RUTGERS
Office of Information Technology

Project Management Office

RUTGERS UNIVERSITY

OFFICE OF INFORMATION TECHNOLOGY

PROJECT MANAGEMENT METHODOLOGY

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VERSION CONTROL

Version	Date	Person	Change
7.0	**01/24/2014**	**Frances Haies**	**Edited content of entire document.**
7.1	03/07/2014	Jim Bruggeman	Edited and reformatted the entire document.

1. INTRODUCTION

The Project Management Office (PMO) in the Rutgers Office of Information Technology (OIT) division has developed the Project Management Methodology that provides a common set of guidelines and tools for all OIT employees. This Project Management process and the accompanying templates are designed to assist all OIT staff in successfully managing projects. This process is meant to be scaled to fit the size, complexity and nature of the project. The primary objective in publishing the Project Methodology Guidelines is to facilitate the spread of proven project management and system development techniques and standards. The expected benefit is that Project Managers can use these techniques and standards to meet or exceed project stakeholder's expectations by:

Delivering on Time

A project's activities must be carefully documented through task development in a logical format defining all dependencies. This methodology describes in detail a process to develop a proper project schedule which takes into account the availability of all project resources and helps to reasonably predict when the project can be completed.

In some case, projects have pre-defined completion dates due to organizational business decisions or other project dependencies. On these "time constraint" type projects, a project manager must pay special attention to ensuring that the project has adequate resources, including alternate resources, to meet the project deadline without impacting scope as well as developing contingency plans to meet anticipated risks.

Completing within Budget

It's imperative for both the project manager and the organization to have an estimated budget when undertaking a project. The project budget should include such items as the cost of internal resources, vendor maintenance costs, upgrades, system growth and refresh costs. The PMO strongly suggests a 5 to 7 year budget be developed.

Completing within Defined Scope

This project methodology introduces a concept of outlining the scope of the project in what is referred to as defining an "A Measure of Success" (MOS). It is a quantifiable project objective with realistic measurable outcomes. From the MOS, we further define "High Level Achievements" or HLAs. The HLAs are further broken out to detailed tasks on the project.

The format of this documentation was created to offer a recommended timing of the use of the processes and associated forms; and to explain the meaning of key terminology used throughout all projects.

One of the most important things to understand is that successful Project Management requires flexibility because not all projects are executed the same as business and environmental factors are always changing.

The methodology contained in this document is not intended to be a cookie cutter approach where all of the discussed project components are always executed in the same way for every project. For example, the Project Initiating Phase calls for the assigned Steering Committee (SC) to identify the project's Measure of Success (MOS) and High Level Achievements (HLAs) which may take several meetings for a large scale project. However, when dealing with a small scale project, the Steering Committee may consist of only a few individuals who can complete the MOS and HLAs within a one hour meeting. Likewise, not all of the project templates discussed are used in every project; their inclusion should be based on the specific needs of each project. We refer the reader to Appendix B – Deliverable Requirements and Approval Matrix as a guide to the appropriate documentation that might be required.

Note: If appropriate, vendor documentation, ex. test plans, test results, etc. can be used in lieu of required internal documentation if they are complete, accurate, and meet the defined documentation output.

Project Phases (Waterfall Methodology)

- Initiating
- Planning/Development
- Executing/ Controlling
- Closing

Project Types (see 'Project Types' in Appendix A - Key Terms and Definitions)

- Small: <500 hrs. labor
- Medium: 501 – 2,000 hrs. labor
- Large: > 2,000 hrs. labor

2. PRE-PROJECT PLANNING

Pre-Project Planning is not an integral part of the PMO methodology as it originates in the business or requester domain. However, a project manager can assist a Project Requestor and Sponsor in creating a Project Service Request or Project Feasibility Study, if requested. These documents are a great first step in defining the business needs.

2.1. Feasibility Study

Feasibility Study Requirements

Feasibility Study v7.0 *Template*

The Feasibility Study addresses the impact of a project on the university with regards to technology (network, other applications, and platforms) and business processes. The results of this study are used to make a decision on whether or not to proceed with the project. From a technology perspective, the study involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the university, school or unit has enough experience using that technology. The Sponsor and the Requestor should complete this document. Ideally, the Feasibility Study should be completed prior to the purchasing process in order to capture scale, scope, needs, and impacts.

2.2. Project Service Request

Project Service Request Requirements

Project Service Request v7.0 Template

The Project Service Request form is simple document for collecting information OIT needs to obtain approval for initiating projects requested by any Rutgers organization. The purpose of the following sections is to offer some help to completing the form.

There are two separate parts to the PSR Form:

1. Part I is named *Requestor Only*. As per the instructions, this information is provided by the requestor and/or Sponsor who is requesting the work.

2. Part II is named *OIT Only*. As per the instructions, this information is provided by the OIT representative who will review the request and develop an impact analysis that will specify the estimated effort, duration, and financial implications.

Step	Step Description
1.	If there is any question as to whether the work is a 'project' or you don't know who to contact at OIT, contact the PMO for assistance, at (732) 743-2551 or email "ist-pmo@ca.rutgers.edu".
2.	The requestor and/or Sponsor requesting the work completes Part I of the form that covers the demographic component of the project service request. If necessary, collaborate with the OIT PMO contact to gather information for this section.
3.	After completing Part I, send the form electronically to your contact at OIT.

Step	Step Description
4.	An OIT lead will complete the OIT Only section in Part II the Impact Analysis and the Request Reference. If necessary, the OIT lead will collaborate with the requestor and/or Sponsor who submitted the request.
5.	If the project is deemed feasible, an OIT lead will obtain the necessary approval to commence project work.

2.3. Project Lifecycle Overview

A high level graphic depiction of the PMO methodology project life cycle is provided in Figure 1. At the end of each defined phase, the project manager is recommended to review the phase deliverables with their supervisor. The project manager is responsible for scheduling these phase completion reviews.

PROJECT PHASES & KEY DELIVERABLES

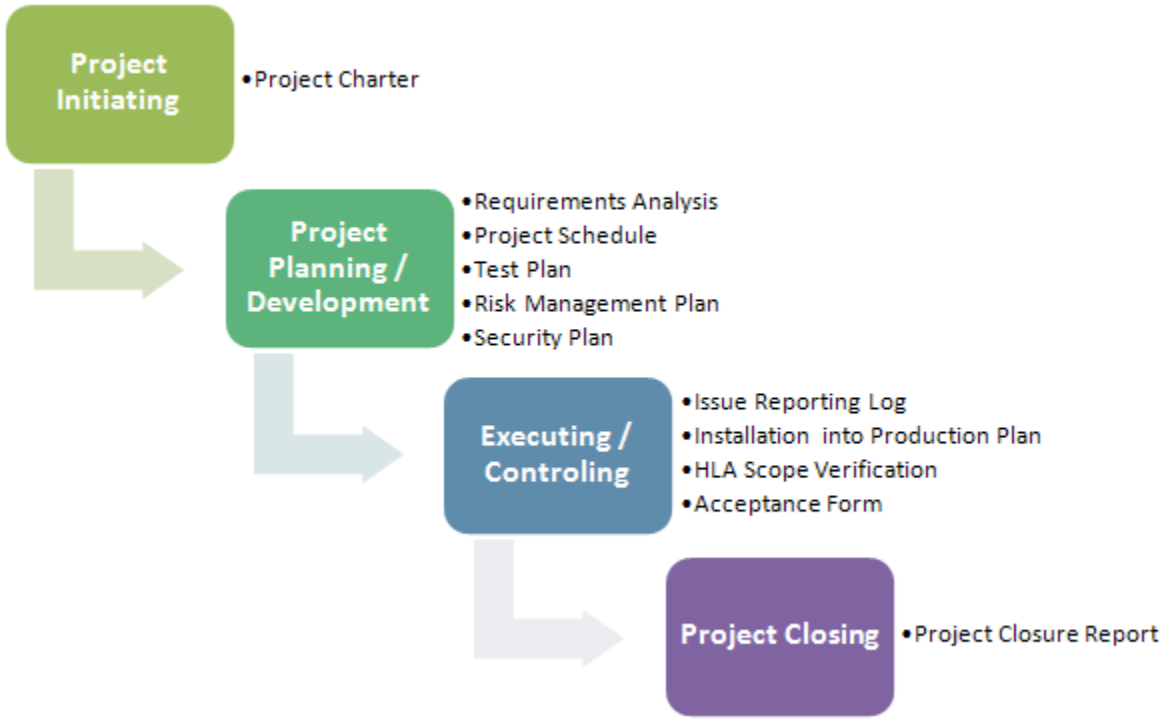

Figure 1 - High Level Overview - Project Lifecycle

3. INITIATING PHASE

The Initiating Phase is where the project formally begins; this is when the Sponsor, Project Manager, and Steering Committee officially authorize the project by defining the project's Measure of Success (MOS) and High Level Achievements (HLAs) and developing the Project Charter. The Project Charter is the main deliverable or document artifact of the initiating phase.

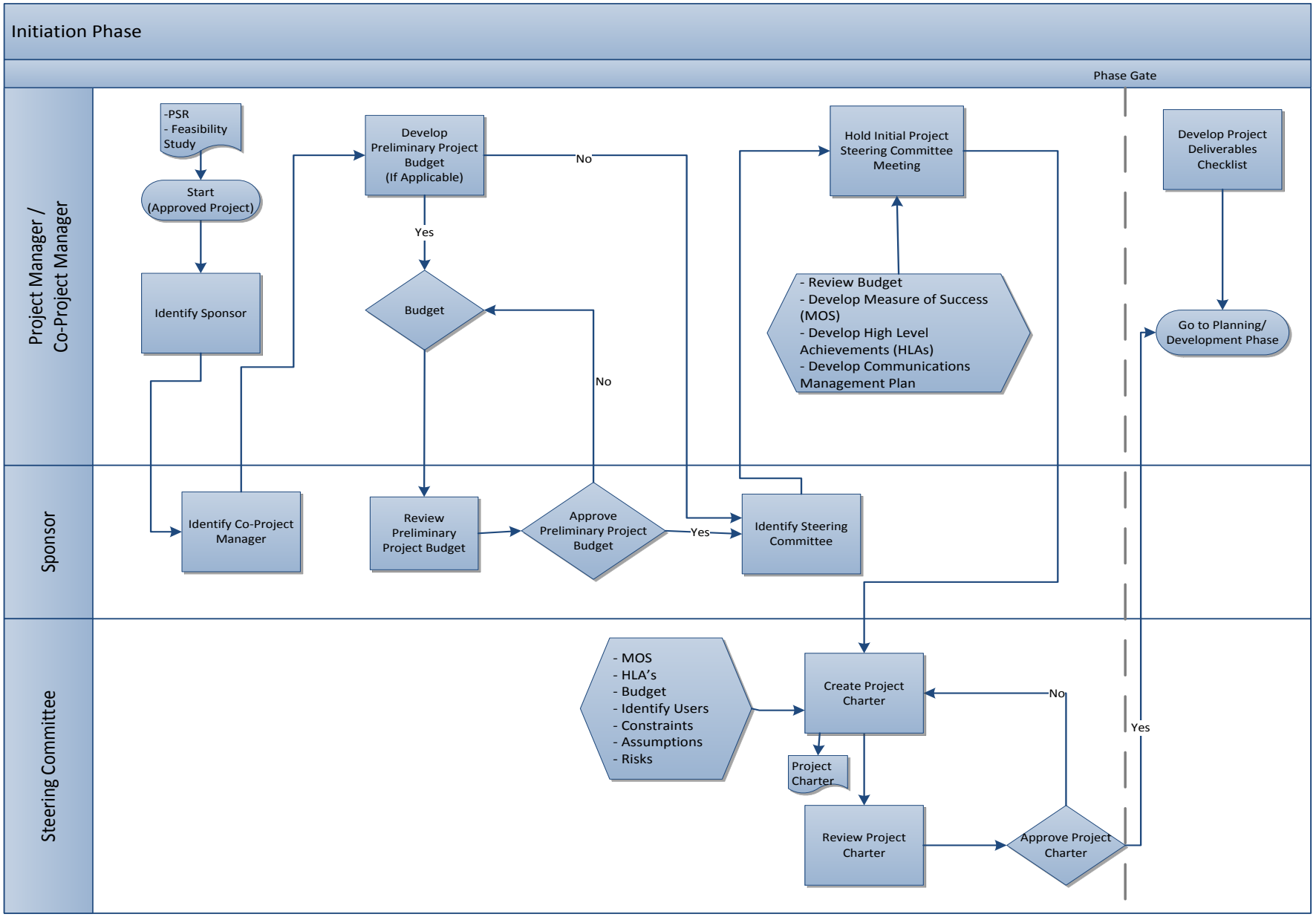

Figure 2 - Initiating Phase

0.1. Project Manager's Role

The Project Manager is the primary person responsible for leading the team successfully through each phase of the project. The Project Manager is the authoritative source for leading the team in accordance with this defined Project Management Methodology, which includes the completion of the appropriate documentation.

0.2. Project Sponsor's Role

The Sponsor is usually the person who requested the project. The Project Manager meets with the Sponsor to secure agreement as to the Sponsor's role in the project.

Sponsor Responsibilities:

- Promotes the project to the University – addresses conflict/issues with other senior executives
- Assists in securing resources (including budget) necessary to complete project deliverables
- Communicates project status to executive management
- Ensures project alignment with university's strategic goals and priorities
- Participates as a member or chair of the project Steering Committee

0.3. Project Manager and Requester Discuss Project

The Project Manager and Project Requester meet to discuss the overall project and review the Project Service Request (PSR) in detail, if applicable. The project's business objectives, obstacles, funding, etc. will need to be identified.

0.4. Identify Co-Project Manager

The Project Manager and Requester discuss who should be designated as the Co-Project Manager for the project. The Co-Project Manager is the person assigned to the project from the department or school which has a major stake in the success of the project. The Co-Project Manager provides detailed knowledge of the department's operations and processes and acts as a subject matter expert (SME). There can be multiple Co-Project Managers; each representing different organizations that have a substantial interest in the project.

The Co-Project Manager's role is to assist the Project Manager in the planning and execution of the project using the defined methodology, having the same accountabilities as the Project Manager. The Co-Project Manager will work hand-and-hand with the Project

Manager and will ensure that the affected department/school management is kept aware of the team's progress, possible risks, and assist in the escalation of issues as needed.

It is important to note that a substantial investment of time may be necessary from the Co-Project Manager to act in this role. The time investment varies based on the scope of the project. The Co-Project Manager's supervisor must be aware of this commitment and agree in advance to allocate the appropriate resource time for this role. In some cases, this might mean backfilling the Co-Project Manager's normal job duties with an alternate or temporary resource.

The Co-Project Manager should have excellent communication and planning skills; be able to handle difficult vendor situations; address team issues; and communicate status to executive management.

Note: As the Project Manager and Co-Project Manager share responsibility for planning and executing the project, from this point forward, the term Project Manager(s) will be used in this methodology document.

0.5. Draft Project Budget

Prior to a project being approved, an official University Budget for the project must be secured. The project requestor and/or Sponsor should have the detail on how the budget numbers were derived and when the funds are available for use.

Project Budget Requirements

Project Budget v7.0 Template

Note: Not all projects will have a budget. Some projects only require the effort of assigned personnel and not capital.

For projects with a budget, the Project Manager(s) must complete the following items:

- Identify the University Index number where the budget funds are located on the financial system.
- Obtain transaction detail of the budget from the financial system.
- Complete a Project Budget using the PMO Budget template which includes a 5 to 7 year funding plan.
- Review the budget with the Requester/Sponsor and obtain approval.

0.6. Define Steering Committee Members

The Project Manager(s) and Requester/Sponsor will identify the potential members for the Steering Committee. These are generally people within the University who can set the direction for the project. The Sponsor and Project Manager(s) are automatically on the Steering Committee.

Steering Committee Responsibilities:

- Actively participate and set the direction of the project:

- Develop the project's Measure of Success (MOS)
- Develop the project's High Level Achievements (HLAs)
- Identify project Constraints, Assumptions, and Risks
- Empower the Project Team to complete MOS
- Review project budget and monitor expenditures against budget

- Responsible for the overall success of the project
- Monitor the project's progression:
  - Approve / Deny Change Requests – scope, budget, timeframes
  - Review and sign-off on High Level Achievements
  - Final decision maker on unresolved project issues
- Approve closing of project.

0.7. Secure Steering Committee Members Participation

The Project Manager(s) and Sponsor will secure participation from the potential Steering Committee members. They will call or meet each potential Steering Committee member and explain the project's objective, the role of the Steering Committee, and the time commitment necessary for the project.

At the initial Steering Committee meeting, the Steering Committee will meet to set the direction of the project usually in a 1 ½ to 2 hour meeting. Afterwards, the Steering Committee will either meet on a scheduled or "as needed" basis to monitor the project's progress.

Project Contact List Requirements

Project Contact List v7.0 Template

The Project Manager(s) will create a Project Contact List which is an internal document that identifies the contact information about the Steering Committee, Implementation Project Team, other Rutgers participants, and 3rd party vendors, as identified. This Project Contact List should be updated as participants' contact information changes and then distributed to the appropriate team members.

Note: Careful consideration should be given before sending contact information for Rutgers participants to 3rd party vendors or consultants.

Steering Committee members may send a proxy for Steering Committee meetings for information transfer, but proxies are not allowed to sign-off on any project deliverables. If a proxy needs to sign-off on documents, they will need to become official Steering Committee members and be approved by the Sponsor.

0.8. Initial Steering Committee Project Meeting

Meeting Agenda 7.0 Template

The Project Manager(s) schedule and facilitate the initial Steering Committee project meeting. The Project Manager(s) and Sponsor will develop and agree upon an agenda for the initial Steering Committee project meeting. The Project Manager(s) are responsible for scheduling all Steering Committee project meetings, creating the agendas, and publishing the meeting minutes.

The initial Steering committee meeting agenda should address the following items:

- Introduction of Steering Committee members
- What is the project's objective – taken from the PSR (if available)
- Role of Steering Committee Members – defined above
- High-level review of the Project Life Cycle and Methodology
- Project Budget (if available)
- Communications Plan
- Develop Measure of Success
- Develop High Level Achievements
- Identify Constraints, Assumptions and known risks
- Next Steps
- Date for next Steering Committee meeting.

The above is a suggested agenda and should be modified to fit the needs of the audience. It might not be possible to complete all of the items listed above in one meeting. The Project Manager(s) should send out the agenda at least two to three days in advance.

Meeting Minutes v7.0 Template

The Project Manager(s) are responsible for having minutes taken for every project meeting. Meeting minutes should be distributed to participants and posted to a project document repository in a timely manner. The Project Manager(s) can delegate the responsibility of taking meeting minutes to team members, administrative support, etc. However, it is the Project Manager's responsibility to make sure that the minutes are taken and posted for every project meeting.

0.9. Define Measure of Success (MOS)

Measure of Success (MOS)

The Steering Committee defines the overall Measure of Success for the project. During the Steering Committee project kick-off meeting, the Project Manager(s) will lead the Steering Committee members through the exercise of determining what the project's end result will be.

Note: It would be productive if the Project Manager(s) prepare a draft MOS to initiate Steering Committee member participation in the MOS definition process.

The Measure of Success should be a statement that specifies exactly what the Steering Committee expects a project to produce, in quantifiable terms.

Example: Decrease the time-frame for de-provisioning students by a minimum of 50% in each of the 8 areas: library, public safety (parking and ID card access), Logician clinical system, email, portal, e-learning, AD, and computer lab access. The current standard de-provisioning timeframe is two working days.

In the above example, if the Implementation Team can 'decrease the time-frame for de-provisioning students in each of the 8 areas to one working day then the project would be

considered successful. A measured achievement must be created as part of the MOS; as you can see from the example above, the measured achievement is that the decrease in timeframe to de-provision a student must be a minimum of 50% less than the current timeframe, in this example two working days.

In order to provide evidence that this MOS has been successfully completed, the Implementation Team will have to be able to define the current de-provisioning timeframes for each of the 8 areas. Then, once the project is completed, the new student de-provisioning process can be compared against the old to determine if the 'minimum of 50%' was successfully met.

0.10. Define High Level Achievements (HLAs)

High Level Achievements (HLAs)

The Steering Committee breaks down the MOS into five or six High Level Achievements (HLAs) that the Implementation Team must complete in order for the project to be successful. During the initial Steering Committee meeting, the Project Manager(s) will lead the Steering Committee members through the exercise to define the High Level Achievements (or deliverables) for the project. The HLAs are a series of broad achievements that when combined equal the MOS. Each achievement (HLA), on its own, is an entire work package that can be completed, either in a serial or parallel manner.

Example of HLAs:

1. Implement the IFEP middleware on a suitable platform with the necessary supporting software with an operational availability of 98%.
2. Successfully implement the web hosted HigherMarkets solution with SciQuest to 95% of Banner users.
3. Map 100% of the vendor catalog items onto the existing or edited commodity codes and successfully enter this data into the HigherMarkets database.

The above three HLAs are separate quantifiable achievements that must be addressed in order to reach the MOS. Each HLA must be a statement that specifies what will be achieved and with what measure.

After each HLA is completed, the Project Manager(s) must provide evidence to the Steering Committee for inspection, review, and sign-off that the HLA has been successfully completed. HLAs will be completed during the Executing Phase of the project.

0.11. Define Constraints and Assumptions

The Steering Committee identifies any constraints and assumptions which will limit or control the activities of the Implementation Team as they work to complete the High Level Achievements and Measure of Success. The Project Manager(s) will lead the Steering Committee through a discussion to identify the project's constraints and assumptions.

Examples of constraints:

- The project budget of $350,000 cannot be exceeded
- The project must be completed before current software contract ends on December 30th, 20XX.

Example of assumptions:

- The hospital IT resources will be used to develop the project's interfaces
- The solution must be able to accept general ledger transactions from the Banner Financial system

The Project Manager(s) will have to make sure that the Implementation Team is working within the constraints and assumptions identified by the Steering Committee.

Special Note on Time Constrained Projects:

A time constrained project is when there is an absolute hard completion date for a project. Few projects truly fit into this type of project. Often project completion dates are "nice to have". However, we must on occasion address true time constraints. In this case, the project manager(s) work through all the steps for developing MOSs and HLAs, develop a project schedule as defined in this methodology and determine if the current allocated resources are sufficient to meet the time constraint. If the project schedule indicates a date outside of the constrained time frame, a detailed analysis of the critical path will need to take place to suggest: alternate approaches, additional resources, additional costs or change in scope.

0.12. Define Project Manager's Authority

The Steering Committee will agree on what the Project Manager(s) overall responsibility is for the project. Generally, the Project Manager(s) is expected to have the following project responsibility:

- Schedule and lead Implementation Team meetings
- Prepare, distribute, and archive required project documentation
    - Meeting Agenda & Minutes
    - Project Document Deliverables, ex. Project Charter
    - Implementation Team and Steering Committee Status Updates
- Lead Implementation Team in developing and executing the Project Schedule
- Monitor project activities/tasks Initiate Project Change Control process, when required

The Project Manager(s) leads the Steering Committee through a discussion regarding Project Manager's authority using questions such as:

- Can the Project Manager(s) directly assign work to any individual on the Implementation Team?

- Can the Project Manager(s) add or remove Implementation Team members from the project without approval from the Steering Committee?
- Can the Project Manager(s) conduct vendor negotiations, budget expenditures, etc.?

0.13. Identify Known Risks

The Steering Committee will help identify any known project risks that could impact the success of the project. Identifying risks will allow the Project Manager(s) and Implementation Team to appropriately plan for the risks as opposed to just reacting to them.

0.14. Identify Impacted Departments and/or IT Systems

The Steering Committee will help identify any known departments and/or IT systems that could be impacted by the project.

Example:

- Departments: OIT's Enterprise Infrastructure group for acquisition of hardware.
- IT Systems & Applications: ERP for interface of general ledger data.

Identifying departments and IT systems/applications that will be impacted by the project will allow the Implementation Team to appropriately plan for these areas.

0.15. Review Project Change Control Process

The Steering Committee and the Implementation Team will need to become familiar with the Project Change Control Process. Having a proper change control process in place is key to having a successful project.

Change Control Process v7.0

Change Request Template v7.0

Once the project scope has been defined (MOS & HLAs), the Project Manager(s) define tolerance levels which the committee feels are acceptable to Scope, Time and Budget. This is documented in the Project Communication Plan. Project Manager(s) will enter into the Change Control Process should the change exceed the set tolerances.

If a change is required then these steps will be followed:

1. Complete Change Request Form – Completion of a change request form (see Change Request Example document for instructions and template) describing the change that is being requested, the justification for the change, the cost of that change in terms of dollars, duration and the impact of the change on scope.

2. Evaluation of the Change Request by the project team

3. The Project Manager(s) should always be required to explore the opportunities to address the issue with corrective action versus changing the project baselines.

4. The Project Manager(s) prepares a recommendation to the Steering Committee regarding the change request.

5. If the change request is approved by the Steering Committee, the Project Manager(s) updates the project documentation.

6. A copy of the change request and action must be retained in the project record and filed in the project archives as part of the project close-out process.

7. The Project Manager(s) should communicate the changes to the appropriate stakeholders.

Project Change Control – This is when the Project Manager(s) has to formally request a change in the project's baseline schedule, finalized budget, Measure of Success, or defined High Level Achievements (scope).

0.16. Develop Communications Plan

Communications Plan Requirements

Communications Management Plan v7.0 Template

The Project Manager(s) develops a Communications Management Plan that details the communication needs of the project stakeholders.

In order to develop this document, the Project Manager(s) interviews the project teams, sponsor, and other participants to determine their communication needs, the type of information they want to receive as well as the medium they would prefer, ex. email. The Communications Plan specifies the project engagement sessions they require, and, which documents, such as change requests, status reports, technical documentation, and updates that are distributed to which recipients. It is essential that we know not only the type of information each recipient would like, but also the level of detail at which the information is desired.

To keep the communication plan manageable, it is suggested that the type and frequency of communication be organized by role (for example, all Steering Committee members will receive the same status report at the same time each month).

Another key function of the communication plan is to determine tolerance levels for changes to scope, time and budget. Projects are so dynamic and can last for a significant length of time that Steering Committee members may not want to be notified every time minor changes occur. Therefore it is recommended that within the Initiation Phase, the Project Manager(s) set communication expectations with the Steering Committee. In this case, the communication plan becomes tied to the Change Management Process.

0.17. Create Project Charter

The Project Charter is the document that formally authorizes the project to begin and sets the goals of the project. This is the major deliverable for the Initiation Phase of the

Project Charter Requirements

Project Charter v7.0 Template

project. The Project Charter is created and approved by the Steering Committee and sets the direction and parameters for the Implementation Team to follow. It details the business objective(s) that the project will address, Measure of Success, as well as high level achievements (HLAs), constraints, assumptions, affected stakeholders, known risks, and areas impacted by the project. Because the Project Charter is developed so early in the project, it provides a broad, high level view, describing the end results, but not all the detailed processes or tasks that will be used to achieve those results. These detailed processes or tasks will be developed during the Planning phase.

Note: It is recommended that the Project Manager(s) should actively participate and help guide the Steering Committee during the Project Charter creation process.

Project Charter key elements:

- Business Objective
- Project Manager's Authority
- MOS's
- HLAs
- Constraints
- Assumptions
- Stakeholder Identification
- Risks
- Known Impacts on Areas/Systems
- Approvals.

The Steering Committee members approve the final version of the Project Charter The Project Manager(s) should note the method of approval on the Project Charter form in the Signature section.

Note: *When the project involves outside contractors, the Project Manager(s) needs to review and confirm the MOS and HLAs with the vendor(s) to ensure their understanding and agreement with the HLA deliverables for which they are responsible. In some cases, this is defined in a formal signed Statement of Work (SOW) with the 3rd party vendor. The Project Manager(s) should attempt to get a copy of any related SOW's to understand the contract provisions, payment terms, etc.*

0.18. Project Deliverables Checklist

Project Deliverables Checklist v7.0 Template

The Project Manager(s) should use the Project Deliverable Checklist to define the required deliverable documents for each phase. This checklist is a guide for the team. Some of these documents listed are mandatory for every project; while others are selected based on the complexity, size, or special requirements of each project. For example, an approved Project Charter is required for every PMO managed project.

0.19. PHASE GATE APPROVAL

For this phase, only the approved project charter is needed to end the phase and move to the next phase – Planning & Development. No further action should be performed on this project, i.e., development of a project schedule, and/or executing schedule tasks, without an approved Project Charter.

4. PLANNING/DEVELOPMENT PHASE

During the Planning/Development Phase, the Implementation Team expands their understanding of the deliverables needed to produce the project's Measure of Success. They break down the High Level Achievements into component deliverables and consider alternative ways to reach the end result. Important deliverables are created such as a detailed project schedule, security plan, risk management plan, test plan, and a budget, procurement, vendor management plan. All of these deliverables are compiled into the overall project plan and schedule.

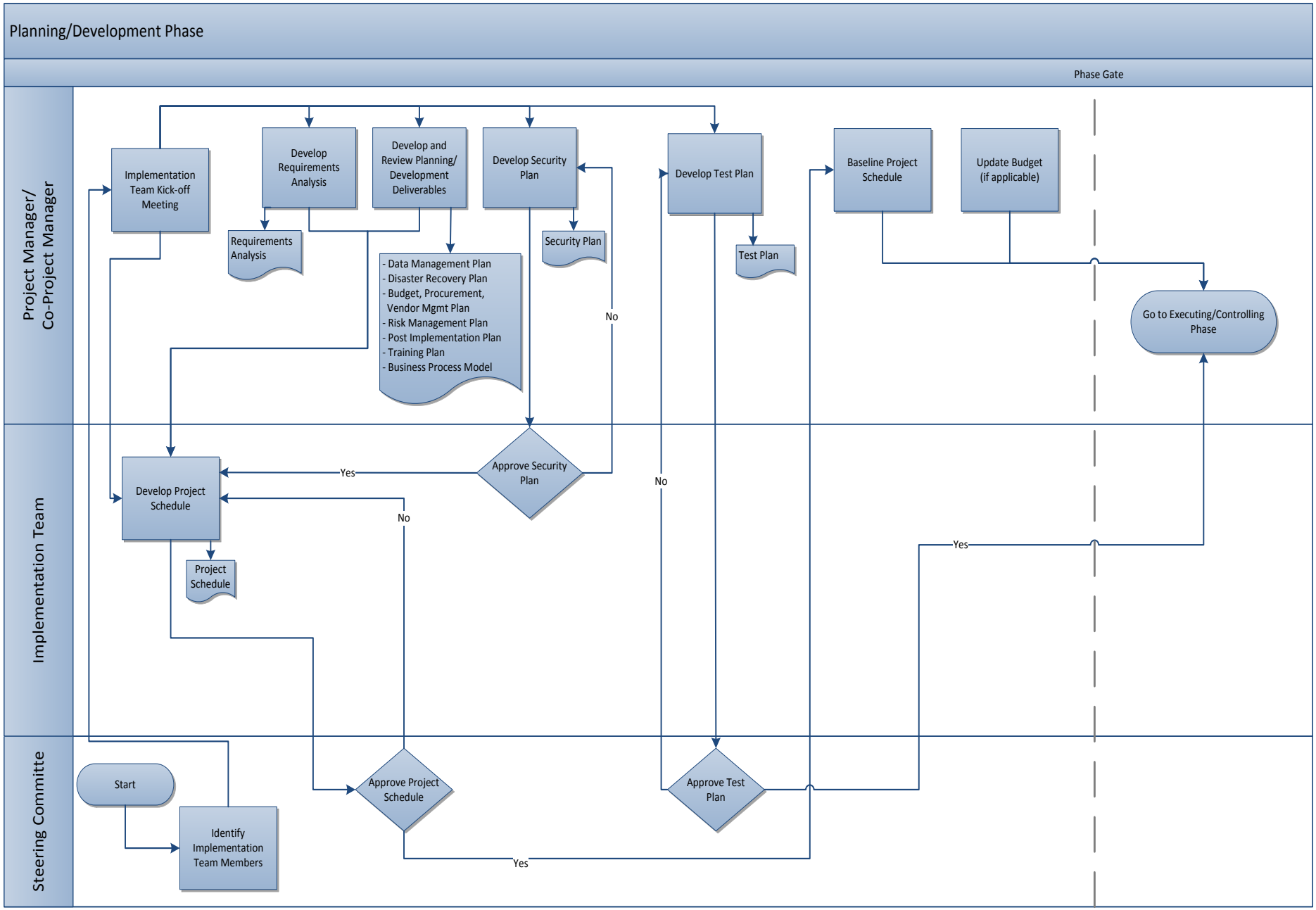

Figure 3 - Planning/Development Phase

4.1. Define Implementation Team Members

The Project Manager(s) requests that the Steering Committee identifies personnel to be assigned to the Implementation Team. The Implementation Team's primary responsibility is to **execute** the project.

Implementation Team consists of internal staff, vendors, and contractors. If the project is going to affect any of the schools, please remember to offer their staff a place on the Implementation Team.

A listing of the Implementation Team's responsibilities is displayed below. The Implementation Team should meet regularly to discuss theproject progress.

Implementation Team Responsibilities

- Develop the detailed tasks to accomplish each HLA
- Agree to timeframes and resource commitment for each task
- Agree on overall project's schedule
- Provide status for each assigned task on a recurring basis
- Complete assigned tasks by planned deadlines
- Communicate concerns/issues to Project Manager
- Attend project meetings
- Identify and manage project risks
- Inspect and agree that each HLA is completed
- Inspect and agree that the project's MOS is completed
- Participate in the development of SDLC documentation
- Provide transition to support staff
- Complete project closure report
- Close-out the Project.

Note: It is extremely important that the Steering Committee knows that they are **AUTHORIZING** the Implementation Team to make all necessary decisions in order to complete each HLA. The Implementation Team does NOT have to get prior approval from the Steering Committee on any decisions regarding these activities, except as noted in the following paragraph.

The Implementation Team cannot change a HLA, modify scope, increase the budget, or change any timeframes for tasks on the project's critical path without Steering Committee approval (see change management process - section 3.15). If the Implementation Team cannot agree upon a major issue resolution or key activity decision, then the Project Manager(s) will present these to the Steering Committee for their guidance and, if necessary, final ruling.

4.2. Implementation Team Kick-off Meeting

The Project Manager(s) schedules and hosts the Implementation Team project's kick-off meeting. The Project Manager(s) will develop the agenda and distribute it to team members prior to the kick-off meeting. Also, the Project Manager(s) are responsible for scheduling all project meetings, creating the agendas, and accurately capturing the meeting minutes.

4.2.1. Implementation Team Agenda

Agenda v7.0 Template

The Project Manager(s) will need to review all Initiating Phase documents so that the Implementation Team knows the Steering Committee's approved direction of the project.

The project Implementation Team kick-off meeting agenda should address the following items:

Meeting Minutes v7.0 Template

- Introduction of Implementation Team Members
- Familiarization with the PMO PM Methodology
- Role of Implementation Team Members
- Review MOS and HLAs
- Review Constraints and Assumptions
- Review Planning Phase steps
- Start HLA task break downProject Team meeting schedule
- Discuss Next Steps

The above is a suggested agenda and should be modified to fit the needs of the audience. The Project Manager(s) should send out the agenda at least two to three days in advance.

4.3. Requirements Analysis

Requirements Analysis Requirements

Requirements Analysis v7.0 Template

The Requirements Analysis is a detailed breakdown of all the critical conditions that must be met for the project to be successful. Requirements should be actionable, measurable, testable, and related to a business need. The Requirements Analysis should also define the business needs, compliance needs, optional design criteria, and security needs.

The Project Manager(s) will work with the Sponsor, Steering Committee and the Implementation Team to make sure that all requirements and needs are well documented and defined.

4.4. Business Process Model

A Business Process Model is a document that outlines business processes and the ways in which operations are carried out to accomplish the intended objectives of an organization. This is the activity of representing enterprise processes, so that the current ("as is")

Business Process Model Requirements

Business Process Model v7.0 Template

process may be analyzed and improved ("to be"). The three areas of focus are management processes, operational processes, and supporting processes.

A Business Process Model is designed to help create a more detailed requirements analysis for the design of the system. The three main purposes of a Business Process Model are to:

- Capture current business processes providing insight into how work is executed, who is involved, and how activities flow from beginning to end.
- Redesign and improve business processes to reduce inefficiencies, drive down costs, and respond faster to customer requests. A process has to be documented and flowcharted before it can be redesigned.
- Automate existing process. Systematic replacement for manual or paper processes.

The Project Manager(s) will work with the functional business members of the Implementation Team who understands how the process for the work being reviewed is completed. This sub-team should capture resources, inputs, processes and outputs, but this should only be a broad outline of the procedures that govern daily activities.

4.5. Develop Project Schedule

Project Schedule Requirements

Project Schedule Template v7.0

After the Implementation Team understands the High Level Achievements (HLAs), the next step is for the team to develop a detailed project schedule to complete the HLAs. The Implementation Team needs to discuss what tasks are necessary in order for the team to complete the HLAs. Who will perform the tasks, what is the resources' effort to complete the tasks, what are the task dependencies, and what is the availability of the resources (% time available to the project).

Depending on the complexity of the project, this planning effort can take a substantial amount of time and effort (weeks, sometimes months) on the part of the Implementation Team. Either MS Excel or MS Project can be used as a tool to develop a detailed project schedule. It is highly recommended that MS Project be used for all medium or large sized projects and PDF formatted copies distributed to Implementation Team members and others who do not have MS Project installed or the correct version.

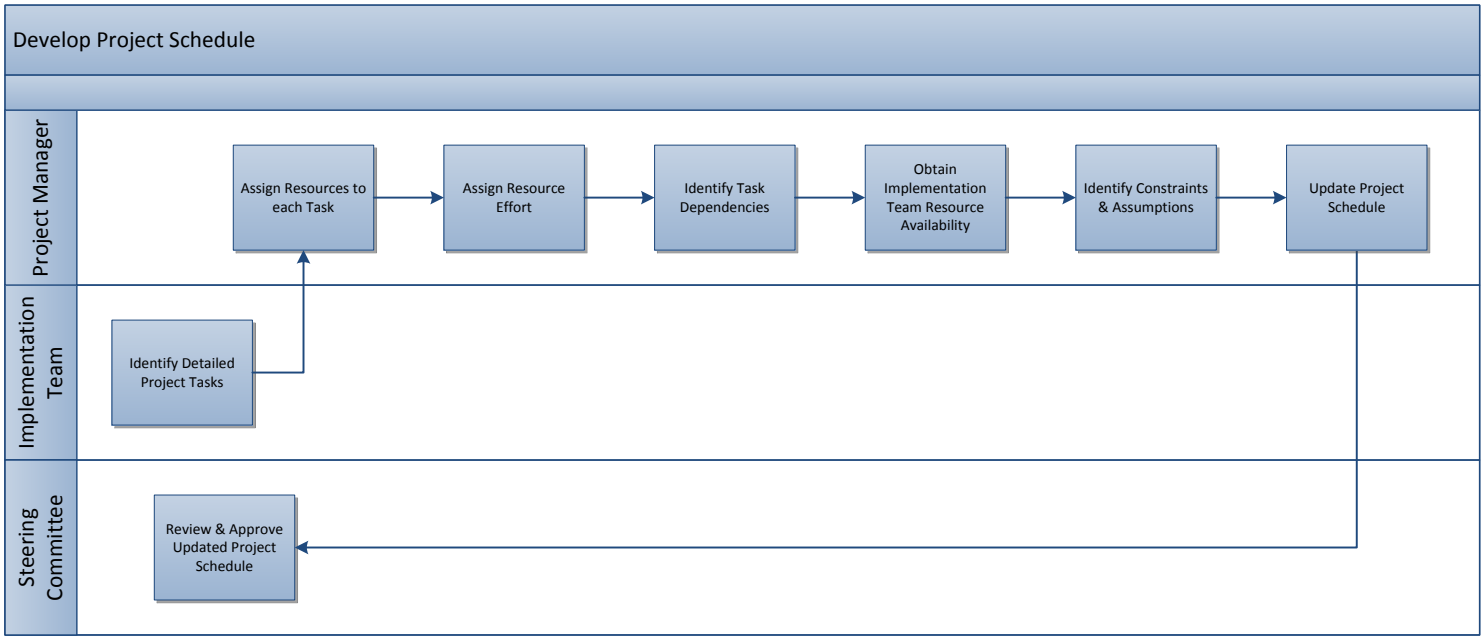

Figure 4 - Develop Project Schedule

4.5.1. Define Detailed Project Tasks

The Project Manager(s) leads the Implementation Team through an exercise to identify the detailed tasks for the defined HLAs. Each large scale activity or sub-HLA will be further broken down into specific sub-tasks.

For example:

Major project activity or sub-HLA: #3 - Define and document existing procedures and steps for de-provisioning students in each of the 8 schools.

Example of detailed tasks for the above sub-HLA:

- Create template and format for documenting procedures
- Document Public Safety student de-provisioning procedures
- Document Library student de-provisioning procedures

In most circumstances, the Project Manager(s) will need to come up with suggestions to get the conversation started. The Project Manager(s) should actively solicit input from all the Implementation Team members.

Note: Be sure to include vendor specific tasks, when applicable.

4.5.2. Assign Resources to each Task

As each task is identified, the Project Manager(s) will work with the Implementation Team to determine who will be responsible for completing the task. Single or multiple resources can be assigned to each task. The assigned resource(s) for a task are usually individuals who are on the Implementation Team.

However, in some situations, assigned resource(s) for a task may be individuals that are not on the Implementation Team. In this scenario, an assigned implementation team member will be held accountable for the task and will have to coordinate the effort of the non-Implementation Team resource(s).

For example, an Implementation Team member is responsible for a task that states 'draft a new security policy that affects all 8 schools at the university'. This team member represents all 8 schools on the Implementation Team; therefore, the team member will have to obtain information from each school to complete the task. It is the assigned team member's responsibility to complete this task by securing the necessary information from each school. The Project Manager(s) will hold the team member accountable, not the school resources that are helping to complete the task.

4.5.3. Assign Resource Effort

Next, the Project Manager(s) ask the assigned resource(s) of the task how much effort in hours it will be required to complete the task.

For example, the task states 'document the current procedure to de-provision a student in the Library' and the task is assigned to Joe to complete. Joe estimates that it will take him 20 hours to complete this task. When estimating the effort the resource(s) should base their answer on a 'perfect world' where they have nothing else to do besides complete this task. The Section 4.6.5 "Obtain Implementation Team Resource Availability" below it discusses how to address team member concerns regarding their availability to work on their assigned project tasks in addition to their normal work duties.

Note: The Project Manager(s) and Steering Committee should realize that the resource efforts stated in the Project Schedule are an **ESTIMATE**. It takes many organizations years before they can accurately estimate the time to complete tasks. Effort estimating improves as Implementation Team members become exposed to this process and have learned from past projects.

4.5.4. Identify Task Dependencies

The Project Manager(s) will ask the Implementation Team what task(s) must be completed before another task can start? Also, does a task need additional lag time to start after a preceding task is completed or can task(s) run parallel (at the same time)? What the Project Manager(s) is trying to do is determine the dependencies of a task.

For example, a task states 'approve library de-provisioning procedure'. The team members identify that this task cannot start until the previous task of 'document the current procedure to de-provision a student in the Library' is completed.

The Project Manager(s) should be knowledgeable of the different types of project task dependencies (e.g., FS – finish to start) and be able to lead the team successfully through this exercise. (Review Definitions Section for an explanation of different project task types).

There are occasions where there is an external dependency with another project or business decision outside the scope of the project. The Project Manager(s) must assess to the best of their ability how this external dependency will impact their project tasks or schedule. An example would be a new application project where a separate infrastructure upgrade project needs to be completed before the application can be installed.

4.5.5. Obtain Implementation Team Resource Availability

After all tasks for each sub-HLA have been identified and assigned the appropriate resources with effort hours, the Project Manager(s) will ask the Implementation Team what their availability is for the entire length of the project. The Implementation Team member will need to identify the average percentage of their time that they can allocate to the entire project, i.e., 10%, 50%, etc. Or they can state that they are only available 5 hours each week to work on the project which translates to 13.0 % (5 hrs./37.5 standard work week) availability. Often, a team member will need to review with their superior what time they can allocate to the project before providing this information to the Project Manager(s). However, the Project Manager(s) may request more time be allocated to the project based on the project needs.

The percentage of time the resource is available to work on the project is used by the Project Manager(s) to help create the project schedule. For example, if 'x' project task assigned to Mary will take 8 hours to complete and Mary is allocated 10% for the entire project, then it will take Mary 2 weeks to complete the task instead of one day (40 hour work week x 10% = 4 hours each week). Entering the above defined tasks, with resources, effort, dependencies, and resource availability, will result in a project schedule with estimated start and end dates.

4.5.6. Finalize Constraints and Assumptions

The Project Manager(s) with the assistance of the Implementation Team identifies any other constraints and assumptions that the Steering Committee may have not identified previously.

If the Project Manager(s) and Implementation Team have identified important constraints and/or assumptions that may need to be incorporated into the project schedule, then the Project Manager(s) should present this information for review and approval at the next Steering Committee meeting.

4.5.7. Refine Project Schedule

After listing all the known tasks, dates, the order in which those tasks should be completed, team member task assignments, availability of the team members for each project task, and identifying constraints and assumptions, the project schedule is refined by the Project Manager(s) using additional factors, such as dependencies on other projects, vacations, holidays, etc.

4.5.8. Project Schedule Approval

The project schedule should be approved by both the Implementation Team members and Steering Committee members before the Implementation Team can start work on any tasks.

4.5.8.1. Implementation Team Review and Approval

The Project Manager(s) review the project schedule(s) with the Implementation Team in order to obtain their overall approval on the tasks, dates, resources, effort, and dependencies.

If the Project Manager(s) provides several different project schedules (scenarios) to the Implementation Team, a final project schedule must be produced and approved by the Implementation Team before the schedule can be reviewed with the Steering Committee.

The Project Manager(s) should document all implementation team approvals.

4.5.8.2. Steering Committee Review and Approval

The Project Manager(s) review the recommended project schedule with the Steering Committee in order to obtain their approval.

During this meeting, the following situations could occur:

- New constraints and/or assumptions are discussed
- HLAs are changed or removed
- More resources are made available

A verbal approval by Steering Committee members is sufficient, but the approvals must be noted in the Steering Committee meeting notes. Email approvals from absent Steering Committee members are also acceptable.

4.5.9. Baseline Project Schedule

Once Steering Committee approval is received, the Project Manager(s) baselines the project schedule. Once the schedule baseline is set, all project task dates are then measured against this benchmark. Remember, proper change control approvals should take place once it is determined that the task or project completion date falls outside the

set tolerance levels, see section 3.14 “Project Change Control Management Process for more details.

The Project Manager(s) should contact the OIT PMO if they don’t know how to set the project baseline in Microsoft Project software.

Note: Even after the Steering Committee has approved a project schedule change, the Project Manager(s) should not re-baseline the project schedule; only change the actual working schedule. A project schedule should be baselined only once as this is used as a benchmark to measure the planned vs. the actual schedule variance. The Project Manager(s) should be able to identify and document the root cause issue(s) that resulted in each schedule delay as well as the appropriate Steering Committee change control approval.

4.6. Security Plan

SECURITY PLAN

Security Plan Template v7.0

Security requirements need to be very specific in regards to the application or general support system, what types of protection must be in place, and what types of intrusions or attacks must be specifically safeguarded against, etc. Security measures should be explicitly required and tested in every project.

Security requirements should also require that sensitive parts of the application, system, or network be protected. All confidential and restricted access portions of the application should be protected. Security should address all portions of a system being developed; including backend systems such as databases; integrated components, such as third party applications or plug-ins; network access; the application being developed; and even access to the source code itself. Effective security requires not only a security plan be developed at the beginning of a project, but also for the plan to be reviewed and adjusted, if necessary, throughout the project.

The Project Manager(s) should work with the Implementation Team and OIT Information Security Office (ISO) to make sure all security aspects have been considered. The security plan should be approved by the Implementation Team and ISO; and where applicable, the Steering Committee.

In the case of projects involving the implementation of a new application or changes to an existing application, the Project Manager(s) should advise the identified application owner/sponsor that they need to register the new application or note changes to an existing application using the ISO ISRA Application Portal website at (http://rbhs.rutgers.edu/ca/infosecurity/program/IS_risk_assessment.html or contact the ISO office for assistance.

4.7. Data Management Plan

DELIVERABLE Requirements and Approvals

A Data Management Plan should determine the type of data that will be used and/or stored within the system and ascertain how the data will be created, maintained, accessed, secured and archived. If there is existing data that requires migration or conversion, the Data Management Plan should address these requirements, as well. This deliverable is scalable to fit the needs of a project that has minimal to no data or a project that is data driven.

Data Management Plan v7.0 Template

The Project Manager(s) are responsible for creating this deliverable in close coordination with all stakeholders, including the Sponsor.

4.8. Disaster Recovery Plan

DISASTER RECOVERY PLAN

Disaster Recovery Plan v7.0

The Disaster Recovery Plan outlines and documents the formalized processes to handle the recovery of applications, data, and infrastructure systems directly related to the project. This document should consider availability needs for each portion of the system. The purpose for this plan is to create a plan for disaster recovery, but it is not intended to be a business continuity plan. Business Continuity plans are usually generated at the enterprise level under the guidance of senior business and IT management.

The Project Manager(s) is responsible to ensure that the Disaster Recovery Plan has been created by developing a new process or set of processes; or by leveraging current processes.

4.9. Create Budget, Procurement, and Vendor Management Plan

BUDGET, PROCUREMENT, VENDOR MGMT PLAN

Budget Procurement and Vendor Management Plan Template 7.0

The Budget, Procurement, and Vendor Management Plan specifies the controls that are agreed upon by the Project Manager(s) to address the funding and cost monitoring of the budget, the procurement and invoicing of vendor goods and services, and how the vendor will be managed.

The management plan is meant to be changed to fit the needs of each specific project. Please review the example provided and modify it to accommodate your project's specific needs.

The following items could be addressed within the management plan:

- Budget
  - Financial Banner index number
  - Who is the fiscal officer
  - What are the funding amounts per fiscal year
  - Who will monitor costs – actual vs. budget
  - When does the SC need to approve financial changes
- Procurement
  - Who approves purchase orders
  - Who approves invoices

- Vendor Management
  - Who is the main contact person with the vendor(s)
  - Who maintains the vendor contact information
  - Who are the vendors
  - How are vendor quotes handled
- Budget Closure

Multi-Year Budget v7.0 Template

Budget Tracking v7.0 Template

Once the Budget, Procurement, and Vendor Management Plan is created, the Project Manager(s) can assist the Project Sponsor or Requestor in creating a multi-year project budget. The PMO Budget Tracking template should be completed with the necessary budget data and kept up-to-date as costs are incurred. As expenses occur (invoice received), the Project Manager will apply project expenses against the budget items that were previously setup. These expenses will then be reviewed and/or approved by the project expense approver (Fiscal Officer or Sponsor).

4.10. Test Plan

The Test Plan will specify the testing needs and goals for the entire project. The Test Plan should include the strategy for all levels of testing required, including but not limited to:

Test Plan Process

Test Plan Template v7.0

- Unit Testing
- System Testing
- Integration Testing
- Installation Verification
- User Acceptance Testing.

If available, the requirements grid from the Requirements Analysis should be included in the testing plan. All needed scenarios for complete, accurate testing should be identified within the Test Plan along with expected timeframes for the testing to be executed. The test results will provide stakeholders with information about the quality of the product being delivered. The test plan is meant to convey testing strategy and scope, it need not contain the actual test scripts or results, that information should be documented later in the project lifecycle.

The Project Manager(s) is responsible for producing a final Test Plan document that needs to be approved by the Sponsor and the Steering Committee and to verify that all appropriate test scenarios have been identified. The final Test Plan is not always completed in the Planning and Development phase, but it MUST be completed and approved prior to the start of actual testing. Once testing starts, test results must be documented and will require a different set of approvals by the testing organizations involved.

Note: For application testing, especially new applications, Project Manager(s) should plan for multiple test cycles as defects will have to be remediated and re-tested.

Note: Training for testers should also be identified in the Test Plan as a prerequisite.

4.11. Develop Risk Management Plan

RISK MANAGEMENT PLAN

Risk Management Plan Template v7.0

The risk management process is a systematic and proactive approach to identifying risks and minimizing their uncertainties. The Project Manager(s) should prepare a Risk Management Plan which includes identifying risks, determining their possible impact, identifying who should be involved in their mitigation, and how the risks will be managed. The Project Manager(s) should seek advice from the Steering Committee and Implementation Team members in creating the plan.

What is a project risk?

A risk is an anticipated event/occurrence which may impact the project; the event/occurrence can either be internal or external. The key word is **MAY**. A risk is not a certainty. If a risk occurs, it becomes an issue.

Generally there are three main areas that risks can impact:

- Budget/costs
- Schedule/time
- Quality/scope.

Risks should be quantifiable and ranked depending on their level of impact to the project. For example, a risk that has a low probability of occurrence and a low impact to the project will be ranked lower than a risk which is likely to occur and would have a huge impact on the project. This ranking can help the Project Manager(s) and Implementation Team utilize the available project resources in the most effective way.

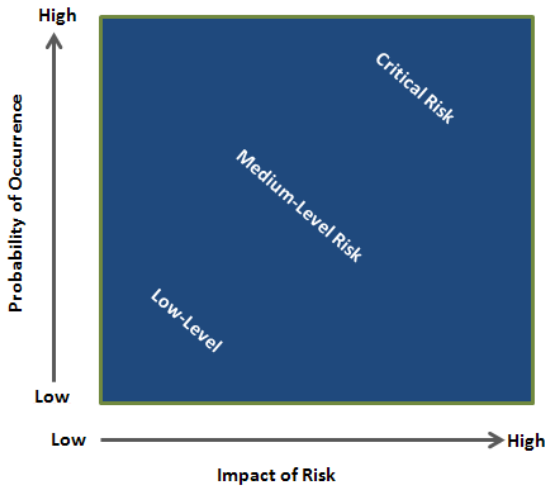

Figure 5 - Project Risk

The Project Manager(s) adds risks to the Risk Management Plan as they are identified. Risks can be identified as early as the Initiating Phase and can continue throughout the project until completion.

Risk Log Template v7.0

The Project Manager(s) logs the risk(s) into the Project Risk Log which needs to be stored in the appropriate project document repository and updated as needed. Project Manager(s) is responsible for reviewing the risks periodically with the Implementation Team and identifying remediation steps to eliminate or reduce the risks throughout the project's lifecycle.

4.12. Post-Implementation Plan

POST-IMPLEMENTATION PLAN

Post Implementation Plan Template v7.0

The Post Implementation Plan will identify the scope of the project and the responsibilities of the staff maintaining the system post-project. The system and/or application should be outlined in detail. The expectations of all support service departments need to be identified and documented. This plan should include required maintenance, maintenance schedules, log reviews and a documented process for system account access reviews. Also, a detailed change management process needs to be developed for future change, maintenance, upgrades and customizations.

The Project Manager(s) needs to work closely with the Implementation Team to create the Post Implementation Plan.

4.13. Training Plan

TRAINING PLAN

Training Plan Template v7.0

The Training Plan defines the activities and approach for training the users on the product of the project. This plan will need to describe the time lines, resources and process of scheduling end user training. The Training Plan will also need to outline how users will be selected for the training classes along with training schedules and curriculum. The outline for the training materials should be included. The Training Plan should address a competency testing outline or matrix, especially for clinical applications.

The Project Manager(s) and the Implementation Team are responsible for ensuring that a thorough Training Plan has been created, while working with the appropriate training staff. Types of training to be considered:

- Technical/System Training
- Tester Training (**Note**: this training needs to be tied into Test Plan)
- Admin User Training
- Super User Training
- End User Training.

Consideration should be given to soliciting feedback from personnel attending the various training sessions as to the quality of the trainng and applicability to the user's work environments as well as meeting applicable clinical or regulatory guidelines. This feedback can be used to improve future training programs and identify areas for re-training of current users. In the case of required competency training, attendence and satisfactory completion must be recorded and retained by the responsible administrative entities.

4.14. Update Project Budget

After the Planning Phase has been completed and the Project Schedule has been baselined, the Project Manager(s) has the appropriate data to make any updates to the Project Budget spreadsheet. The Project Manager(s) must notify and get approvals for any budget changes from the responsible organizational and Financial departments.

4.15. PHASE GATE APPROVAL

The Project Manager(s) should not move forward with the project until all Steering Committee members are in agreement that the defined phase deliverable (the project schedule) has been completed sufficiently to move into the Executing/Controlling Phase.

5. EXECUTING / CONTROLLING PHASE

During the Executing and Controlling Phase, the Implementation Team members work on completing the tasks defined on the project schedule. The Project Manager(s) will monitor the project's progress and adjust performance as needed to meet deliverable(s) deadlines. As HLAs are completed, the Implementation Team should review and approval them.

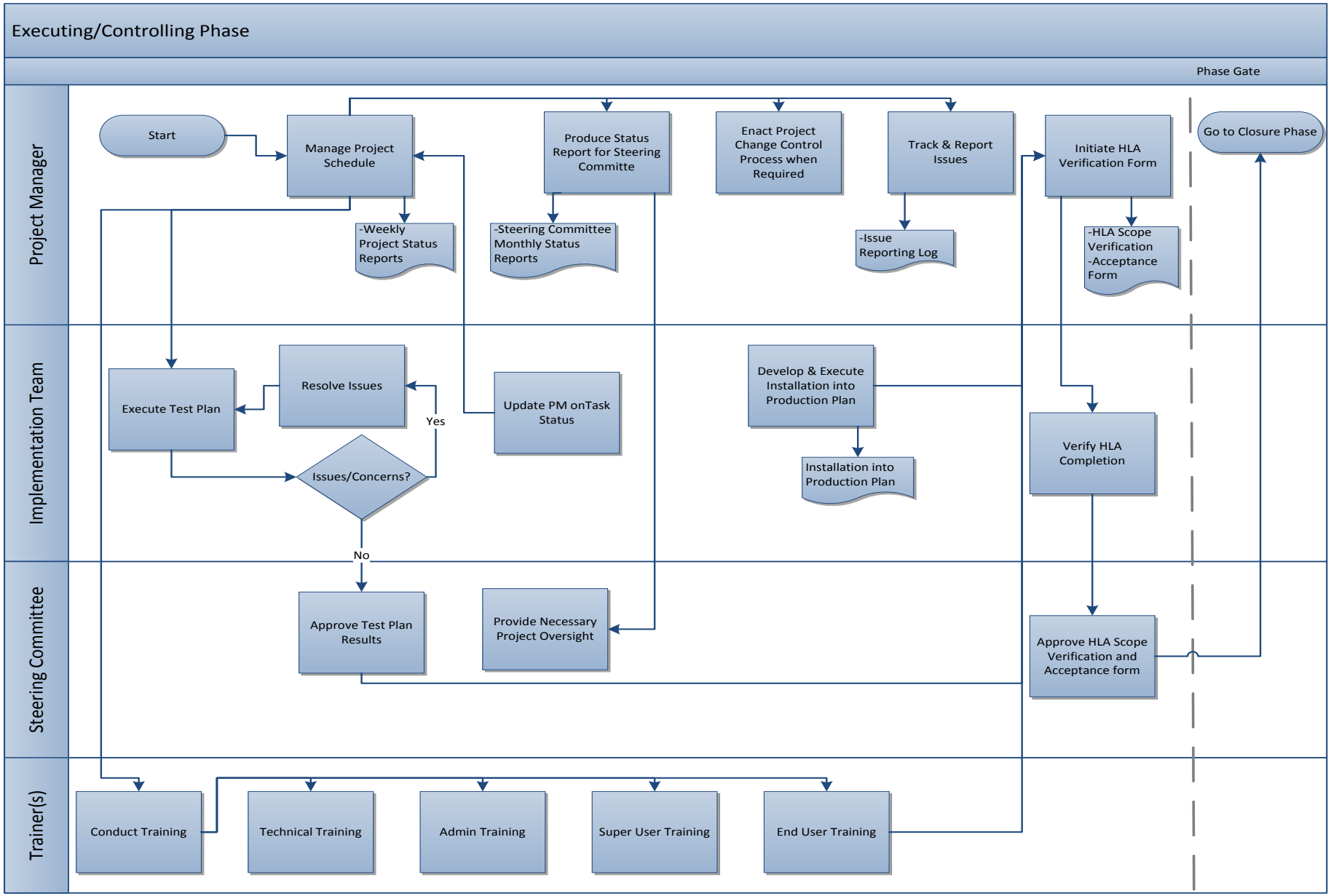

Figure 6 - Executing/Controlling Phase

5.1. Project Schedule

The Project Manager(s) will manage the project schedule by reviewing the resources' progress for each assigned task. Based on the ongoing status provided by the Implementation Team members, the Project Manager(s) will address issues and problems, update task effort, and review that tasks are being completed within designated start and completion dates.

5.2. Execution of Test Plan

The Project Manager(s) will work with the Implementation Team to identify testers to execute the Test Plan that was developed during the planning phase, making sure that all levels of testing have been performed and appropriately recorded and approved. All issues and/or concerns will need to be documented and worked through until testing is successful. The Test Plan results must be accepted and signed-off on by all designated approvers.

5.3. Status Reports

Implementation Team members will provide regular status updates on their scheduled project tasks as agreed upon in the Communication Plan. In most cases, updates on ongoing open tasks will be on a weekly basis.

SC Status Report Standards 7.0

SC Monthly Status Report Template 7.0

1. The status update will reflect the work performed for each task from the previous update. If no work was performed by the Implementation Team member for an open task, a status on the task is still required stating that no work effort occurred. This information will be delivered as outlined in the Communications Plan.

2. The Project Manager(s) will update the project schedule based on the individual updates provided by the Implementation Team members. Any issues and/or concerns identified will need to be addressed by the Project Manager(s). This may result in corrective action or change to the project schedule.

3. The Project Manager(s) will provide regularly scheduled project status reports that will be distributed to the team members and appropriate stakeholders as outlined in the Communications Plan. The project status report must follow the pre-defined standards for a status update.

4. The Project Manager(s) will produce a monthly status report for the Steering Committee and distribute as outlined in the Communications Plan. If the status report for your area is more detailed than the PowerPoint template provided, the Project Manager(s) may continue to use the more extensive version.

5.4. Project Change Control Process

Change Request Template v7.0

The Project Manager(s) will enact the project Change Control Process when necessary (see Project Change Control Process in the Planning Phase) by submitting a Change Request Form to the Steering Committee.

5.5. Issues Reporting Log

Issues Reporting Log Template v7.0

Issues can pop up at any time during a project and should be reviewed and addressed by the Implementation Team. Typically, project issues can be related to changes in the project schedule, resources, materials, finances, or unexpected changes in the project environment.

Every project should track, resolve and manage issues.

Below is a guide to the types of information you should capture in a typical issue log:

Id:	A unique number to track the issue.
Issue Date:	Date the issue was raised.
Type:	Used to categorize issues for easier assignment and tracking. Issue types may vary, but should usually include the following: • Technical: an issue relating to the technical aspects of the project process or deliverable. • Financial: An issue relating to project funding, spending or budget. • Resource: An issue relating to project resources. • Schedule: An issue relating to the project schedule (timeline). • Other: A unique issue specific to the project at hand.
Problem Description:	Identify the specific nature and impact of the issue (what is the issue about and how does it impact the project in terms of deliverables, schedule, costs, scope or

other parameter?).

Originator: Who first raised the issue?

Assigned To: Who is responsible for issue resolution?

Issue Priority:	To ensure that issues are dealt with appropriately considering impact and consequences: • High: Issues having a major impact on the project, requiring immediate action. • Medium: Issues have a moderate impact on the project, requiring attention in the near future. • Low: Issues having an insignificant impact on the project, requiring attention at some future date if time permits, or not at all.
Start Date:	To establish a timeframe for problem initiation.
Target Completion Date:	To establish a timeframe for resolution.
Resolution Description:	To identify the steps taken to address and resolve the issue.
Status:	Classification to track issue status: • Identified: The issue has been identified, resolution has not yet begun. • Seeking Resolution: Determining how to resolve the issue. • Solution Proposed: A solution to the issue has been proposed and is pending acceptance or revision. • Resolved: The issue has been resolved. • Escalated: The issue has been escalated to the Steering Committee for further action.
Close Date:	To establish a timeframe for problem closure.

Once an issue is raised and documented, resource assignments must be made. Depending on the nature of the issue, any Implementation Team member may be involved.

A key challenge is tracking issue status from the point at which issues are first raised and assigned, through to resolution. Depending upon the complexity and visibility of any given project, you may need to review all open project issues at each Implementation Team meeting. Review of the open issues during these team meetings can provide an opportunity for the entire team to consider issues resolution progress, plan or adjust corrective actions, and re-allocate resources when required to close critical issues.

5.6. Installation into Production

INSTALLATION INTO PRODUCTION

Installation Into Production Template v7.0

Installation into Production is a specific, detailed plan that documents the steps that will be followed to move a system or application from the testing and/or development environment into the production environment. This document will include the criteria for installation, deployment approach, contingencies, communications, and production (system & functional) verification. Testing is required and test results should be documented in conjunction with the expected outcome. The plan should include the roles and responsibilities of those involved. For applications or systems which are third party hosted, the Implementation Team should coordinate with the vendor(s) during development of this document.

The Project Manager(s) is responsible to ensure the Installation into Production Plan is created, and approved by the Implementation team and OIT Change Management (if applicable). Once the plan has been completely executed and passed final user acceptance testing, the final approvals must be obtained by the appropriate stakeholders.

For any project, whether this document is completed or not, the OIT Change Management Policy must be reviewed and followed. This policy process is required for all systems and applications, even hosted environments. The most up to date policy 70.2.12 – IT Change Management Policy can be located in the Information Technology Section of the Rutgers University Policy Library by clicking on this hyperlink: Information Technology Policy Library.

Deliverable: The Project Manager(s) will ask the Steering Committee members to approve the completed HLA.

Note: Approvals can be verbal as long as they're documented.

5.7. Conduct Training

The Training Plan that was developed during the Planning/Development Phase needs to be refined, if necessary, and then administered. This process will need to be monitored and evaluated closely by the Project Manager(s) working with the training staff assigned to the project.

It is highly encouraged that training attendees be asked to provide feedback on the training curriculum, quality of training, and applicability to their operational needs so that, in the case of shortfalls, re-training can be scheduled as soon as possible and future training plans can be improved.

Consideration should be given to post-implementation training, either as refresher training or for users that were unable to attend the scheduled user training.

5.8. HLA Deliverables Verification

HLA Scope Verification and Acceptance Template v7.0

The HLA Verification Form identifies that the Implementation Team and Steering Committee has provided formal acceptance for a project deliverable(s). The HLA Verification Form requires evidence the scope has been fully executed. Approval by each implementation team member is required before the HLA Verification form is sent to the Steering Committee for final approval.. Steering Committee approval of each HLA Verification Form is required before the project can move into the Closure Phase.

5.9. PHASE GATE APPROVAL

The Project Manager(s) cannot move forward with the project until all Steering Committee members approve and sign-off on all Project Deliverables, especially the HLA Scope Verification and Acceptance form.

6. CLOSING PHASE

The closing phase begins when the project's MOS is completed. The Project Manager(s) will complete the processes for closing the project budget and complete a closure report. The closure report will include final comments and lessons learned on the project.

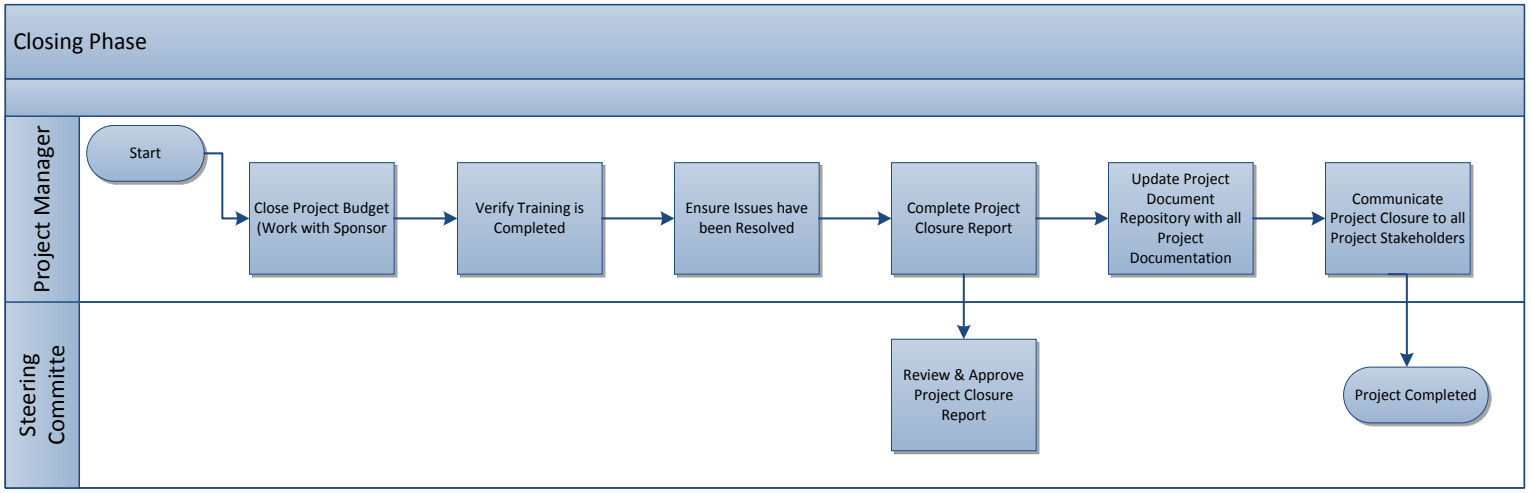

Figure 7 - Closing Phase

6.1. Project Closure

The project is officially closed when the Project Budget Memo is completed and the Project Closure report is approved by the Steering Committee.

BUDGET CLOSURE MEMO

Budget Closure Memo v7.0

1. The Project Manager(s) and the Sponsor will follow the required steps to close the Project Budget:
   i. Close out vendor invoices
   ii. Update salary information
   iii. Confirm that PO's have been closed
   iv. Meet with Sponsor, Financial Officer to confirm budget closure
   v. Send out Budget Closure Memo.

2. Verify that any major implementation or post-implementation issues have been resolved.

PROJECT CLOSURE REPORT

Project Closure Report Template v7.0

3. Complete the Project Closure Report with the assistance of the Implementation Team and submit it to the Steering Committee for approval.

4. The Project Manager(s) will verify that all project documentation is up to date and resides in the appropriate project document repository for review or audit. For those using the PMO PPM solution, the PMO will close the project and remove access the system for team members.

5. The Project Manager(s) will communicate the project closure to all project stakeholders as appropriate.

Appendix A – Key Terms and Definitions

TERM	DEFINITION
Artifact	A term used to describe official project documents.
Business Issue	The business reason why the requestor wants to have the project completed.
Co-Project Manager	The Co-Project Manager is the personnel assigned to the project from the department who has a major stake in the success of the project. The Co-Project manager is to assist the Project Manager in the execution of the methodology having the same accountability. The Co-Project Manager will also have responsibility to aid the Implementation Team in performing tasks to complete the project deliverables. The Co-Project Manager will work hand-and-hand with the Project Manager. While the PM will lead and direct the team through the PMO methodology, change and risk management processes; the Co-PM will lead and direct the project through specific subject matter.
Core Domain	The infrastructure at Rutgers RBHS for system authentication and access to file storage that is in a secured location.
Corrective Action	Corrective Action is steps the project manager(s) should take in order to bring the project back to agreed upon baselines to scope, time or budget.
Critical Path	A critical path is the sequence of project task activities which add up to the longest overall project duration. This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path).
Deliverables	The required result or output for completing a step in the project methodology.
Implementation Team	The group of individuals who are responsible to implement the project tasks.
OIT (or IT) Leadership/Leader	The group of individuals designated as IT leads for their respective area, school or department
Project Management Methodology	Processes that provide a common set of guidelines and tools for all OIT employees to successfully manage a project.
Project Management	The central administration OIT department who sets the direction,

TERM	DEFINITION
Office (PMO)	monitors, and provides training on how OIT personnel should successfully run projects.
Project Baseline	A project's baseline is defined as the original approved scope, cost and schedule. The project's baseline is used to measure how actual performance deviates from the plan.
Project and Portfolio Management System	A centralized software application used to track all projects and in some cases used to organize operational tasks in (IT) departments.
Project Manager	The Information Technology (IT) personnel who has responsibility of planning, execution, and closing of a project. This individual will manage the entire project and ensure that the project is compliant with PMO Project Methodology. The subject matter expert for project management activities and processes.
Project Task Dependency Types	**Finish to Start (FS).** Task cannot start until a prior task or tasks are completed. <this is the most common type of task dependency and is the default setting in MS Project> **Finish to Finish (FF).** Task completes concurrently with another prior task or tasks. **Start to Start (SS).** Task starts at the same time as another task or tasks. **Start to Finish (SF).** Task cannot finish until another task or tasks are started.
Project Types	**Small Scale Project** – Typically, a small project is departmental in focus. This may include small organizational improvements or enhancements to current practices and/or procedures. Often this may include process improvement efforts, updates or minor enhancements to an existing information system or an incremental product development project. Small scale projects are those involving up to 500 hours of effort or less (OIT, team members and stakeholders combined), and will have a small number of implementation team members. **Medium Scale Project** – A medium project is often one conducted within an individual business unit. Medium projects typically involve implementing new capabilities to support key business function, and may include significant process improvement projects, systems enhancements, or the development and implementation of new systems to support a single business function. There may be some procurement associated with the project, whether for products, services, or resources. These projects are between 500 and 2000 hours of effort, and may have up to 10-15 Implementation Team

TERM	DEFINITION
	members. **Large Scale Project** – Large projects tend to be significant and organizationally-driven strategic projects. Large projects are usually aligned with the attainment of key strategic objectives of the organization, and will often have far reaching impact within the organization. These projects may require more extensive use of external consultants and contracting expertise, and will typically have much more complex procurement requirements. Large projects typically require over 2000 hours of resource effort, and likely involve increased size of the implementation teams – often with 30 or more team members. **Time Constraint Project** – This is a project that has a specified completion date that must be met. Special attention must be given to adhering to baselined project schedule and applying mitigation efforts whenevert issues surface that impact the critical path of the project.
Sponsor	The person who owns and promotes the project to the University, addresses conflict/issues with other senior executives, ensures project alignment with university's strategic goals and priorities, and any other duties outlined by the steering committee.
Stakeholders	Are any individuals who are affected by the project, .i.e., sponsor, project manager, steering committee, Implementation Team, vendor, and end users.
Steering Committee	The governing body of the project that have the responsibility to set the direction of the project and monitor the project's progression. (Refer to Initiating Phase – Project Team Directory for detail Steering Committee responsibilities.)

Appendix B – Deliverable Requirements and Approval Matrix

Project Deliverable	Requirements by Project Size				
Pre-Project Planning Phase	**Large**	**Medium**	**Small**	**Requirements**	**Approvals**
Feasibility Study (SDLC)	**O**	**O**	**O**	This is an optional requirement for all project sizes, unless requested by the Sponsor or during the project approval process. Any feasibility study generated is attached to the PSR submitted for review.	The Feasibility Study should be approved by the Sponsor and Requestor, at a minimum.
Project Service Request	**R**	**R**	**O**	The Project Service Request (PSR) document serves as the entry point for a requestor or other stakeholders to submit a request for OIT services.	The Project Service Request has multiple levels of approvals. The first approval will be the name of the requestor's management who has reviewed the PSR and agrees that service request should be submitted to OIT. The next approval level will be the OIT Representative review of the PSR, including preliminary effort hours and costs. The OIT Representative then reviews the PSR with the OIT Director. The OIT Director approves the PSR or requests modifications prior to approval. The OIT Director will obtain PMO approval when PMO

Project Deliverable	Requirements by Project Size				
					resources are being used to manage the project.
Initiating Phase	**Large**	**Medium**	**Small**	**Requirements**	**Approvals**
Project Budget	**R**	**R**	**R**	Project Manager(s) complete a Project Budget using the PMO Budget template.	Project Manager(s) obtain budget approval from Sponsor. The project will not move forward until a budget is approved by the Sponsor.
Project Contact List	**R**	**R**	**O**	The Project Manager(s) will complete a Contact List which is an internal document that identifies demographic information about the Steering Committee members, Implementation Team, 3rd party vendors, and affected project stakeholders. Required for large and medium scale projects and optional for small scale projects.	Approval is not required.
Measure of Success & High Level Achievements	**R**	**R**	**R**	The Steering Committee defines the overall Measure of Success for the project. Required for large and medium scale projects and optional for small	The Steering Committee reviews and approves. Changes should be incorporated into the MOS and HLA document and then redistributed to the Steering Committee

Project Deliverable	Requirements by Project Size				
				scale projects.	for review and approval.
Project Charter	R	R	R	The Project Manager(s) shouldn't move ahead with the project until the Steering Committee has approved the Project Charter.	The Project Charter is created, approved and signed-off by the Steering Committee.
Planning/Development Phase	**Large**	**Medium**	**Small**	**Requirements**	**Approvals**
Requirements Analysis (SDLC)	O	O	O	This deliverable is optional for all project sizes, unless requested by the Sponsor, Steering Committee or IT management. If an RFP is being issued as part of the project, Requirements Analysis is strongly recommended.	The Requirements Analysis should be approved by the Steering Committee, at a minimum.
HLAs	R	O	O	Project Manager(s) will lead the Steering Committee members through the exercise to define the High Level Achievements (or deliverables) for the project. Required for large scale projects and optional for medium and small scale projects.	The Project Manager(s) should review the suggested changes. If appropriate, the changes should be incorporated into the document and then should be redistributed to the Implementation Team for review and approval. After each HLA is completed, the Project Manager(s) must provide evidence to the Steering

Project Deliverable	Requirements by Project Size				
					Committee for inspection, review, and sign-off that the HLA has successfully been completed.
Business Process Model	**O**	**O**	**O**	This deliverable is optional for all project sizes, unless requested by the Sponsor, Steering Committee or IT management.	The Business Process Model will have two approvals. The first approval will be the plan itself, and the other will be the implementation of the plan. Both should be approved by the Sponsor and the Steering Committee, at a minimum.
Project Schedule	**R**	**R**	**R**	The Project Manager(s) enters the detailed tasks into either the Microsoft Project or another scheduling software tool to create a project schedule.	See Project Schedule Approval
Security Tool/Assessment	**R**	**R**	**O**	This deliverable is mandatory for large and medium scale projects and optional for small scale projects unless requested by the Sponsor, Steering Committee, or IT management.	The Security Tool and Assessment should be approved by the Sponsor, Steering Committee, Implementation Team, and the Information Security Office, at a minimum.
Data Management Plan	**O**	**O**	**O**	This deliverable is optional for all project sizes, unless	The Data Management Plan should be approved by the Implementation

Project Deliverable	Requirements by Project Size				
				requested by the Sponsor, Steering Committee or IT management.	Team and, if applicable, the Sponsor and the Steering Committee.
Disaster Recovery Plan	**O**	**O**	**O**	This deliverable is optional for all project sizes, unless requested by the Sponsor, Steering Committee or IT management.	The Disaster Recovery Plan should be approved by the Sponsor, the Steering Committee, Implementation Team, at a minimum. And, the IT Infrastructure Department for sign-off on requirements, design and costs.
Budget, Procurement & Vendor Management Plan	**R**	**O**	**O**	The Budget, Procurement and Vendor Management Plan is required for large scale projects and optional for medium and small scale projects.	The completed plan is signed-off by the Project Manager, Co-Project Manager (if assigned), and budget fiscal officer. Any change to the funding amounts shall require formal Steering Committee approval.
Test Plan	**R**	**R**	**R**	This process is critical and required for all projects, regardless of size.	The Test Plan will have two approvals. The first approval will be the plan for the testing, and the second will be the test results or completion of the testing. The Test Plan should be approved by the Sponsor, the Steering Committee and the Implementation Team, at a minimum.
Communications Plan	**R**	**R**	**O**	The Communications Plan is required for	Steering Committee and

Project Deliverable	Requirements by Project Size				
				large and medium scale projects and optional for small scale projects.	Sponsor should approve.
Risk Plan	R	R	O	The Risk Plan is required for large scale projects and highly recommended for medium scale projects and optional small scale projects.	The Risk Management Plan should be approved by the Sponsor and Requestor, at a minimum.
Post- Implementation Plan	R	R	O	The Post Implementation Plan is required for large scale projects, highly recommended for medium scale projects and optional for small scale projects unless requested by the Sponsor, Steering Committee or IT management.	The Post Implementation Plan should be approved by the Implementation Team and Steering Committee, at a minimum.
Training Plan	R	R	HR	This deliverable is required for large and medium scale projects, and it is highly recommended for small scale projects unless a training plan is required by the Sponsor, Steering Committee or IT management.	The Training Plan will have two approvals. The first approval will be the plan that is defined for training, and the second will be for the completion of the training for all users. The Training Plan should be reviewed by the Implementation Team and approved by the Steering Committee.

Project Deliverable	Requirements by Project Size				
Executing Phase	**Large**	**Medium**	**Small**	**Requirements**	**Approvals**
Installation into Production	**R**	**R**	**O**	This deliverable is required for large and medium scale projects, and optional for small scale projects	The Installation into Production Plan will have two approvals. The first approval will be the processes identified in the plan, and the second will be for the completion and verification or acceptance of the production environment. The Installation into Production Plan should be approved by the Implementation Team, IT Change Management (if applicable), Sponsor, and the Steering Committee.
Closing Phase	**Large**	**Medium**	**Small**	**Requirements**	**Approvals**
Budget Closure Memo	**R**	**O**	**O**	This deliverable is required for large projects and optional for medium and small projects unless requested by the Sponsor, Steering Committee or IT management.	Not Applicable
Project Closure Report	**R**	**R**	**O**	This deliverable is required for large and medium scale projects and optional for small scale projects unless requested by the sponsor, steering committee or IT	The Project Manager(s) will complete the Project Closure Memo and Report and receive approval from the Steering Committee.

Project Deliverable	Requirements by Project Size				
				management.	

Archived Documents – Available As Needed:

Project Deliverable	Requirements by Project Size			Approvals
Architecture Document	**O**	**O**	**O**	The Architecture Design document, if created, should be approved by the Sponsor and the Steering Committee, at a minimum.
Development Plan	**O**	**O**	**O**	The Development Plan, if produced, should have two approvals. The first approval will be the plan for the development of the system or application, and the second will be for the completion of the installation in a test environment. The Development Plan should be approved by the Sponsor, the Steering Committee and the Implementation Team, at a minimum.