

Washington's Consolidated Technology Services Agency

A Project Manager's Guidebook

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Chapter 1: Preface

What is the purpose of this guide?

The guidebook is a resource to help business and technology project managers learn the basics of project management. It provides a step-by-step process for managing projects from initiation through closeout as well as supporting templates.

This toolkit is only a guide. It is intended to be flexible and scalable. Larger, high risk projects may follow these guidelines more strictly while smaller, lower risk projects may choose to apply the project management tools and templates in accordance with the unique needs of the project. The project approach taken should take into account severable variables:

- 1. **Organizational culture**. What is the organization's capabilities and capacity, and unique project management policies and standards?
- 2. **Project scale.** Projects can range from small and simple involving a single business unit to large and complex with multiple large agency impacts.
- 3. **Implementation approach.** A project may follow many planning and implementation methodologies, including waterfall, agile, hybrid or planning wave.
- 4. **Project type.** There are many different project types including: software upgrade, enhancement, replacement or new implementation, technology infrastructure, telephony and communications, security, privacy and data protection, data management and analytics, web and online portals and facilities relocation.

It is important to select a project management approach that incorporates best practices but is flexible to accommodate the unique aspects of the project.

What is a project?

The <u>Project Management Institute</u> (PMI) defines a project as "a temporary endeavor undertaken to create a unique product, service or result."¹ A project is temporary with a defined beginning and end in time. It is unique in that it is not routinely performed. The purpose of a project is to meet its goals and conclude.

What is project management and why is it important?

PMI defines project management as "the application of knowledge, skills tools and techniques to project activities to meet the project requirements."² The purpose of project management is to implement projects on schedule and within budget and to deliver planned outcomes with business value.

¹ Project Management Institute, "*What is Project Management?*," <u>https://www.pmi.org/about/learn-about-pmi/what-is-project-management</u> (accessed April 11, 2020).

² Ibid.



Why is project management important?

Research³ shows that organizations with high performing project management complete 88% of projects on time and 90% of projects within budget. Additionally, 92% of projects meet original goals and business intent. This is in contrast with underperforming organizations that complete only 24% of projects on time and 25% of projects within budget. For these organizations only 33% of projects meet original goals and business intent.

Effective project management:

- Aligns project goals with business priorities.
- Coordinates resources to a unique product, service or result.
- Manages risk.
- Manages expectations and prepares stakeholders for change.
- Results in projects delivered on time and within budget.
- Results in better business outcomes.

How to use this guide

This guidebook is written for project managers. It is important to note that there are many other tasks performed or led by the project sponsor, steering committee, implementation team or vendor. Also, many tasks included here are done in collaboration with or with support from these project stakeholders.

This guidebook is organized according to the following five project phases:

- Chapter 2: Project initiation
- Chapter 3: Planning and procurement
- Chapter 4: Project execution
- Chapter 5: Project monitoring and controlling
- Chapter 6: Project closure

This guidebook also has eight appendices:

- Appendix A provides a list of acronyms used throughout this guidebook.
- Appendix B provides a comprehensive list of links to the project management document templates referred to throughout chapters two through six of this document.
- Appendix C outlines why qualified project managers are essential and identifies the recommended qualities, characteristics, skills and abilities of a qualified IT project manager.
- Appendix D discusses the importance of building and supporting a strong project team.
- Appendix E provides a note on the importance of planning for organizational change.
- Appendix F presents one technique to monitor and measure post go-live transition to full effective and efficient use of the implemented IT solution.

³ Project Management Institute, "*Success Rates Rise: Transforming the high cost of low performance*," <u>https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/pulse-of-the-profession-2017.pdf</u> (accessed April 11, 2020).



- Appendix G provides quick tips and best practices for key project management knowledge areas, including:
 - Feasibility study development.
 - Scope management.
 - Schedule management.
 - Cost management.
 - Human resource management.
 - o Risk management.
 - Procurement management.
 - o Communication and stakeholder management.
- Appendix H provides links to several additional project management resources and references materials.



Chapter 2: Project initiation

What is project initiation and why is it important?

Initiation is the collection of processes to define a new project or phase of an existing project.⁴ Project initiation includes:

- Authorization to commit organizational resources to the initiative.
- Clear articulation of the project scope, schedule, budget and planned outcomes.
- Establishment of project governance and identification of the project manager and project team.

During project initiation it is important to:

- Clarify the opportunity or problem to be solved.
- Understand alternative solutions and build a business case for the project.
- Conduct due diligence to help decide if the project is a "go."
- Define planned outcomes.
- Identify stakeholders and their needs.
- Understand project risks, constraints and dependencies.
- Make decisions regarding scope, schedule and budget.
- Establish project governance.
- Identify a project manager and project team.

Key project management steps and activities

Step 1. Develop a business case

A business case documents the business opportunity or problem to be solved. It includes a description of the proposed project and defines specific goals, objectives and expected benefits, aligned with business priorities. It also includes how business value will be measured. Activities include:

- 1. Document the business opportunity or problem to be solved and a description of the proposed project.
- 2. Define specific project goals, objectives and expected benefits.
- 3. Validate benefits with data from research, subject matter experts and stakeholders.
- 4. Present the business case to management for approval.
- 5. Share the final business case and decisions with stakeholders.

⁴ Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



A note on setting goals

Goal setting is an indispensable part of project initiation and planning. Project goals must be meaningful, well-defined, easy to comprehend and measurable. In developing project goals, the following SMART goal guidance should be applied:

- Specific: Make your goals specific and narrow for more effective planning.
- **Measurable:** Define what evidence will prove you're making progress and reevaluate when necessary.
- **Attainable:** Make sure you can reasonably accomplish your goals within a certain timeframe.
- **Relevant:** Your goals should align with your long-term objectives.
- **Time-bound:** Set a realistic end date to drive task prioritization and motivation.

Template: Business Case

Step 2. Conduct a feasibility study

A feasibility study evaluates solution options for addressing a business opportunity or solving a business problem. It helps to determine if a recommended course of action has merit and is achievable before the organization invests resources. Activities include:

- 1. Conduct in-depth interviews with stakeholders to understand the expected outcomes and benefits of addressing the business opportunity or solving the business problem.
- 2. Seek the advice of experts and complete an assessment of alternative solutions, including feasibility, cost, timeline, specific risks and benefits and assumptions for each.
- 3. Present the study to management for approval to pursue the recommended alternative.

For more information regarding feasibility studies for IT projects under Washington state OCIO oversight, see the <u>Feasibility Study Requirements for IT Investments</u> available on the OCIO website.

Template: Feasibility Study

Step 3. Establish a project charter

The project charter authorizes the scope of the project. It defines the project goals and objectives as well as the roles, responsibilities and authority of project governance bodies, the project manager and project team. Activities include:

- 1. Review the business case and feasibility study.
- 2. Conduct stakeholder interviews and working sessions to document the project goals, objectives and expected outcomes and planned benefits.
- 3. Identify the project scope, assumptions, risks, constraints and dependencies.
- 4. Document the high-level budget and schedule milestones.
- 5. Define the roles, responsibilities and authority of project governance bodies, the project manager and project team.
- 6. Include a performance measure plan for the project and for planned benefits.
- 7. Obtain approval for the project charter from the project sponsor, steering committee, project manager and oversight groups as appropriate.



For more information on understanding, defining and supporting the project goals and scope, see the <u>Appendix C: Understanding</u>, <u>Defining And Supporting Project Goals And Scope</u>.

Template: Project Charter

Step 4. Develop a staffing plan and create a project team

Before any project work begins, identify the skills and people needed to complete the objectives in the charter. This step can include the project sponsor, steering committee, project advisor and project manager as well as functional teams, technical teams and communication and organizational change teams. A staffing plan ensures that the project has the right number of people in the right positions with the right skills to be successful and effectively achieve project goals. Activities include:

- 1. Create a list of skills needed to do the work and identify organizational resources who possess the right skills.
- 2. Identify during what time periods project team members will be needed.
- 3. Meet with resource managers to discuss what specific staff members are needed for the project, their availability and if alternatives are needed.
- 4. Obtain commitments from resource managers, understanding that specific staff may be identified at a later date, closer to kickoff.
- 5. If resources are not available inside the organization work to acquire external resources.
- 6. Clarify budget impacts.
- 7. Develop an onboarding program and create training materials.
- 8. Obtain approval for the staffing plan from the project sponsor and steering committee.
- 9. Complete a responsibilities matrix, Team RACI (Responsible, Accountable, Consulted, Informed) Matrix.

For more information on selecting a project manager, see <u>Appendix D: Qualities</u>, <u>Characteristics</u>, <u>Skills and Abilities of an IT Project Manager</u></u>. For more information on the purpose and benefits of a project team, building and supporting a project team and project team skill composition, see <u>Appendix E: Building and Supporting a Project Team</u>.

Templates: Staffing Plan, Project Team RACI Matrix

Step 5. Set up project workspace

A project workspace (physical or virtual) provides the project team a space to work and collaborate on project tasks. It should be a dedicated space, especially for medium to large projects. Activities include:

- 1. Develop a strategy for the physical location (or virtual environment) in which the team will work.
- 2. Communicate costs for workspace configurations and specialized tools to the project sponsor.
- 3. Provide workspace, equipment and productivity and communication tools to the team.
- 4. Provide training on equipment and productivity and communication tools if necessary.



A note on setting up a project workspace

The agency project team should be in an area separate from other business units but adjacent to the vendor team. Separation ensures privacy and areas to work without interruption, while proximity allows for collaboration. A conference room (or virtual meeting space) will also be needed to conduct meetings and collaboration sessions between the agency project and vendor project teams.

Project teams may also require support equipment, including computers, software, printers, copying machines, FAX machines and telephones to perform their work. Having proper team designated equipment can improve performance and productivity.

Step 6. Establish an online project collaboration space

An online collaboration space provides the project a central location to store project control documents, vendor contracts, works in progress, deliverables and project artifacts. Activities include:

- 1. Determine the location for the online collaboration site (e.g., Microsoft Office365, Teams, SharePoint) based on your organization's policies and standards.
- 2. Establish and organize the site for easy use.
- 3. Grant appropriate access to the site.
- 4. Move all project related documents to the site (e.g., business case, feasibility study, charter).
- 5. Train project team members and set expectations for how and when to use the site to support communication, collaboration, document storage and other project activities.

Step 7. Complete project initiation checklist

A project initiation checklist ensures all initiation activities are complete and you are ready to move onto the next phase of the project. Activities include:

- 1. At the beginning of the project, develop an initiation checklist with your team.
- 2. Assign task owners and track progress.
- 3. Share the checklist with the project management and implementation teams and other appropriate stakeholders.
- 4. Complete the initiation checklist and resolve any outstanding items.
- 5. Save the initiation checklist to the online project collaboration site.

Template: Project Initiation Checklist



Chapter 3: Project planning and procurement

What is project planning and procurement and why is it important?

Planning is the collection of processes performed to clarify and mature the project scope, refine the objectives, develop a project management plan, secure necessary resources and schedule project activities.⁵ Procurement includes acquring needed goods or services from outside the organization. The primary outputs of this phase include:

- Project plan and schedule.
- Financial plan.
- Staffing plan.
- Project management plan.
- Benefits realization plan.
- Communication and organizational change plan.
- Risk and issue management plan.
- Procurement management plan.

This is not a comprehensive list of project planning documents. Many planning documents are created and deployed as part of implementation and vary according to the type of project. These can include configuration plans, data conversion plans, testing plans, training plans and transition to operations plans.

During project planning and procurement it is important to:

- Articulate the project scope and identify the cost, resource requirements and realistic timetable.
- Clearly define project roles, responsibilities and authority.
- Explain to stakeholders how the project work will be accomplished.
- Build confidence with stakeholders that the project can be completed successfully.
- Increase the likelihood of project success.
- Help stakeholders understand when and how procurement will be conducted.

Key project management steps and activities

Step 1. Develop project workplan and schedule

The project workplan and schedule identifies activities necessary to accomplish the project scope and deliver planned outcomes. The workplan includes tasks, start and end dates, work effort, critical path items, any dependencies and resource assignments. This deliverable is different than the Project Management Plan described later in this guide.

⁵ Ibid.



Activities for building the project workplan include:

- 1. Identify deliverables or work products for each objective in the project charter.
- 2. Collect and analyze the requirements for each deliverable or work product, including any procurement requirements.
- 3. Conduct working sessions with key stakeholders to validate requirements and identify all the necessary tasks to produce the deliverables or work products and achieve the project objectives. Consider necessary procurement activities.

While the approach to accomplishing work can vary by implementation approach (e.g., traditional waterfall, agile, hybrid, planning wave) it is important to have a baseline schedule. Generally, activities for creating the project schedule include:

- 1. Sequence the work tasks defined in the earlier steps.
- 2. Estimate the work effort to each task.
- 3. Define the duration and start and end dates for each task. Consider including appropriate contingency.
- 4. Assign specific resources to each task.
- 5. Identify all predecessors and critical path items.
- 6. Review the overall schedule and compare the project end date to the project sponsor's desired end date. If there is a gap, reconcile the discrepancy and make recommendations to adjust schedule, scope and/or resources.
- 7. Present the updated project schedule to stakeholders to secure commitment to your timeline.
- 8. Record a baseline of your schedule.
- 9. Save the project workplan and schedule to the online project collaboration site.

For medium and large projects, transition your project workplan and schedule to a project scheduling software.

Step 2. Develop a financial plan

A financial plan describes how the authorized budget will be spent throughout the project lifecycle. It is also referred to as a spending plan. In Washington state, gated funding projects are required to submit a Technology Budget to the OCIO that provides a spending plan. Activities include:

- Estimate the cost of all necessary external goods and services (e.g., software licenses and subscriptions, hardware and equipment, implementation and other professional services, project management, quality assurance, travel and per diem expenses, training, conference and seminar expenses). Refer to the project workplan for procurement requirements.
- 2. Estimate the cost for each state employee resource. Refer to the project workplan and schedule. Include staff benefits and overhead.
- 3. Identify funding sources and any available in-kind resources.
- 4. Total all estimated project costs and compare to the charter budget allocation. Identify and communicate any budget shortfall or surplus.
- 5. Revalidate cost assumptions and if a discrepancy remains make recommendations to adjust schedule, scope and/or resources.



- 6. Obtain approval for the financial plan from the project sponsor and steering committee.
- 7. Save the financial plan to the online project collaboration site.

Step 4. Develop a project management plan

The project management plan describes how the project will be executed, monitored, controlled and closed. Activities include:

- 1. Define project organization and resource management process.
- 2. Define project reporting process.
- 3. Define risk and issue management processes.
- 4. Define scope management and change control processes.
- 5. Define the process to ensure the quality of the final product or service (quality management process).
- 6. Define stakeholder engagement process.
- 7. Obtain approval for the plan from the project sponsor and steering committee.
- 8. Save the project management plan to the online project collaboration site.

The project management plan may also include guidelines for the following, if not already included in other planning documents:

- Schedule management.
- Cost management.
- Communication and organizational change management (OCM).

Template: Project Management Plan

Step 5. Develop a benefits realization plan

The project benefits realization plan outlines the activities necessary for achieving the planned benefits. It identifies a timeline and the tools necessary to ensure benefits are fully realized over time and provides an associated post-implementation measurement plan. Activities include:

- 1. Review the project goals and planned benefits in the project charter.
- 2. Conduct a working session with the project sponsor and steering committee to identify the activities necessary for achieving the planned benefits and assign activity owners.
- Conduct a working session with the project sponsor and steering committee to identify specific, measurable project benefits. Consider cost efficiencies, streamlined business processes, enhanced government services, increased productivity, improved operations and other quantitative and qualitative measures as well as specific benefits to citizens of the state.
- 4. Define how benefits will be measured, by whom and with what frequency.
- 5. Transition the benefits realization and measurement plan to the business owner.
- 6. Discuss a baseline measure if available and target measures for periodic intervals.
- 7. Obtain approval for the benefits measurement plan from the project sponsor and steering committee.
- 8. Save the benefits realization plan to the online project collaboration site.

Template: Benefits Realization Plan



Note that for smaller, less complex projects, the benefits measurement plan may be integrated into the <u>Project Management Plan</u>.

Step 6. Develop an organizational change management plan

The organizational change management plan identifies how different stakeholders may be impacted by project outcomes and establishes an approach to maximizing stakeholder adoption of change. Activities include:

- 1. Conduct a stakeholder analysis and complete the stakeholder register in the Organizational Change and Communications Management Workbook.
- 2. Identify potential technology, process, policy and culture changes and their potential impacts on different stakeholder groups.
- 3. Identify specific organizational change activities for each change and each stakeholder group (e.g., policy or procedure change, reorganization, training).
- 4. Identify the timeline for organizational change activities.
- 5. Identify the individuals or groups responsible for implementation.
- 6. Obtain approval for the organizational change management plan from the project sponsor and steering committee.
- 7. Save the organizational change management plan to the online project collaboration site.

For more information on the importance of planning for organizational change, see the <u>Appendix</u> <u>F: Planning for Organizational Change</u>.

Template: Organizational Change and Communications Management Workbook, Organizational Change Management Plan

Note that for smaller, less complex projects, the organizational change management plan may be integrated into the <u>Project Management Plan</u>.

Step 7. Develop a communications management plan

The communications management plan is an essential tool to identify project stakeholders, their information needs and how communication will be managed throughout the project. Activities include:

- 1. Conduct a stakeholder analysis and complete the stakeholder register in the Organizational Change and Communications Management Workbook.
- 2. Identify communication needs for each stakeholder group.
- 3. Define the method and frequency of communications based on the stakeholder analysis.
- 4. Identify the individuals or groups responsible for implementation.
- 5. Establish a method for feedback from stakeholders.
- 6. Obtain approval for the communication and organizational change management plan from the project sponsor and steering committee.
- 7. Save the communication management plan to the online project collaboration site.

Templates: Organizational Change and Communications Management Workbook, Communications Management Plan



Note that for smaller, less complex projects, the communications management plan may be integrated into the <u>Project Management Plan</u>.

Step 8. Develop a risk and issue management plan

The risk and issue management plan defines the risk and issue management processes for the project. Activities include:

- 1. Identify specific risk and issue categories (e.g., scope, schedule, budget, technical, quality, team resources, project management, project sponsorship).
- 2. Define the steps and responsibilities of the risk management process (e.g., identification, assessment, response planning [accept, transfer, mitigate, avoid], control).
- 3. Define the steps and responsibilities of the issue management process (e.g., identification, analysis, resolution).
- 4. Define the process for documenting, monitoring and reporting risks and issues.
- 5. Obtain approval for the risk and issue management plan from the project sponsor and steering committee.
- 6. Save the risk and issue management plan to the online project collaboration site.

Template: Risk and Issue Management Plan

Note that for smaller, less complex projects, the risk and issue management plan may be integrated into the <u>Project Management Plan</u>.

Step 9. Develop a procurement management plan

The procurement plan describes what goods and services are needed, identifies the procurement vehicle to be used, defines the procurement approach, and details specific roles and responsibilities for a successful procurement. Activities include:

- 1. Identify the goods and services to be purchased. Define what is in and out of scope.
- 2. Decide on the procurement vehicle e.g. master contract, request for qualifications and quotation (RFQQ), request for proposals (RFP), interagency agreement.
- 3. Identify the evaluation and selection committee members. Ensure appropriate business and technology representation.
- 4. Define the procurement approach, timeline and evaluation phases e.g., minimum requirements, proposal evaluation, software demonstration and vendor interview.
- 5. Document the evaluation process, including evaluation criteria and weights.
- 6. Define roles and responsibilities and assign specific resources. Consider evaluation and selection committee members, subject matter experts, technical experts, procurement officer, legal, project manager and future users.
- 7. Obtain approval for the procurement plan from the project sponsor and steering committee.
- 8. Save the procurement plan to the online project collaboration site.

Template: Procurement Management Plan (coming soon)



Chapter 4: Project execution

What is project execution and why is it important?

Project execution is the collection of processes performed to complete the work defined in the project plans and to satisfy project requirements and objectives.⁶ The primary outputs of this phase include:

- Project kickoff.
- The project deliverables defined in the project plans.
- Go live readiness assessment.
- Solution go live.
- Transition to operations.

Project execution is important to:

- Put the project plans into action and accomplish the work.
- Produce the planned outcomes of the project.

Key project management steps and activities

Step 1. Conduct project kickoff

A project kickoff establishes shared expectations for the project. It reviews the project purpose and planned outcomes, scope and deliverables, schedule and key milestones, and roles and responsibilities. Activities include:

- 1. Select kickoff meeting participants (e.g., project sponsor, steering committee, project management and implementation teams, key users, other stakeholders).
- 2. Develop the kickoff meeting agenda. Include project purpose and planned outcomes, scope and deliverables, schedule and key milestones, and roles and responsibilities and expected time commitments. Also consider reviewing budget, communication and stakeholder management and known risks.
- 3. Prepare for the kickoff meeting. Practice your delivery and prepare for questions.
- 4. Conduct the kickoff meeting. Find opportunities to make it interactive such as a brainstorm on project risks and mitigation strategies.
- 5. Follow up on any decisions or action items made at the kickoff meeting.

Templates: Kickoff Meeting Agenda

⁶ Ibid.



Step 2. Coordinate implementation activities

Implementation is where the majority of the work happens and is typically the longest phase of the project. Activities include:

- 1. Manage the implementation team to complete all required tasks and activities.
- 2. Monitor and report on project schedule and budget.
- 3. Manage risks, issues, and action items according to plan.
- 4. Manage project scope change requests according to plan.
- 5. Coordinate communications and stakeholder engagement according to plan.

Step 3. Manage deliverable quality⁷

While the approach to managing quality can vary by type of project and implementation approach (e.g., traditional waterfall, agile, hybrid, planning wave) it is important to manage quality throughout the project. Activities include:

- 1. Clearly identify roles and responsibilities for deliverables and deliverable quality.
- 2. Establish deliverable acceptance criteria with project sponsor, steering committee, project management and implementation teams, vendor(s) and appropriate stakeholders.
- 3. Identify interim opportunities for quality reviews (e.g., interim and draft deliverables, and ongoing refinement of user stories and sprint demonstrations for agile projects).
- 4. Conduct quality assurance activities.
- 5. Address or correct any deliverables that do not meet acceptance criteria.
- 6. Continue to monitor performance and deliverables to ensure quality remains acceptable.
- 7. Evaluate lessons learned after each major phase or sprint, or after key milestones or deliverables and apply learning to future activities.
- 8. Report progress to the project steering committee.

Templates: Deliverables Register, Deliverable Quality Review and Acceptance Form

Step 4. Assess go live readiness

A go live readiness assessment is essential in evaluating if the solution is ready to transition to the production environment successfully, with minimal disruption and prepared to deliver planned outcomes. Activities include:

- 1. Develop readiness criteria with the project sponsor, steering committee, project management and implementation teams, vendor(s) and appropriate stakeholders.
- 2. Modify the readiness checklist and dashboard as needed. Consider interfaces, testing, bug fixes, data migration and data quality, production environment, peripherals, training, technical and user documentation, business process documentation, rollout plan, transition to operations plan, long term support plan, contingency planning and rollback plan, benefits measure plan and user readiness.
- 3. Develop a 90-60-30-day plan to routinely assess the team's performance towards readiness goals.

⁷ For larger projects, create a separate quality management plan to contain process guidelines for quality control.



- 4. Develop a daily plan for the week before go live to assess the team's performance towards readiness goals.
- 5. Document any new risks or issues that may impact go live readiness or user adoption.
- 6. Resolve new critical issues and evaluate impact on schedule, adjust as needed.
- 7. Use the checklist to obtain authorization to move to each new readiness stage.

Template: Readiness Checklist and Dashboard (coming soon)

Step 5. Go live

Go live transitions the solution to the production environment. Stabilization is the period following go live during which the solution is fine tuned. Milestone business processes are performed in the live environment for the first time and users begin to implement newly enabled business processes. Stabilization could last a few days to several months. During this period it is common for some dip in performance as solution processes are fine tuned, users become familiar with new business processes and support teams provide increased coverage to users. Activities include:

- 1. Confirm go live readiness.
- 2. Confirm vendor support role and readiness during go live, stabilization and future ongoing operations.
- 3. Go live according to plan. Be prepared with the rollback and contingency plan.
- 4. Oversee stabilization activities and regularly report status to project sponsor, steering committee and project management and implementation teams.
- 5. Ensure transition to operations according to plan.

For more information regarding go live readiness, see <u>OCIO Policy 121.10 – Project Go-Live</u> <u>Readiness Decision Governance</u> available on the OCIO website.

For more information on one technique to monitor and measure post go-live transition to full effective and efficient use of the solution, see <u>Appendix G: Initial Operations Capabilities and</u> <u>Full Operational Capabilities Milestones</u>.



Chapter 5: Project monitoring and controlling

What is project monitoring and controlling and why is it important?

Monitoring and controlling is the collection of processes required to track, review and regulate the progress and performance of the project, and identify any areas in which the plan needs to change.⁸ The primary outputs of this phase include:

- Status reporting.
- Schedule and budget monitoring.
- Risk and issue management.
- Project scope change management.
- Vendor management.
- Communication and stakeholder management.

Monitoring and controlling is important to:

- Communicate project health and progress.
- Control project scope, schedule and budget.

Key project management steps and activities

Step 1. Monitor and report project status

Status reporting keeps decision makers and other key stakeholders informed of project health and progress. Activities include:

- 1. Review the project communication plan.
- 2. Confirm the reporting distribution frequency, format and delivery method meet expectations and support communication goals.
- 3. Confirm responsibility for creating and publishing status reports.
- 4. Monitor and control the accuracy, completeness and timeliness of project status reports.
- 5. Periodically obtain feedback on report content, format and delivery methods.
- 6. Save the status reports to the online project collaboration site.

Template: Project Status Report

⁸ Ibid.



Step 2. Conduct regular project team and steering committee meetings

Project team and steering committee meetings enable project teams and committees to review project status, discuss risks and issues and make important project decisions. Activities include:

- 1. Review the project communication plan.
- 2. Consider having a team or committee chair, or individual assigned responsibility to lead the meetings. Also assigned a scribe to capture meeting highlights, action items and decisions.
- 3. Confirm the meeting purpose, participation and agenda.
- 4. Distribute the agenda and any supporting materials in advance. Identify all presenters and consider making agenda items time bound, with start and end times. Clarify what is included for presentation, discussion, action or decision.
- 5. Conduct the meeting.
- 6. Complete and publish the project steering committee report.
- 7. During the meetings, assign a person to capture meeting highlights or action items.
- 8. Follow up on action items and update project logs (e.g., risks, issues, action items, decisions made).
- 9. Save the meeting minutes to the online project collaboration site.

Templates: Status Meeting Agenda

Step 4. Monitor the project schedule

Close monitoring of the project schedule supports early identification of any schedule variance and enables early intervention. Activities include:

- 1. Routinely review the project schedule, comparing actual progress against planned.
- 2. Identify activities that are behind-schedule, or at risk of being late.
- 3. Consider resource overallocation and potential need to add resources or extend the project schedule to accommodate.
- 4. Consider critical path activities and dependencies.
- 5. Attempt to resolve schedule risk. Consider reallocation of resources, reordering project activities, scope or slack time.
- 6. Bring all proposed significant schedule changes to the project steering committee for review and approval.
- 7. Document all approved schedule changes on the online project collaboration site.

Step 5. Track the project budget

Closely tracking the project budget helps identify budget variances and allow early intervention. Activities include:

- 1. Create an expense register or identify an existing budget tracking tool.
- 2. Include planned expenditures by week for small or short-term projects, or by month for medium to large sized projects.
- 3. Regularly log actual expenditures and review against planned.
- 4. Conduct budget audits with your financial subject matter experts.



- 5. Identify activities that are or at risk of becoming overbudget.
- 6. Provide budget status (and cost variance) reports to the project steering committee.
- 7. Attempt to resolve budget risks and issues. Consider project scope or contingency.
- 8. Bring all proposed significant budget changes to the project steering committee for review and approval.
- 9. Document all approved budget changes on the online project collaboration site.

Step 6. Manage project change requests

Project change is important to track and minimize changes to project scope, schedule and cost. Activities include:

- 1. Review the project change management plan, typically included in the project management plan.
- Review the change request with the project management and implementation teams and vendor(s). Analyze scope, schedule and budget impacts as well as potential impacts on planned outcomes using the change request form.
- 3. Submit change requests with significant impacts on scope, schedule, budget or planned outcomes to the project sponsor and steering committee for review and approval.
- 4. Update the change request log on the online project collaboration site.
- 5. Update the RAID log and document all approved schedule or budget changes on the online project collaboration site.

Templates: <u>Project Change Management Plan</u>, <u>Project Change Request Form</u>, <u>Project Change Request Log</u>, <u>Risks, Action Items, Issues and Decisions (RAID) Log</u>

Step 7. Manage vendor performance

Vendor management is critical to managing vendor performance and deliverable quality as well as overall project scope, schedule and budget. It also is an important part of establishing a longterm support relationship. Activities include:

- 1. Establish regular meetings with vendor representatives to review the project schedule, evaluate progress, collaborate on deliverables, manage risks and issues and address any contract matters.
- 2. Establish acceptance criteria for all vendor deliverables.
- 3. Review and approve or formally accept all vendor deliverables.
- 4. Record vendor deliverables and review status in the deliverables register on the online project collaboration site.

A note on the project team/contractor relationship

The primary duty of the project team is to support and further the interests of the agency and the success of the project. Independence and objectivity are therefore essential. There are several steps the project manager can take to maintain independence from the contractor and reduce the likelihood of the project being compromised. Project managers should consider the following actions:

• All formal meetings between the project team and contractor to discuss the project should be documented.



- Deliverable dates should be rigorously administered. Project team comments on deliverables should be in writing and in a proscribed format.
- All proposed changes to the project should be submitted formally to the project manager and/or contractor in a written format previously agreed upon by the project manager and contractor.
- Relations between the project team and the contractor should be formal and maintained at a business level. Social events involving agency personnel and the contractor are not recommended.

Templates: Deliverables Register, Deliverable Quality Review and Acceptance Form

Step 8. Manage risks and issues

Risk and issue management provides early warning of issues that may negatively impact project success, and a process to mitigate risks before they do. Activities include:

- 1. Review the risk and issue management plan and follow the plan to identify, analyze, monitor and resolve risks and issues.
- 2. Create a risks, action items, issues and decisions (RAID) log. Review and update the risk and issue logs regularly.
- 3. Develop response plans for all known risks.
- 4. Develop action plans for all high-impact issues. Evaluate impacts on scope, schedule and budget.
- 5. Include risks and issues, and recommended response strategies, as standing agenda items for project team and steering committee meetings.
- 6. Escalate issues that significantly impact scope, schedule or budget to the project steering committee. Call for a decision on the recommended resolution as well as any necessary changes to scope, schedule or budget.
- 7. Update the RAID log and document all approved scope, schedule or budget changes on the online project collaboration site.

Templates: Risks, Action Items, Issues and Decisions (RAID) Log, Issue Impact Analysis Form



Chapter 6: Project Closure

What is project closure and why is it important?

Project closure is the collection of processes to finalize all activities for the project.⁹ The primary outputs of this phase include:

- Documentation of lessons learned.
- Closeout of vendor contracts.
- Release of state resources from the project back to business operations.
- Archival of project documents and artifacts.

Project closure is important to:

- Validate that deliverables meet quality specifications.
- Confirm that project objectives and expected outcomes have been achieved.
- Ensure a smooth transition to operations.
- Ensure processes are in place to measure resulting benefits.
- Celebrate success.

Key project management steps and activities

Step 1. Conduct a post-implementation review

The post-implementation review (PIR) evaluates how successfully the project objectives were met and how effective the project management practices were in keeping the project on track. It is a best practice to also evaluate lessons learned throughout the project, especially after major phases or sprints, or after key milestones or deliverables. Activities include:

- 1. Survey the project team.
- 2. Survey customer feedback and satisfaction.
- 3. Review and analyze:
 - Project outcomes against original project and performance measures.
 - Original project budget and the final actual project costs.
 - Original project schedule and the final actual project schedule.
 - Project scope change log; identify any work removed from scope.
 - Lessons learned.
- 4. Submit the final PIR to the project sponsor and steering committee and save to the online project collaboration site.
- 5. Share project lessons learned with other agency project sponsors and project managers.

Templates: Post Implementation Review (PIR) Report

⁹ Ibid.



Step 2. Review benefits realization and measurement plan

Measuring benefits is important to demonstrate that the investment delivered planned outcomes, not just that the project was delivered on time and on budget. Often, it may not be possible to fully measure benefits until a year or more after a project is complete. Activities include:

- 1. Review the benefits realization and measurement plan with the project sponsor, steering committee and key stakeholders.
- 2. Ensure post go live benefits measurement activities, timelines, responsibilities and reporting are clearly assigned and understood.
- 3. Transition the benefits realization and measurement plan to the business owner.

Template: Benefits Realization Plan

Step 3. Complete transition activities and close the project

Project closure is the official end to the project and signals the transition to ongoing operations. The project manager in collaboration with the business owner generally oversees this process. Activities include:

- 1. Develop a closure checklist with your team. Review the project workplan and schedule.
- 2. Assign task owners and track progress.
- 3. Share the checklist with the project management and implementation teams and other appropriate stakeholders.
- 4. Conduct the necessary transition and closure activities. Consider project documentation and artifacts, vendor deliverables, final vendor payments, contract closeout, return of project team members to the business units, release of remaining project budget, reconfiguration of project team space, etc.
- 5. Communicate project closure.

Step 4. Complete project closeout checklist

A project closure checklist ensures all closure activities are complete and you are ready to close out the project. Activities include:

- 1. Complete the closure checklist and resolve any outstanding items.
- 2. Save the closure checklist to the online project collaboration site.

Template: Closeout Checklist

Step 5. Celebrate project success

It is important to celebrate project success—along the way and especially after go live. Activities include:

- 1. Plan the celebration with your team and stakeholders.
- 2. Determine how you will recognize virtual or remote team members.
- 3. Celebrate and acknowledge the hard work.



4. Recognize the team, especially to the project sponsor, steering committee and key stakeholders.



Appendices

A: List of acronyms

Acronym	Definition
DES	(Washington State) Department of Enterprise Services
FOC	Full operational capabilities
IOC	Initial operations capabilities
0010	(WaTech) Office of the Chief Information Officer
OCM	Organizational change management
PIR	Post implementation review
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
RACI	Responsible, accountable, consult, and inform (a matrix of roles and responsibilities)
RAID	Risks, action items, issues and decisions (RAID) log
RFP	Request for proposals
RFQQ	Request for qualifications and quotation



B: Project management templates

The following leading practice project management document templates are available for your use. They are intended to support the project management work activities outlined in this this guidebook. However, they can be tailored and scaled to meet the unique needs of each project.

- 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. Organizational Change and Communications Management Workbook.
- 10. Organizational Change Management Plan.
- 11. Communications Management Plan.
- 12. Risk and Issue Management Plan.
- 13. Procurement Management Plan (coming soon).
- 14. Kickoff Meeting Agenda.
- 15. Deliverables Register.
- 16. Deliverable Quality Review and Acceptance Form.
- 17. Readiness Checklist and Dashboard (coming soon).
- 18. Project Status Report.
- 19. Status Meeting Agenda.
- 20. Project Change Management Plan.
- 21. Project Change Request Form.
- 22. Project Change Request Log.
- 23. Risk, Action Items, Issues and Decisions (RAID) Log.
- 24. Issue Impact Analysis Form.
- 25. Post Implementation Review (PIR) Report.
- 26. Closeout Checklist.



C: Qualities, characteristics, skills and abilities of an IT project manager

The project manager works with the executive sponsor and project leadership to establish the vision, goals and performance measures of the project. They manage the day-to-day activities of the project team to ensure efficiency and effectiveness. A skilled, able and highly qualified project manager is an essential component of ensuring project success on schedule and within budget.

Project manager qualities and characteristics

The following provides a selected sample of the qualities and characteristics of effective project managers:

- Honesty, dependability and reliability.
- Enthusiasm for the project.
- Commitment to doing a good job.
- Customer first orientation.
- Strong time management and organizational skills.
- Tolerance for ambiguity.
- Knowledge of project management principles, methods and change management processes.
- Knowledge of the theory and concepts of IT management practices and approaches related to planning, organizing, staffing, monitoring and controlling.
- Familiarity with best practice management tools and techniques used in support of an IT project.
- Knowledge and experience in more than one technology discipline (e.g., software development, network administration).
- Knowledge of technology planning principles and technology alignment practices.
- Knowledge of IT management practices and techniques.
- Knowledge of information systems lifecycle methodologies, including analysis, design, testing, implementation, maintenance, documentation and training procedures and practices.
- Knowledge of vendor management practices and processes.
- Knowledge of project benefits realization principles and processes.

Project manager skills and abilities

In addition to the above qualities and characteristics, there are certain skills and abilities that should be considered when selecting a project manager. Most important is previous experience and demonstrated skills and abilities. Relevant qualifications to be considered include the ability to:

- Develop project plans, including schedule, scope, budget, human resource, risk and issue, change and quality management plans.
- Monitor and control day-to-day project work.



- Manage, track and report on project performance, including schedule and budget.
- Identify and manage project risks, assumptions and constraints.
- Establish and maintain cooperative, effective and productive working relationships with others at all organizational levels.
- Build consensus around complex issues, mediate and resolve problems and implement change.
- Guide and motivate others and shape team priorities to reflect program goals and objectives.
- Work on highly visible and politically sensitive projects and programs.
- Effectively communicate both verbally and in writing to staff and executive level audiences.
- Summarize complex information.
- Create a cooperative and productive program/project environment.
- Lead multi-discipline project teams to achieve project goals and objectives.
- Influence and persuade others with respect, tact and courtesy.
- Negotiate and lead conflict resolution.



D: Building and supporting a project team

The scope, complexity, size, duration and specialized skill requirements of a project will define the composition of the project team. For example, a relatively small, internally developed project will likely require a project manager and some part-time assigned assistance. However, projects that are high-cost, high-visibility, involve external contractors, or involve many business units or process changes will likely require dedicated full-time resources to effectively manage and executive the project and mitigate risk.

After implementation is complete, project team members often transition back to their previous business units, but continue to provide key technical and functional leadership in employing and maintaining the new system or solution.

Required skills

Composition of the team will vary based on the unique nature of the projects. Generally, the team will be created with members who bring a mixture of technical, functional, administrative and business skills:

- Technical skills include knowledge of state technical standards, software development, operating systems, hardware, communications networks, internal data processing capabilities and configuration management.
- Functional skills include knowledge of all applicable functional or business processes, practices, procedures and governing regulations.
- Administrative skills include the timely preparation and maintenance of project related documentation such as reports, deliverable reviews, budgets, schedules, team performance and evaluation reviews, technical and functional library and other correspondence as well as management of the team collaboration site.
- Business and related analytical skills are often required when a project is dealing with issues such as the following:
 - \circ $\,$ Use of complex cost scheduling and reporting systems.
 - Complex financial/funding arrangements.
 - Rigorous contractor payment and performance schedule.

Full versus part-time assignments

There are many issues to consider when assigning resources to a project, including:

- Heavy workload requirements.
- Continuity.
- Access to staff with specialized technical and functional expertise.
- Management control.
- Career enhancement opportunity.

If there is doubt concerning whether a person should be full-time assigned to a project, management would be well-advised initially to make a temporary (60-90 days) assignment and adjust as needed.



E: Planning for organizational change

The implementation of a new IT system or solution has the potential to significantly change business processes, policies, standards and procedures as well as change how people work. It is important to appreciate the complexity of the change and the time necessary to prepare for organizational readiness.

An important task is to ensure that key organizational change planning and preparation activities are completed before user training begins. Planning and preparation should address all areas impacted by the new system or solution, including but not limited to policies, standards, procedure and process documentation, job descriptions, staffing, training. A benefit of early planning is the opportunity to identify potential additional functional and technical requirements early in the development process, during which changes can be made with minimum impact. Early preparation also ensures training materials are consistent with the final solution functionality as well as updated policies, standards, procedures, work processes and job descriptions.



F: Initial operations capabilities and full operational capabilities milestones

This appendix presents one technique to monitor and measure post go-live transition to the full effective and efficient use of an implemented IT solution. This technique:

- 1. Sets realistic expectations regarding initial and subsequent system capabilities such as reliability, functionality and overall performance.
- 2. Requires the using organization to achieve specific performance objectives within a finite period of time.

Initial operations capabilities milestone

The starting milestone is the initial operations capabilities milestone (IOC). This begins after user acceptance of the new system or solution. The IOC phase can be characterized as an official period of adjustment between the using organization and the new system. The underlying assumption is that the users will not reach full effective and efficient performance levels for some period of time. This happens for a number of reasons:

- Employees using the solution have a learning curve to become familiar with all the features and functions.
- Policies, procedures, checklists and forms often lag the implementation of the new system or solution.
- System fixes performed by the solution provider or implementer to correct basic software functionality problems will likely continue through most of this phase. Many of these fixes will affect operating procedures.

The time frame for completing the IOC is determined by the user organization, business cycles and complexity of the system, and is approved by the executive sponsor. This time frame may be as long as six to 12 months or more.

Full operational capabilities milestone

The full operational capabilities (FOC) milestone represents the end of the transition period. At this point, system errors have been corrected, users have been fully trained and are completely familiar with the system, and policies, procedures, checklists and forms have been revised or new ones developed. The focus has shifted from fixing and implementing the system to sustaining routine business operations and identifying opportunities for improvement.

FOC clearly signals the end of the project. The project team should have been transitioned back to normal operations roles and responsibilities, and the system should now be in a routine maintenance mode. Changes or enhancements to the system should go through a formal change management process.



G: Best Practice Quick Tips

This appendix provides quick tips and best practices for the following project management knowledge areas, beginning on the next page:

- Feasibility study development.
- Scope management.
- Schedule management.
- Cost management.
- Human resource management.
- Risk management.
- Procurement management.
- Communication and stakeholder management.



Feasibility study development quick tips

Overview

A feasibility study evaluates alternative solutions for addressing a business opportunity or solving a business problem. It helps determine if a recommended course of action has merit and is achievable before the organization invests resources.

For more information regarding feasibility studies, see the <u>Feasibility Study Requirements for IT</u> <u>Investments</u> available on the OCIO website.

Key process steps

- 1. Identify the business opportunity or need.
- 2. Define the investment objectives and planned outcomes.
- 3. Describe the impacts on internal and external stakeholders.
- 4. Recommend the proposed solution, work approach and timeline.
- 5. Discuss the major alternatives considered and comparative risks, costs and benefits.

Best practices

- 1. Conduct stakeholder interviews to clarify the expected outcomes of addressing the business opportunity or solving the business problem.
- 2. Seek the advice of experts and complete an assessment of alternative solutions, including feasibility, cost, timeline, risks and benefits as well as assumptions for each. Use market research where available.
- 3. Gather lessons learned from similar organizations that have completed similar work.
- 4. Document the data sources to support validation or future refinements.
- 5. Follow the requirements in the <u>Feasibility Study Requirements for IT Investments</u>.
- 6. Present the feasibility study to executive leadership for approval to pursue the recommended alternative.



Scope management quick tips

Overview

Scope management is the definition, monitoring, controlling and validation and verification of what is in and what is out of project scope. It delineates the project boundary.

Key process steps (as defined by the Project Management Institute¹⁰)

- 1. **Plan scope management:** Create a scope management plan that documents how the project scope will be defined, validated and controlled.
- 2. **Collect requirements:** Define and document stakeholders needs and requirements to meet project objectives.
- 3. **Define scope:** Develop a detailed description of the project and product.
- 4. **Create a work breakdown structure:** Subdivide project deliverables and project work into smaller, more manageable components.
- 5. **Control scope:** Monitor the status of the project and product scope and manage changes to the scope baseline.
- 6. Validate scope: Formalize acceptance of the completed project deliverables.

Best practices

- 1. Clearly define the minimum viable product (MVP) to meet user requirements.
- 2. Establish a scope change management policy with the project sponsor and steering committee.
- Create a written scope change process with input from the project sponsor, steering committee and project management and implementation teams. Obtain agreement to the process.
- 4. Check in with stakeholders to ensure their minimum requirements are being addressed.
- 5. Work with stakeholders to minimize scope changes during the execution phase of the project.
- 6. Evaluate change requests for those that expand the scope of the MVP and consider delaying work to a future project, release or enhancement.
- 7. Escalate scope changes with schedule or budget impacts to the project sponsor and steering committee.
- 8. Update the project workplan, schedule and budget as needed when a scope change is approved.

¹⁰ Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



Assessment checklist

Use this checklist and status dashboard for engagements where scope risk is elevated.

G/Y/R	Assessment Item
	Scope baseline established, documented in the project charter and approved by the project sponsor and steering committee.
	The deliverables and key milestones of the project workplan and schedule align with the approved scope and planned outcomes.
	Scope and progress against planned outcomes are periodically reviewed by the project steering committee and management and implementation teams.
	All approved changes are documented and decisions communicated to all project stakeholders.



Schedule management quick tips

Overview

Schedule management is the development, monitoring and controlling of the project schedule. When fully resource loaded, it supports effective resource allocation and best practice resource management.

Key process steps (as defined by the Project Management Institute¹¹)

- 1. **Plan schedule activities:** Establish the policies, procedures and documentation for planning, developing, managing, executing and controlling the project schedule.
- 2. **Define activities:** Document the actions needed to produce the project deliverables.
- 3. Sequence activities: Identify and document relationships among the project activities.
- 4. Estimate activity resources: Estimate staff, equipment or supplies required.
- 5. Estimate activity durations: Estimate time needed to complete activities.
- 6. **Develop schedule:** Analyze activity sequences, durations, resource requirements and schedule constraints to create the project schedule model.
- 7. **Control project schedule:** Monitor the status of project activities to update project progress and manage changes to the schedule baseline to achieve the plan.

Best practices

- 1. Identify specific deliverables or work products for each objective in the project charter.
- 2. Define the work tasks to produce the deliverables or work products.
- 3. Sequence the work tasks.
- 4. Estimate the work needed. Divide work efforts greater than 80 hours into smaller tasks.
- 5. Define the duration and start and end dates for each task. Consider including appropriate contingency or slack time.
- 6. Assign specific resources to each task and validate resource capacity.
- 7. Identify all predecessors and critical path items.
- 8. Review the overall schedule and compare the project end date to the project sponsor's desired end date. If there is a gap, reconcile the discrepancy and make recommendations to adjust schedule, scope and/or resources.
- 9. Present the updated project schedule to stakeholders to secure commitment to the timeline.
- 10. Record a baseline of the project schedule.

¹¹ Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



Assessment checklist

Use this checklist and status dashboard for engagements where schedule risk is elevated.

G/Y/R	Assessment Item
	All schedule activities map to scope requirements, deliverables and planned outcomes.
	The project schedule integrates all agency as well as vendor activities.
	The schedule includes appropriate contingency or slack time.
	All activities have assigned resources (i.e., technology, equipment, materials, people, budget).
	Resource capacity is known and there is no overallocation.
	Any resource overallocation is identified and managed as a project risk or issue.
	Dependencies and critical path activities are clearly identified.
	The schedule is formally baselined and approved by the project sponsor and steering committee.
	The project schedule is routinely monitored and shared with the project sponsor, steering committee, project management and implementation teams and key stakeholders.



Cost management quick tips

Overview

Cost management includes the development of an approved time-phased project budget and the ongoing tracking and reporting of actual expenditures against planned budget. It manages changes to the baseline budget only through a formal change control process.

Key process steps (as defined by the Project Management Institute¹²)

- 1. **Plan cost management:** Establish the policies, procedures and documentation for planning, managing, expending and controlling project costs.
- 2. **Estimate costs:** Develop and approximation of the monetary resources needed to complete project activities.
- 3. **Determine budget:** Aggregate the estimated costs of individual activities or work packages to establish an authorized cost baseline.
- 4. **Control costs:** Monitor the status of the project to update the project costs and manage changes to the cost baseline.

Best practices

- 1. Be conservative when estimating.
- 2. When estimating, consider the technology, equipment, materials, labor and other resources necessary to complete the activities.
- 3. Include appropriate contingency.
- 4. Set a cost baseline and update the version number to align with approved changes to the budget.
- 5. Create an expense register or use an existing budget tracking tool. Include planned expenditures by week for small or short-term projects, or by month for medium to large sized projects. Ensure there is a place for project team members to log project hours and activities.
- 6. Conduct budget audits with your financial subject matter experts.
- 7. Report cost variance in each status report and explain variances in easy to understand terms.

¹² Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



Assessment checklist

Use this checklist and status dashboard for engagements where cost or budget risk is elevated.

G/Y/R	Assessment Item
	All project activities have an estimated cost.
	Estimated costs comprehensively represent all required resources to complete the task or activity.
	Budget status is transparent to the project team and oversight bodies.
	Expenditures are regularly monitored and reported, and variances are communicated to stakeholders.
	The monthly spend rate aligns with the estimated monthly budget.



Human resource management quick tips

Overview

Human resource management describes the process for organizing, managing and leading the project team, including roles, responsibilities and reporting relationships.

Key process steps (as defined by the Project Management Institute¹³)

- 1. **Plan human resource management:** Identify and document project roles, responsibilities, required skills and reporting relationships, and create a staffing management plan.
- 2. Acquire project team: Confirm human resource availability and obtain the team necessary to complete project activities.
- 3. **Develop project team:** Improve competencies, team member interaction and overall team environment to enhance project performance.
- 4. **Manage project team:** Track team member performance, provide feedback, resolve issues and manage changes to optimize project performance.

Best practices

- 1. Set clear expectations for human resources in the project initiation and planning phases.
- 2. Seek specialists, not generalists.
- 3. Collaborate with operational supervisors and managers to balance resources and manage priorities throughout the project.
- 4. Establish written performance measures for team members.
- 5. Employ the project schedule as an aid in determining resource allocation and the critical path. However, recognize it is not the written resource plan.
- 6. Strive to include team members that are willing to compromise and have diverse backgrounds and experiences.

¹³ Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



Assessment checklist

Use this checklist and status dashboard for engagements where human resource management risk is elevated.

G/Y/R	Assessment Item
	An approved written human resource management plan is in place.
	The team charter clearly defines roles, responsibilities and behavioral expectations.
	There is a plan to maintain continuity on the team, and to minimize disruption when turnover occurs.
	Resources do not have other significant competing priorities.
	Resource capacity is known and there is no overallocation.
	Any resource overallocation is identified and managed as a project risk or issue.



Risk management quick tips

Overview

Risk management provides early warning of issues that may negatively impact project success, and a process to avoid, mitigate, transfer or accept risks as they arise.

Key process steps (as defined by the Project Management Institute¹⁴)

- 1. **Plan risk management:** Determine which risks may affect the project and document their characteristics.
- 2. **Perform qualitative risk analysis:** Prioritize risks for further analysis or action by assessing and combining their probability of occurrence and impact.
- 3. **Perform quantitative risk analysis:** Numerically analyze the effect of identified risks on overall project objectives.
- 4. **Plan risk responses:** Develop options and actions to enhance opportunities and to reduce threats to project objectives.
- 5. **Control risks:** Implement risk response plans, track identified risks, monitoring residual, identify new risks and evaluate risk process effectiveness throughout the project.

Best practices

- 1. During the initiation and planning phases, review lessons learned from similar projects.
- 2. Consider brainstorming known risks and mitigation strategies during the project kickoff.
- 3. Evaluate risks for impacts on scope, schedule, cost, quality, resources, procurements, and stakeholder engagement. Assess the probability and project impact of each risk.
- 4. Track risks in an easily accessible register, to be reviewed at least monthly and updated at the beginning of significant project milestones.
- 5. Include a response strategy, owner and trigger event.
- 6. Review high priority and any newly identified risks with the project sponsor, steering committee and project management and implementation teams to promote awareness, transparency and accountability.
- 7. During project closure, transfer any open risks to the business owner.

¹⁴ Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



Assessment checklist

Use this checklist and status dashboard for engagements where overall risk is elevated.

G/Y/R	Assessment Item
	Lessons learned from similar previous projects were reviewed to avoid similar risks.
	Known risks are documented in the project charter, risk management plan, risk register and status reports.
	Risks are classified by type and priority, and each risk has a trigger event and owner.
	Risk are analyzed for probability and project impact.
	The risk register is regularly updated and high priority risks are reviewed with the project sponsor, steering committee and project management and implementation teams.



Procurement management quick tips

Overview

Procurement management describes the process of acquiring the necessary goods and services from outside the organization.

Key process steps (as defined by the Project Management Institute¹⁵)

- 1. **Plan procurement management:** Document project procurement decisions, specifying the approach and identifying potential sellers.
- 2. Conduct procurements: Obtain seller responses, select a seller and award a contract.
- 3. **Control procurements (contracts):** Manage procurement relationships, monitor contract performance and make changes and corrections as appropriate.
- 4. Close procurements (contracts): Complete each procurement.

Best practices

- 1. Follow the Department of Enterprise Services (DES) guidelines for procurement and contract management. Be sure that you do not exceed your agency's delegated authority.
- 2. Consult with your agency's contracts and procurement department or the DES guidelines to understand the best option for acquiring the needed goods or services.
- 3. Include enough time in the schedule to conduct the procurement.
- 4. Research contract types and engage in the best contract type for the project methodology to be used (e.g. fixed bid, not to exceed, time and materials).
- 5. Ensure that contract terms protect the state's interests, including unique terms for subscription service contracts (e.g., data ownership, security).
- 6. Ensure that acceptance criteria are clearly documented and agreed upon within the contract.
- 7. Monitor contracts to ensure the work is performed on schedule and contract limits are not exceeded.

¹⁵ Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



Communications and stakeholder management quick tips

Overview

Communication and stakeholder management describes the process of engaging stakeholders in project decisions and execution based on the analysis of their needs and interests as well as their influence on the project and the potential impact of change for their operations and business processes.

Key process steps (as defined by the Project Management Institute¹⁶)

- 1. **Identify stakeholders:** Identify the people, groups or organizations that could impact or be impacted by a decision, activity or outcome of the project. Analyze and document relevant information regarding their interests, involvement interdependences, influence and potential impact on project success.
- 2. **Plan communications management:** Develop an appropriate approach and plan for project communications based on stakeholder's information needs and requirements, and available organizational assets.
- Plan stakeholder management: Develop appropriate management strategies to effectively engage stakeholders throughout the project life cycle based on the analysis of their needs, interests and potential impact on project success.
- 4. **Manage communications:** Create, collect, distribute, store, retrieve and disposition project information in accordance with the communications management plan.
- 5. **Manage stakeholder engagement:** Communicate and work with stakeholders to meet their needs/expectations, address issues as they occur and foster appropriate stakeholder engagement in project activities throughout the project life cycle.
- Control communications and stakeholder engagement: Monitor overall project stakeholder relationships and adjust strategies and plans for engaging stakeholders. Monitor and control communications throughout the entire project life cycle to ensure the information needs of the project stakeholders are met.

Best practices

- 1. Promote partnership and collaboration with stakeholders.
- 2. Include communication and stakeholder engagement activities in the project schedule. Clearly assign responsibilities.
- 3. Integrate communication and stakeholder management into organizational change management.

¹⁶ Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*. 6th ed. Newtown Square Pennsylvania, 2017.



- 4. Clearly communicate resource needs to avoid surprises.
- 5. Provide timely and "right sized" information.
- 6. Include a feedback process for stakeholders.
- 7. Involve stakeholders in the planning for the transition to operations.
- 8. Remember to celebrate and recognize team contributions.

Assessment Checklist

Use this checklist and status dashboard for engagements where stakeholder engagement risk is elevated.

G/Y/R	Assessment Item
	A stakeholder register exists, and a stakeholder analysis has been conducted.
	A communication plan exists, stakeholder communications occur according to plan and a communications log is maintained.
	There is a feedback process for stakeholders.
	When new stakeholders are identified, a project onboarding meeting is held and follow up meetings are held to identify stakeholder expectations, questions and concerns.



H: Additional references

This appendix provides a list of additional links and other helpful project management resources.

- 1. Department of Enterprise Services (DES) Project Management Training
- 2. Project Management Institute (PMI)
- 3. The Agile Alliance
- 4. OCIO Policy 121 IT Investments Approval and Oversight Policy
- 5. OCIO Policy 121.10 Project Go-Live Readiness Decision Governance
- 6. OCIO Policy 131 Managing Information Technology Projects
- 7. OCIO Policy 131d Appendix D: Critical Indicators of Project Performance
- 8. OCIO Policy 132 Project Quality Assurance
- 9. 2019-21 Information Technology Gated Funding Oversight