WaTech
Washington Technology Solutions

Annual Independent Recommendations on Oversight of IT Projects

December 28, 2023

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Introduction and purpose

The 2023-25 operating budget provides WaTech funding for experienced information technology (IT) project managers to provide critical support to agency IT projects under WaTech oversight. Per Section 155(1)(a) these project managers:

i.   Provide master level project management guidance to agency IT stakeholders.

ii. Consider statewide best practices from the public and private sectors, independent review and analysis, vendor management, budget and timing quality assurance and other support of current or past IT projects in at least Washington state and share these with agency IT stakeholders and legislative fiscal staff twice annually, and post these to the statewide IT dashboard.

iii. Provide independent recommendations to legislative fiscal committees by December of each calendar year on oversight of IT projects to include opportunities for accountability and performance metrics.

This report is the fifth annual report providing independent recommendations on oversight of IT projects. It reflects a requirement introduced in 2022 (see item (iii) above) to include opportunities for accountability and performance metrics.

2023 new observations and recommendations summary

The observations and recommendations included in this report by the project management partners (PMPs) are the result of engagement with WaTech and customer agencies as well as best practice research.

	Observation	New Recommendation(s)

1	**Agencies often engage WaTech as part of compliance rather than a partner in the planning of their projects.**
	
	Many projects experience challenges in later phases due to decisions made early on in initiation, planning, or procurement. For instance, if an inexperienced team put together a resource plan it could result in a budget request that is missing key elements. If funding was granted, this would lead to a project budget that did not meet the project's requirements. Or in another case, if a team used a project structure and governance that is not suited for the size and scale of their project, that project may experience issues and false starts. In other cases, procurement of a vendor is completed before the appropriate project team is onboarded, leading to a vendor driven project that does not meet the agency's needs.
	
	Many current issues and pitfalls could be avoided if agencies leveraged WaTech partners early on to aid them in planning their efforts. This approach would reduce risk significantly and position the project approach, schedule, budget request, and project structure for the best possible outcome.
		1. Document "Project Planning Partnership Approach" to partner with agencies, at agency request, to support initiation, planning, and procurement of their projects. Approach should include:
		    a. What to expect when engaging with WaTech.
		    b. Types of support available (e.g., Oversight Consultant, Project Management Partner, Enterprise Architecture).
		    c. Key areas of focus (e.g., definition of governance structure tailored for the project and agency).
		    d. Identification of pertinent lessons learned from similar projects.
		    e. Process to identify and engage with other state personnel to discuss current and experience with similar projects.
		    f. Structure of repository for past documentation (e.g., procurement contracts, QA statements of work, other project documentation).
		2. Engage with two to three new agency projects to "pilot" the approach.
		3. Create Outreach Plan with the objective of changing agency perception of WaTech. This outreach could include:
		    a. Town halls discussing the Project Planning Partnership Approach.
		    b. "Road show" at the appropriate different agency forums offering an overview and open Q&A.
		    c. Direct engagement with agency leadership, PMOs, and other staff to ensure the offering is understood and WaTech engagement process is clear.
		    d. "Case Study" summaries of this approach on projects

	Observation	New Recommendation(s)

2	**Key performance indicators (KPIs) are often not collected, poorly defined, or impractical. This includes KPIs that are—or should be—reported on the Washington State IT Project Dashboard.**
	
	Per section 701 of the 2023-25 Operating Budget (Engrossed Substitute Senate Bill 5187), projects under oversight must include in their charter:
	
	    (iv) Metrics to support the project strategy and vision, to determine that the project is incrementally meeting user needs.
	
	    (vi) Performance measures used to determine that the project is on time, within budget, and meeting expectations for quality of work product.
	
	When looking at the project reporting posted to the project dashboard, rarely did we see actual KPIs being reported.
	
	KPIs are often proposed in the project charter; but that is often the last time they are mentioned.
		Our recommendation is that projects under oversight should adopt these practices when choosing and defining KPIs:
		
		1. Evaluate metrics using a set of detailed criteria (other than SMART). The KPIs should be:
		    • Linked to a project's goals.
		    • Responsibility-linked.
		    • Organizationally acceptable.
		    • Comprehensive.
		    • Credible.
		    • Cost-effective to collect and process.
		    • Compatible with existing information systems.
		    • Comparable with other data.
		    • Easy to interpret.
		2. Define each metric in detail. This includes:
		    • Formula – How the KPI is calculated.
		    • Data source.
		    • Unit of measure (e.g., percent, ratio).
		    • Collection and reporting frequency.
		    • Baseline – Current level of performance.
		    • Target – Desired level of performance.
		    • Threshold – Acceptable level of performance.
		    • Owner.
		    • Authorized by.
		3. Collect the metric data.
		    • KPI data is only useful if it is collected and reported.
		    • If projects aren't using KPIs to inform their decisions, then they are wasting time.

	Observation	New Recommendation(s)

3	**IT projects, in general, fail often. And the impact of failures is worse for large projects.**
	
	Several studies cite statistics that IT projects fail often:
	
	• According to a 2020 <u>Standish Group</u> report, out of 50K projects in their study, 66% of IT projects end in partial or total failure. And large projects are successful less than 10% of the time.
	• And not only do larger projects fail more often, but when they fail, the impact of the failure is larger. Research from <u>McKinsey</u> found that 17% of large IT projects go so badly, they threaten the very existence of the company.
	
	Reinforcing these statistics are our personal experiences as project management partners helping teams with IT projects.
	
	Large IT projects are more difficult to deliver successfully than small ones for a variety of reasons, including:
	
	• A project's complexity, interdependencies, communication, and other challenges grow as fast (or faster) as the project grows.
	• When a project requires lots of people working for a long time, it's harder for managers to predict all the activities and work streams that will be needed.
	
	Smaller projects are often more successful because:
	
	• It's easier to identify and fix problems.
	• Teams are less overwhelmed by the workload ahead.
	• Smaller teams lead to increased accountability.
	• A sense of urgency occurs earlier.
	• Project team members get more satisfaction by delivering results faster.
	• Reduced impact of failure.
		As agile approaches to software development have demonstrated, incrementalism works. Our recommendations are:
		
		• Break larger projects into smaller projects.
		• If a project must be big, segment it into components that are useful in themselves.
		
		As an illustration, consider a hypothetical large program to build a financial management system for multiple agencies over several years.
		
		• The project team segments the project by financial process (e.g., accounts payable, accounts receivable, purchasing).
		• The project has one team configure the software, and additional teams draft all the agencies' requirements, develop a training program, test the enterprise-wide system, etc.
		• Late into the project the team discovers that:
		  o One agency's A/P requirements conflict with another agency's requirements.
		  o It takes time-consuming manual work arounds to make the system work.
		  o Accounting staff refuse to use the system.
		  o The number of integrations is significantly larger than anticipated.
		• Consider an alternative approach for the same type of project, but in a smaller increment:
		  o A single (and small team) takes on deploying the A/P module for a single agency within 120 days.
		  o The team uses an agile-like approach.
		  o The team completes the same activities as mentioned above (i.e., requirements definition, software configuration, system integrations, training, and testing).
		• Although many of the same problems likely arise on this smaller project, the project team is better positioned to solve them: problems are revealed sooner; their impact is smaller; and the team quickly finds solutions.
		• The project team gains insight into the problems from the prior increment and the approach for that prior work serves as a model for subsequent increments.

	Observation	New Recommendation(s)
4	**Lack of standard oversight project process training for project managers and business sponsors.** In the dynamic landscape of project management, the arrival of new Project Managers (PMs) and sponsors is a common occurrence. However, their success largely depends on understanding and fulfilling their roles and responsibilities effectively. Additionally, providing them with the right tools and knowledge tailored to the specific project's size and complexity is paramount for a project's overall success, which is why WaTech should provide Oversight Project Process Training for Project Managers and Business Sponsors.	Our recommendation is to develop and roll out training sessions designed for project managers and business sponsors to provide them with a comprehensive understanding of the oversight process. In this initiative, we would develop job sheets and training materials that are meticulously tailored to align with the specific scale and complexity of each project. These materials will serve as invaluable tools to support the project teams, ensuring that they have the resources and knowledge necessary to navigate their roles effectively. Training materials would be role-based and consist of: 1. Procurement process. 2. Quality assurance. 3. Leveraging QA, OCIO, and Sponsors. 4. Security design review. 5. Technology budget. 6. Delegated authority. 7. Project artifacts. 8. Decision packages. 9. Feasibility studies. 10. Common pitfalls of each role. 11. How to make informed decisions. 12. Other tips and guidance. In summary, developing training and resources for project managers and sponsors on the oversight process is a sound investment in the success of projects and the organization. It ensures that these key individuals are well-prepared to navigate the complexities of project management, leading to more efficient, successful, and cost-effective project outcomes.

Progress on previous observations and recommendations

The table below represents observations and recommendations from the 2022 annual report, along with updates on WaTech's progress towards addressing the recommendations.

	Observation	Recommendation(s)	Progress in 2023
1	**Evaluation and measurement of oversight effectiveness is difficult to assess.** Project success and failure are determined by many variables. Assessing a single point of failure or the effectiveness of a single entity is difficult. However, with the implementation of critical key performance indicators (KPIs), key trends can be assessed, and the effectiveness of oversight can be inferred.	1. As part of the OT project, define and document "critical" KPIs (including target measures) to study oversight effectiveness and identify continuous improvements. 2. Implement changes to policies to incorporate tracking and evaluation of "critical" KPIs.	Recommendation remains. Development of oversight KPIs are a work in progress and are expected to be defined in future iterations of the oversight transformation roadmap. One of the recommendations for the 2023 Annual report provides additional suggestions on how to better define KPIs.

	Observation	Recommendation(s)	Progress in 2023

2	**The oversight and attention required for all projects is not equal.**
	
	Most "major" projects are placed under oversight because the Legislature designates them as subject to 701 of the operating or transportation budget. WaTech designates additional projects (a minority) through an evaluation process using the ITPA tool.
		1. Consider proceeding with criteria for scalable (right-sized) rules and standards for oversight based on risk level and project need. Seek to adapt oversight processes to fit the nature of the investment per the WaTech Project Approval and Oversight Process Assessment recommendation to establish risk-based oversight levels and scalable oversight requirements.
		2. Create classifications (tiers) of oversight for projects based on thresholds defined in Policy 121 and the ITPA tool.
		3. Align and scale oversight requirements, reporting, and templates (technology budgets, investment plan, etc.) to each classification (tiers).
		4. WaTech should consider re-evaluating criteria for recommending which projects are gated in the annual IT Decision Package Recommendation Report. Update, if needed, Policy 121 to revise the criteria that will drive the evaluation of the level of oversight required for each project.
		5. Evaluate how scalable oversight can benefit both the projects and agencies' experience of the gated funding process.
		6. Evaluate the current Oversight Consultant (OC) workload against "major" project thresholds:
		  a. Quantify the total time spent against the total project budget and complexity.
		  b. Determine which gated funded projects are not classified as "major" projects.
			WaTech adopted an amended policy on July 19, 2023, and found here. The project's tier is based on the project's risk, complexity, scope, and scale, and is assessed using an online questionnaire. The project investment form and tiering assessment questionnaire were released on October 2023 and replace the ITPA.
			
			Requirements that vary based on the project's tier include the need for a feasibility study, project quality assurance plan, and project management plan. The supporting standard PM-01-04-S here indicates which PM deliverables are required based on a project's assessed tier.

3	**Agencies at times perceive WaTech policies and practices as compliance efforts and not as a proactive strategic partnership.**
	
	Agencies can struggle with the oversight process, especially the timeliness and value add that it brings to projects. This is compounded by the lack of a full contingent of Oversight Consultants (OC) resources due to turnover that exasperates the timeliness issue and impacts the proactive partnerships that the OCs desire with agencies.
	
	OCs are highly experienced and knowledgeable senior resources with IT and project backgrounds. They thrive on complex problems and mitigation strategies. Frequently they anticipate serious issues and help agencies avoid problems. When OCs are not engaged as trusted partners, it can take away from their impact and effectiveness.
		1. Create an organizational change management project with these objectives:
		   a. Assess agency perception of oversight. Use this as a baseline.
		   b. Plan and conduct engagement activities with agencies to:
		     1. Align on how the OCs and PMPs can partner with and provide value to agencies before, during and after their projects.
		     2. Educate and discuss how WaTech partners with agencies and advocates on their behalf within the authorizing environment.
		     3. Discuss agency key needs and perceptions with agencies.
		     4. Continue to build overall trust, awareness, and desire for agencies to engage with WaTech oversight as strategic partners in their projects.
		2. Establish a direct consultative service provided by OCs and PMPs for critical points in a project.
		3. Establish a regular cadence of information sharing and exchange with the external quality assurance providers who are providing services to the state of Washington – a facilitated workshop where their perspectives on common issues and good practices can be captured.
		4. Oversight Transformation (OT) has two components – compliance and strategic consulting. Consider creating a statewide awareness campaign to promote strategic consulting capabilities.
			The OC team has:
			• Increased its collaboration with WaTech business relationship managers.
			• Hired a full complement of oversight consultants and reduced the turnover among the OCs.
			• Hired additional project management partners to assist agencies with their projects; and those PMPs are engaging with the project teams as early as possible (e.g., decision package formulation) during the project.
			• Increased the amount of formal and informal training on OC requirements (e.g., tech budget and compliance with 701 requirements).
			• Adjusted OC and PMP project assignments so that knowledge from other projects can be leveraged more effectively (e.g., one criterion used to assign OCs and PMPs to projects is prior experience working with that agency).
			• Continued regular meetings between the project's assigned OC and QA provider.
			• The creation of a statewide awareness campaign to promote strategic consulting capabilities was not completed and has been added to 2024 plans.

	Observation	Recommendation(s)	Progress in 2023
4	**The OC team is often overallocated due to both project load and attrition.** This drives a heavy workload for the OCs and results in them being spread too thin to support their portfolio of projects. Major projects under oversight can suffer due to the reduced time that an OC or a PMP can dedicate to understanding each project's respective needs and challenges, thereby reducing the role of the OC to fiduciary compliance and limiting agency perception of the OC as a trusted partner and advisor. If the OT project successfully defines levels of oversight requirements based on tiers, the project load will remain high for each filled OC position. WaTech is currently funded for six permanent, full-time OC positions. This requires a portfolio of approximately 20 projects per consultant.	1. Assess workloads and refine the oversight staffing model that supports the anticipated workload, if required. Establish targets for OC time spent on projects at each oversight tier. Higher risk projects require more hours of oversight. Minimize time spent on smaller projects. 2. Consider and implement new OC recruitment methods to increase the pool of qualified candidates when filling vacancies such as a recruitment staffing company and more sourcing on LinkedIn to fully staff the OC team. 3. Consider and implement additional retention strategies to retain experienced OCs. 4. One objective of the OT project is to "engage with a consultant-based mindset that conveys an advisory, participatory, and partnership intent." OCs will need to invest time into each project to develop a level of understanding necessary to provide meaningful advisory, participatory, and partnership consultation.	The OC team has implemented several changes to address these challenges, including: • Right-sizing oversight investment based on project tiering. • Fully staffing OC team as of 11/1/2023. • Implementing an Agile delivery model to promote team swarming on urgent items.

Looking toward 2024

In 2024, the project management partners will continue to support Washington State IT projects in partnership with the agencies, WaTech, the Legislature and the Office of Financial Management (OFM). The project management partners are committed to establishing an enduring support program that enhances and streamlines WaTech oversight processes and tools.

PMP plans for 2024 include:

- Additional training offerings in the areas of sponsorship, project management, program / project organization and governance, vendor management, and scheduling.

- Identifying additional methods to engage early to:
  - Prepare agencies for writing a business case.
  - Craft an investment plan or help plan a feasibility study to dive deep into readiness or funding precision.
  - Influence budget requests.
  - Assist with budgeting and integrated schedules.
  - Design right-sized project governance models and management controls.
  - Provide strategic recommendations.
- Continuing to grow the Community of Practice and its agency representative advisory board with the goal of making it self-sustainable by year-end.
- Development of oversight specific Key Performance Indicators (KPI) to assess the effectiveness of oversight processes. For example, for projects under oversight measure compliance with Section 701, analyze deviations and make recommendation to improve project's compliance.
- Continue to support the CIO Portfolio of key strategic projects by providing advisory services to agencies with adherence to oversight guidance. Services include review and feedback on governance, technical documentation, and additional support for the assigned Oversight Consultant.
- Consider creating a statewide awareness campaign to promote strategic consulting capabilities within WaTech.
- For commonly used solutions across the state enterprise (e.g., Salesforce, ServiceNow, MuleSoft, etc.) build a knowledge repository of best practices and recommendations for the lifecycle of these solutions from contracting and price negotiation through implementation and ongoing support and maintenance. Engage with other groups in the state to facilitate the collection and development of the repository. Collectively establish a community of practice to share knowledge and build connections.
- Contributing to WaTech efforts to simplify the technology budget template and gated funding process.
- Continuing direct service to Washington State IT projects.

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