructure and operations. Infrastructure includes hardware, operations software such as operating systems and DBMSs, and technical infrastructure such as networks and end-user infrastructure such as PCs, notebooks, printers and mobile devices. Operations includes all supporting ITSM services such as incident management, problem management, configuration management, change management, release management, etc. Both infrastructure and operations needs to consider in-house capabilities to support applications deployed from an organization's data center and external capabilities and services to support applications that are hosted externally (IaaS, PaaS, etc.) or provided as SaaS.
4.2 Security	The extent to which the project has defined and implemented the full lifecycle and full breadth of security requirements for the solution being implemented. Security assesses the physical security, solution security architecture, data security and privacy (e.g. encryption; data at rest and in transit), application permissions / controls (e.g., roles and responsibilities), processes for applying / maintaining security in production, audit requirements / compliance as well as backup and recovery procedures.
4.3 Regulatory	The extent to which the project has an understanding of, and the ability to comply with, regulatory requirements that apply to the organization, its industry and the solution being deployed.

5. Data Management

Readiness Category	Definition
5.1 Data Controls	The extent to which enterprise and project Data Management (governance, stewardship, security, etc.) are aligned and adequate to meet project needs. Data Controls assesses the project's adherence to a well-defined system of decision rights and accountabilities for information-related processes as well as the project's ability to execute according to agreed-upon models which describe who can take what actions, when they can take them, with what information and using what methods.
5.2 Data Model	Assesses the existence, maturity and stability of both logical and physical data models for the new solution. This risk category considers the overall solution data model, the alignment and integration of data models for different solution components (e.g. modules from different vendors), and any customizations of the data model (and the corresponding effort to maintain those customizations). This risk category also considers the ability of the data model(s) to support transactional vs. reporting / analytics needs.
5.3 Data Conversion	The extent to which the project has the processes, resources and tools for cleansing and migrating legacy data to a new solution. Data conversion assesses the plans and processes to ensure data quality, including what will be converted, how it will be cleansed and converted (including extraction, transformation and loading) into the new solution's environment and how the quality and quantity of the legacy data is assessed.
5.4 Reporting & Analytics	The extent to which the project considers and meets the organization's reporting and analytics needs as it pertains to the new solution. Reporting and Analytics assesses the appropriateness of infrastructure and architecture, data (internal and external) requirements, alignment to enterprise reporting strategy / solution and evolution of new solution's reporting capability over legacy system's reporting capabilities.

6. End-User Implementation

Readiness Category	Definition
6.1 Organizational Change Management	<p>The extent to which the project identifies, analyzes, manages and implements the required changes to the organization as well as its processes and structure in order to maximize the benefits of the new solution being implemented, helps end users accept change, and/or gets the organization ready for the change to take place. Organizational Change Management (OCM) assesses the depth and completeness of the project's stakeholder and/or business impact analysis as well as the level of alignment / synchronization between the business processes changes, communications and training to execute changes in procedures, activities and behaviors.</p> <p>A key element of OCM is Communication. Accordingly, OCM also assess the extent to which the project analyzes key stakeholders (business and IT; internal and external) who are impacted by the project but are outside the project team, defines their respective key messages, and then develops and executes a plan using the appropriate mechanisms to deliver effective messages to the stakeholders in a timely fashion. Communications assesses the methods to obtain feedback from end users.</p>
6.2 Training & Knowledge Transfer	<p>The extent to which the project plans, manages and delivers the appropriate level of technical and end-user training to support both technical / procedural changes resulting from a new solution and broader process changes that have a more substantive impact on all stakeholders. Training assesses the comprehensiveness and appropriateness of training audience, schedule, tools/methods, and high level content to allow intended audiences to be self-sufficient at Go Live. Knowledge transfer assesses similar criteria but with a focus on how to ensure solution support teams will be ready to support the solution when it goes live.</p>
6.3 Customer Perception	<p>Assesses the customers' perception of the solution both before and after it is deployed. While customer perception may be influenced by OCM, communications and training, this risk category also considers the inherent perception that must be overcome by the project based on the make-up of the solution's stakeholders and end-users, and the legacy solution being replaced or renewed.</p>

7. Maintenance & Support

Readiness Category	Definition
7.1 Support	<p>The extent to which the project has planned and implemented the proper end user support structures for deployment and after Go Live, including clear roles, responsibilities and service level agreements. End user support assesses the overall processes, procedures and support for business processes and policy, infrastructure / devices, written materials, help desk, and other business and technical support.</p>

**Any questions regarding this Report
should be addressed to:**

Heide Cassidy
Managing Partner
Gartner, Inc.
2001 Sixth Avenue
Suite 2200
Seattle, WA 98121
Mobile: +1 206 245 8321
Email: heide.cassidy@gartner.com

**This Report was prepared for
State of Oregon Public Employees Retirement System:**

Yvette Elledge-Rhodes
State of Oregon Public Employees Retirement System
Deputy Director and Executive Sponsor - SB1049 Program
Email: Yvette.S.Elledge-Rhodes@state.or.us