
Quarterly Best Practices Summary and Semi-Annual Update on Independent Oversight Recommendations for IT Projects

Office of the Chief Information Officer
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Executive Summary

The 2020 supplemental Operating Budget (Section 149(1)(a)) provided the Office of the Chief Information Officer (OCIO) funding for experienced information technology project managers to provide critical support to agency IT projects that are subject to gated funding project provisions. The 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 at least quarterly, beginning July 1, 2020; and
- (iii) Beginning December 31, 2019, provide independent recommendations to legislative fiscal committees by December of each calendar year on oversight of IT projects.

This report provides the first quarterly best practices and lessons learned summary to agency IT stakeholders and legislative fiscal staff and the first semi-annual update on independent recommendations to legislative fiscal committees on the oversight of IT projects. The next quarterly best practices summary is scheduled for October 2020 and the semi-annual recommendations report is scheduled for December 2020.

Key Accomplishments

The 2019-21 Biennium Operating Budget provided funding to the Office of the Chief Information Officer (OCIO) for four expert level project managers to provide guidance to gated funding projects. The first of these expert project managers joined the OCIO in July 2019. Three additional expert project managers joined the OCIO in November 2019. However, one resource left the team in February 2020 to join another state agency.

The following provides a summary of key accomplishments since the first report of independent recommendations in December 2019.

- **Master level project management guidance to agency IT stakeholders.** Expert level project managers spent more than 1,000 hours working directly with individual state agencies, providing master level project management guidance per section 149(1)(a)(i) of the 2020 Operating Budget—Supplemental (ESSB 6168). They have engaged with 40 gated funding projects representing 32 state agencies since January 2020.
- **Statewide best practices.** Expert project managers have been working one-on-one with agency project teams to share industry best practices and lessons learned per section 149(1)(a)(ii) of the 2020 Operating Budget—Supplemental (ESSB 6168). These have included:
 - Project management.
 - Project governance.
 - Investment planning.
 - Technology budgeting.
 - Project schedule planning and management.
 - Risk and issue management.
 - Procurement advice and consultation.
 - Quality reviews of work products.
 - Project sponsor coaching.

Additionally the expert project managers have worked closely with the OCIO to publish an online [IT project lessons learned repository](#) well as a [glossary](#) and [FAQ document](#) to support gated funding technology project budgeting. Expert project managers are now working to develop and publish new best practice project management resources, including the following.

- Project manager's handbook.
- Selected project management best practice tools and templates (included in the project manager's handbook; see Appendix A for a complete list).
- Selected project management process guides (included in the project manager's handbook; see Appendix A for a complete list).

Best Practices and Lessons Learned

Expert level project managers have identified several opportunities to bring industry best practices to gated funding projects. Here are four of the most common themes encountered in the expert level project managers' work with agencies this reporting period.

1. **Project governance.** Some agencies have challenges establishing strong and effective program or project governance. Expert level project managers have consulted with agencies on best practices and brought lessons learned around governance structure, membership, decision making authority, process and roles and responsibilities.
2. **Contracting.** Agencies can underestimate the work effort and time involved in procuring and contracting with vendors. Contracting expertise varies significantly by agency. Additionally there are limited to no statewide standard processes for affirming scopes of work and anticipating or handling contracting challenges. Expert level project managers have consulted with agencies in reviewing requests for proposals, evaluating and selecting vendor solutions, and preparing for contract negotiations and securing protective contract terms.
3. **Vendor management.** Weak contracts, sophisticated (or unsophisticated) vendors and lack of agency experience can challenge good vendor management practices. Expert level project managers have shared vendor management best practices for having a dedicated vendor manager to regular schedule, budget and progress review meetings to clear escalation procedures.
4. **Foundational project management structure.** Most agencies focus extraordinary effort on overall project design and implementation approach. However, less effort tends to be spent on the foundations of project management. Expert level project managers have consulted with agencies on:
 - Best practice program and project management office structures.
 - Minimum program and project manager qualifications.
 - Project management control processes (e.g., scope management, schedule management, budget management, human resource management, risk and issue management).
 - Deliverables (e.g., charter, project management plan) and tools and templates).

The expert level project managers have additionally compiled an online repository from [lessons learned](#) from Washington state IT projects under OCIO oversight completed since fiscal year 2019. It provides a tool for project managers to learn from the experiences of others to reduce project risk and reinforce positive outcomes. It is searchable by project type, project phase and lesson learned category. Lessons learned categories include:

- Agency readiness
- Communications and stakeholder management
- Cost management
- Executive sponsorship and governance
- Implementation approach and methodology
- Organization change management
- Procurement and contract and vendor management

- Project management and project controls
- Project team and human resource management
- Schedule management
- Scope management
- Other best practices and lessons learned

The following table provides a sample of included lessons learned.

Category	Lesson Learned
Agency Readiness	<ul style="list-style-type: none"> • Complete a feasibility study or alternatives analysis to identify options, analyze costs, assess comparative risks and benefits and review lessons learned from other similar projects. • Define and validate requirements in the beginning of the project. • Establish organizational capacity for new technologies and assess readiness for change. • Maintain a current and accurate inventory of servers and applications. Having an up to date inventory helps to better plan for performing any necessary testing, upgrades or maintenance.
Communications and Stakeholder Management	<ul style="list-style-type: none"> • Perform a stakeholder analysis and develop a communications plan. Monitor communications to ensure messaging is consistent and received as intended. • Find appropriate ways to share the impacts and urgency of change and enlist stakeholders in championing and communicating the change. • Establish a stakeholder advisory committee with full user representation to build buy in and acceptance early on and throughout the project.
Executive Sponsorship and Governance	<ul style="list-style-type: none"> • Participate in executive sponsor training. Seek support from executive sponsors from other projects, QA and the OCIO. • Involve the executive sponsor early and throughout the project to set the vision, champion the project and remove roadblocks. • Establish a representative governance structure as appropriate. Communicate often to set expectations, gain buy in, clarify roles and responsibilities, update progress, make timely decisions and escalate issues. • Empower the steering committee to make decisions. Leverage the purpose of the meeting and engage committee members to participate. Schedule meetings at a time when all voting members can attend. Have the project sponsor remind committee members of the urgency and priority of the project.

Category	Lesson Learned
Implementation Approach and Methodology	<ul style="list-style-type: none"> • Consider an agile project management methodology to break down large work efforts into manageable tasks and activities that can be completed in shorter durations and deliver tangible value more regularly. Establish a cadence of standups to review work completed, in progress and planned and any associated dependencies, constraints or risks. Increase the frequency of these standups as project risks increase or key milestones near. • Establish a clear methodology and implementation approach that sets acceptance standards and entrance/exit criteria for each sprint, phase or deliverable. • Avoid the trap of believing a replacement system should simply reproduce legacy system functionality. Define and validate business needs and functional requirements. • Ensure the approach for data conversion is carefully developed, clearly documented and tested with scheduled data extract processes and weekly conversion runs. • Involve business units in the process of writing the test scripts for that unit. Have business units conduct their own testing rather than whichever tester is available at that time.
Procurement and Contract and Vendor Management	<ul style="list-style-type: none"> • Engage the procurement office early to understand the procurement options and timelines, before committing to schedule and budget. • Work closely with legal to ensure the project scope, requirements, performance standards, acceptance criteria, payment schedule, dispute processes and appropriate protective terms and conditions are included in the vendor contract. Develop a vendor management plan including an issue escalation process. Assign a contract/vendor manager. • Establish hard limitations before contract negotiation. Do not negotiate away essential protections (e.g., performance standards, right of refusal for key staff, data ownership, exist strategy, performance bond liquidated damages). • Establish vendor management practices and establish expectations with the vendor early. Continuously evaluate vendor performance. Set routine vendor meetings to review completed and planned work, work planned but now completed, deliverables status, schedule and budget status, performance quality, risks and issues. Return to the contract for performance standards as needed.

Category	Lesson Learned
Project Management and Project Controls	<ul style="list-style-type: none"> • Acquire a skilled project manager and apply a proven project management discipline early in the project. • Establish a project management plan. Have it formally approved and deploy it. • Ensure team members understand their specific job responsibilities, establish effective cross-team communications and improve meetings with agendas, tracking of action items and decision documentation. Share meeting minutes and hold staff accountable to assigned tasks and timeframes. • Conduct joint pre-project planning with the agency and vendor detailing objectives, methodology and implementation approach, timeline, deliverables and roles and responsibilities to set expectations and support team building. • Use a RAID log for tracking risks, action items, issues and decisions. Include OCIO findings in the agency response to findings on the IT dashboard and in the monthly status reports. • Ensure change requests include a full impact analysis to enable the change control board to make an informed approval and prioritization decision. • Analyze and apply lessons learned at each rollout/phase gate to address improvement opportunities and confirm best practices in preparation of following rollouts.
Project Team and Human Resource Management	<ul style="list-style-type: none"> • Allocate adequate resourcing considering resource requirements by task, identifying needs for time commitment, availability and specific skills, knowledge and abilities. • Plan for team co-location if possible. If not possible, provide remote work tools to support geographic diversity, collaboration and information sharing. • Monitor and regularly report resource availability. When resource constraints arise, escalate the issue and potential impacts to the project steering committee to make a decision on project priorities and resource allocation. • Ensure that key employees have backup for long term absences or to conduct their normal duties in order to mitigate impacts to the project schedule. • Provide formal training and mentorship for technical staff who assume a significant project management role as a way to increase effectiveness of project teams.

Category	Lesson Learned
Schedule Management	<ul style="list-style-type: none"> • Use an industry standard estimation process. Comprehensively identify all project costs, document all assumptions, conservatively estimate and consider a contingency. Research similar projects at other agencies or states. Leverage subject matter experts, peer reviews, market research and requests for information. If no comparative data is available plan with conservative, rather than optimistic, estimates. Evaluate the progress to schedule regularly and adjust accordingly. • Define the minimum viable product (MVP) early in the project and restrict all development, including new change requests, to those that support only the MVP. Only when the MVP is complete should non-MVP change requests or additional enhancements be considered. Limit exceptions to those approved by the steering committee and change control board through a formal review and approval process. • Prepare a comprehensive, integrated project schedule with agency and vendor tasks, start and end dates, dependencies, critical path items and resource assignments immediately after contract execution. Use this schedule to report actual progress against baseline. • Build in time for OCIO oversight processes and gated funding requirements.
Scope Management	<ul style="list-style-type: none"> • Clearly document the project during project initiation and planning in the project charter, project management plan or similar document. Get formal approval and buy in for the project scope beginning significant work. Monitor project scope regularly throughout the project and approve change requests only through a formal change process. • Have a clearly documented, agreed upon scope management process, including detailed impact analysis for change requests and an escalation to the project steering committee or sponsor for changes significantly impacting scope, schedule or budget.

The online lessons learned repository is intended to be an ongoing work in progress and lessons learned will be added as the expert level project managers continue their work with agency projects.

Status Update on Prior Recommendations and Next Steps

This section provides a status update on recommendations and next steps identified in the December 2019 Independent Recommendations on Oversight of IT Projects report. New recommendations will be included in the December 2020 master level project managers annual report of independent recommendations oversight of IT projects, per state statute.

Recommendations

The 2019 report made seven recommendations in two categories for OCIO and expert project manager action. While the OCIO produces a separate quarterly status update on its IT project oversight improvement initiative efforts, these recommendations are included here for continuity.

Approval and Oversight Process and Practices

- 1. Per the Plante Moran report, the OCIO should proceed with criteria for scalable (right-sized) standards for oversight based on risk level and project need. Seek to adapt oversight processes to fit the nature of the investment per the Plante Moran recommendation to establish risk-based oversight levels and scalable oversight requirements.**

In progress. The expert project managers are working closely with the OCIO to define risk-based project categories and corresponding oversight and quality assurance requirements as well as minimum project manager qualifications. The July 2020 OCIO Oversight Improvement Initiative Quarterly Status Update, separately prepared for the OCIO, provides a more detailed progress update. While initially scheduled to be complete in October 2020, a lack of project resources is delaying work on this activity. The schedule will be re-baselined when key support resources are identified and made available.

- 2. In 2020, the expert project managers should explore and analyze the influence of financial holdbacks on project success.**

In progress. The expert level project management team is working closely with gated-funding projects and is cataloguing the impacts (pro and con) of financial holdbacks.

- 3. In 2020, the OCIO should formulate recommendations on guidelines for feasibility studies; including timing of studies within the project lifecycle and how to scale content to suit investment needs.**

In progress. The expert level project managers have initially drafted criteria to guide agencies in whether or not to commission a study as well as scalable requirements for projects of different size and complexity. The OCIO is reviewing these recommendations and will be working with the expert level project manager team to refine and finalize these guidelines later this year, based on resource availability.

Project Management Best Practices

The OCIO, as part of its workgroup structure to address the Plante Moran recommendations, should engage the expert project managers as well as the statewide project management community to:

1. Establish standard deliverables common to the project lifecycle for endorsed methodologies (e.g. waterfall, agile or hybrid).

In progress. The OCIO is engaging the expert level project managers to develop a standard, integrated oversight methodology. This methodology will integrate common deliverables for implementation, enterprise architecture, security, privacy and project management as well as oversight to provide project managers a comprehensive best practice model for managing IT projects. When drafted, this methodology will be shared for feedback from the state chief architect, state chief information security officer, WaTech chief information privacy officer and the statewide project management community. The July 2020 OCIO Oversight Improvement Initiative Quarterly Status Update, separately prepared by the OCIO, provides a more detailed progress update. While initially scheduled to be complete in October 2020, a lack of project resources is delaying work on this activity. The schedule will be re-baselined when key support resources are identified and made available.

2. Develop a repository of recommended templates for project deliverables based on the applied project management methodology.

In progress. The OCIO is working closely with the expert level project managers to develop and publish a project manager's handbook later in 2020. It is intended as a resource to help project managers learn the basics of project management. It will provide a step-by-step process for managing projects from initiation through closeout. It will include nearly 30 project control document templates and several project management process reference guides.

3. Implement a lessons learned methodology and a repository of knowledge that is accessible and usable to project communities.

Complete. The OCIO published a [lessons learned repository](#) in June 2020. It is publicly available online. It includes lessons learned compiled by the expert project managers from best practices from the public and private sectors, independent review and analysis, vendor management, budget and timing, quality assurance and other support of current and past IT projects in Washington state. This repository is intended to be an ongoing work in progress and other lessons learned will be added as the expert level project managers continue to work with state agencies and gated funding IT projects.

4. Establish guidelines for Organizational Change Management to provide consistent guidance to agencies.

Not yet started. Similar to the work being produced to guide feasibility studies, the expert level project manager team will tackle a best practice for organizational change management (OCM) to guide agencies in designing projects to optimize proven OCM strategies.

Next Steps

The 2019 report identified seven next steps for the expert project managers. The table on the following page provides a status update for each of these.

Due Date	Next Step	Status
January 30, 2020	1. Facilitate and document a working session with the oversight consultants (OCs) that elicits lessons learned to date regarding the technology budget approval and gate certification process.	Complete. Lessons learned session data was used to inform the technology budget FAQ and glossary . Expert level project managers delivered a follow-up recommendation to advance technology budget approval and gate certification process improvements as part of the OCIO oversight process improvement initiative.
January 30, 2020	2. Create an expert project managers skills matrix to facilitate the assignment of expert project managers to at-risk projects.	Complete. See Appendix B.
March 1, 2020	3. Develop 2020 performance measures with baseline data and outcomes that contribute to OCIO metrics and performance goals.	Complete. See Appendix C.
March 1, 2020	4. Evaluate lessons learned about technology budgets and the gated funding projects to date and develop recommendations for processes and policies.	Complete. Data was used to define requirements for the latest version of the technology budget for gated funding projects template (v4.0) .
June 30, 2020	5. Prepare a mid-year report of lessons learned, recommendations for the biennial budget and key information for legislative awareness, to include: <ul style="list-style-type: none"> a) Suggestions for feasibility study requirements and when/how to adjust based on project risk. b) A planning calendar that improves agency capacity to plan across fiscal years, biennia, supplemental budget years – as well as across the software development or project life cycle. c) A documented rubric for when an Expert Project Manager should be assigned and how they should function. 	In progress. This report is the first mid-year update to the December 2019 report of independent recommendations. <ul style="list-style-type: none"> 1) Expert project managers have been providing guidance to agencies performing feasibility studies. They drafted guidance on when to commission a study and recommended requirements for specific content, which are in OCIO review. 2) A planning calendar is in development and drafts will be circulated with OFM and legislative partners when available. 3) The OCIO has a detailed process for identifying a need for and assigning an expert level project manager to gated funding projects. See Appendix B.

Due Date	Next Step	Status
September 30, 2020	6. Deliver a compendium of useful FAQs and guidance articles that serve as a resource for agency planning. Include a repository of “real life” deliverable samples and collected best practices.	In progress. Project manager’s handbook with best practice document templates, tools and process guides schedule for publication later in 2020. Additional guidance in development.
November 30, 2020	7. Participate in the WaTech effort to address the approved and outstanding Plante Moran recommendations for improving oversight effectiveness. (This task owned by the OCIO).	In progress. Refer to OCIO update for oversight improvement efforts.

Appendices

A: List of Resources in the Project Manager's Handbook

This appendix provides a list of the project management document templates and quick tip reference guides to be published with the project manager's handbook later in 2020.

Project Management Document Templates

1. Business Case
2. Feasibility Study
3. Project Charter
4. Staffing Plan
5. Project Team RACI Matrix
6. Project Initiation Checklist
7. Project Management Plan
8. Benefits Realization Plan
9. Change and Communications Management Workbook
10. Communications Management Plan
11. Organizational Change Management Plan
12. Risk and Issue Management Plan
13. Procurement Plan
14. Kickoff Meeting Agenda
15. Deliverables Register
16. Deliverable Quality Review and Acceptance Form
17. Readiness Assessment Checklist
18. Project Status Report
19. Status Meeting Agenda
20. Change Request Form
21. Change Request Log
22. Risk, Action Items, Issues and Decisions (RAID) Log
23. Issue Impact Analysis Form
24. Customer Satisfaction Survey
25. Post Implementation Review Report
26. Benefits Realization Plan
27. Closure Checklist

Project Management Process Reference Guides

1. Feasibility Study Development
2. Scope Management
3. Schedule Management
4. Cost Management
5. Human Resource Management
6. Risk Management
7. Procurement Management
8. Communications and Stakeholder Management

B: Expert Level Project Manager Assignment Rubric

The expert level project manager team works closely with the assistant director OCIO and OCIO oversight consultants to support gated funding projects encountering challenges or at risk for encountering challenges. The team has inventoried skillsets for each of the team members categorized by program and project management skills, industry expertise and other advisory services experience to support the assignment of a team member.

The process for engaging an expert project manager on a gated funding project is outlined in the steps below. It is important to note that typically steps 1 through 6 occur in less than one week, most often in one to three days.

- Step 1** **Oversight consultant or agency** identifies a potential need for expert level project manager services.
- Step 2** **Oversight consultant** notifies the assistant director OCIO of the request for services.
- Step 3** **Assistant director OCIO** reviews the expert level project managers skills matrix and considers project manager relationship with agency, skillset, industry expertise, consulting experience, availability, potential conflict of interest and other relevant variables before assigning the expert level project manager.
- Step 4** **Oversight consultant and assigned expert level project manager** consult with the agency to develop a proposed scope statement for the needed assistance.
- Step 5** **Expert level project manager** drafts a brief scope of work with exit criteria and reviews with agency.
- Step 6** **Expert level project manager** submits scope of work to assistant director OCIO, copies oversight consultant and begins work with the agency.
- Step 7** Upon completion of the exit criteria, **expert level project manager** closes out services and notifies oversight consultant and assistant director OCIO.

C: Performance Measurement Plan

As previously noted, section 149(1)(a) of the 2020 Operating Budget—Supplemental (ESSB 6168), effective April 3, 2020 provided the OCIO funding for “experienced information technology project managers to provide critical support to agency IT projects...[and] provide master level project management guidance to agency IT stakeholders.” In the December 2019 Independent Recommendations on Oversight of IT Projects report, on the next steps recommended by the expert project managers was to, by March 1, 2020, develop performance measures with baseline data and outcomes that contribute to OCIO metrics and performance goals.¹

This appendix presents these performance measures, their measurement frequency, mode of measurement and baseline and target measures. **The expert level project managers will assess annually how well performance measures are influencing project success. If there is minimal to no correlation, the expert project managers will work with the OCIO to evaluate other performance measures and adjust accordingly.**

Measure #1	Number of gated funding projects receiving OCIO expert level project management guidance.
Measurement frequency	Semi-annually.
Approach	Track and report by reporting period # of gated funding projects receiving OCIO expert level project management guidance.
Baseline	0
Current count	40
Target	Not applicable; determined by need.
Related OCIO performance measure (target)	Number of gated funding projects under OCIO oversight (100%).

¹ The July 2020 OCIO Oversight Improvement Initiative Quarterly Status Update provides a more detailed report on OCIO performance measures and goals, including counting rules.

Measure #2	Percent of gated funding projects where OCIO assessed risk status reduced after receiving OCIO expert level project management guidance.
Measurement frequency	Semi-annually.
Approach	Track and report by reporting period percent of gated funding projects that received a reduced OCIO risk rating after receiving OCIO expert level project management services.
Baseline	0
Current count	29%
Target	50%
Related OCIO performance measure (target)	Decrease in percent of projects assessed as high risk (red) status by OCIO for more than two months (20%).

Measure #3	Average period of time an OCIO gated funding project remains in OCIO assessed red (high risk) status after engagement with an OCIO expert level project manager.
Measurement frequency	Semi-annually beginning in December 2020.
Approach	Track average number of months gated funding projects remain in OCIO assessed red (high risk) status after receiving OCIO expert level project manager guidance. Report by reporting period by category: 1) two or fewer months; 2) three to four months; and 3) five months or more.
Baseline	0
Current count	Not applicable.
Target	TBD
Related OCIO performance measure (target)	Average project duration (months) in OCIO assessed red (high risk) status (two months).

Measure #4	Agency satisfaction with OCIO expert level project manager services.
Measurement frequency	Annually beginning in December 2020.
Approach	Agency customer satisfaction survey (electronic).
Baseline	0
Current count	Not applicable.
Target	TBD
Related OCIO performance measure (goal)	Not applicable.