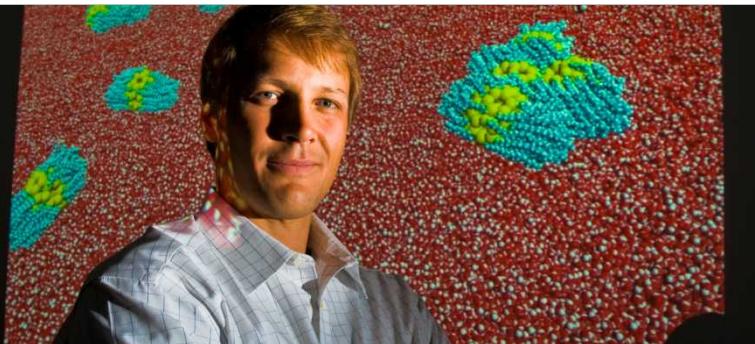


*Exceptional service in the national interest*



# Utilizing Project Management on Financial Projects

Tristan Walters, PMP, ScrumMaster



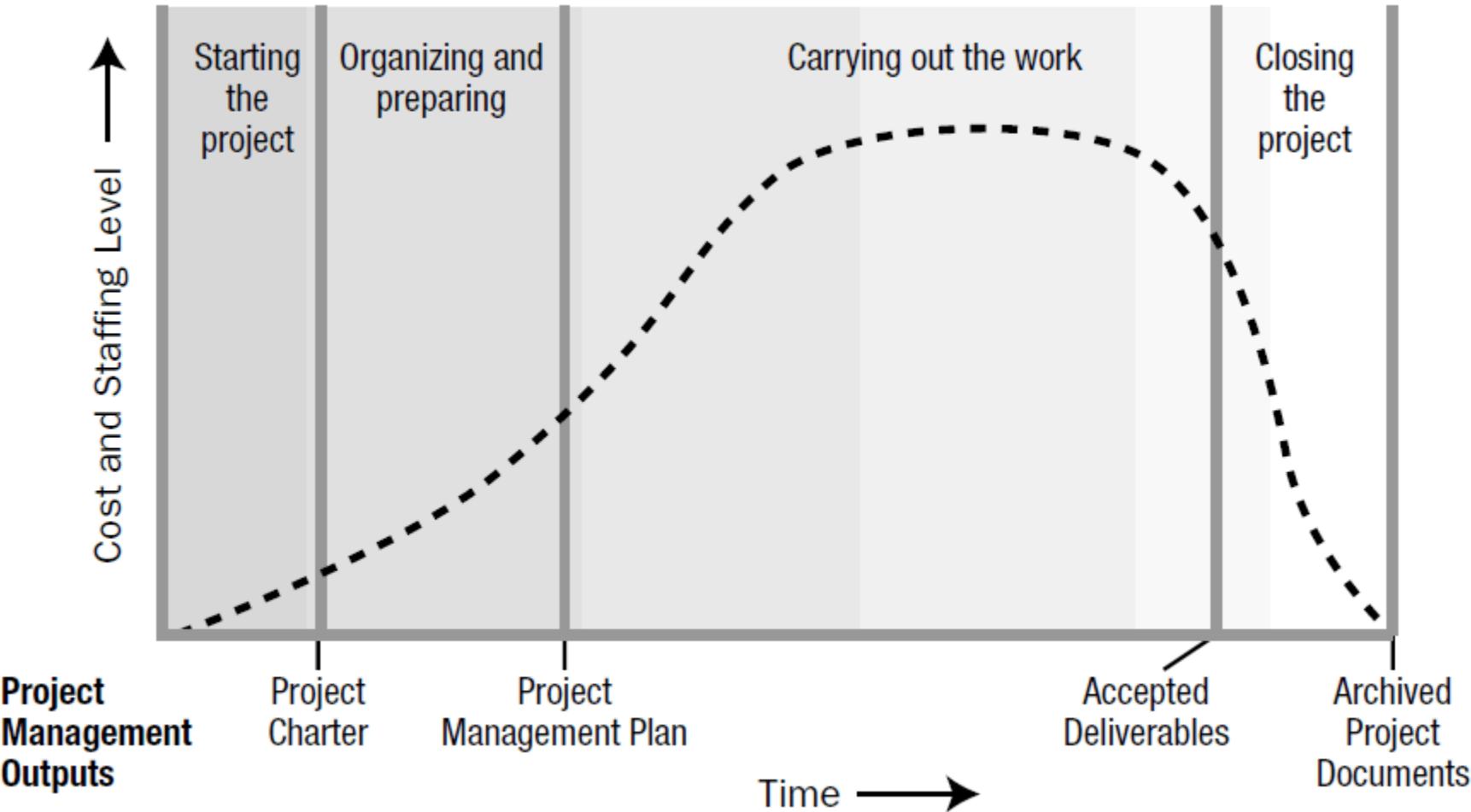
Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000. SAND NO. 2011-XXXXP

# What is a Project & What is Project Management?



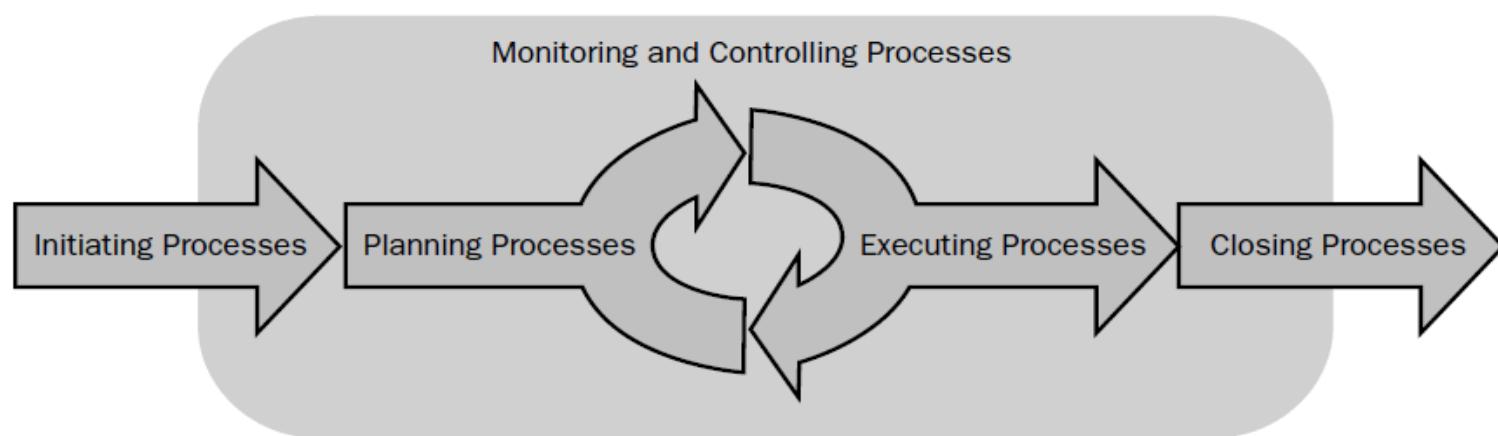
- **Project** = Temporary endeavor undertaken to create a unique, product, service, or result
- **Project Management** = The application of knowledge, skills, tools, and techniques to project activities to meet the project requirements

# Project Lifecycle



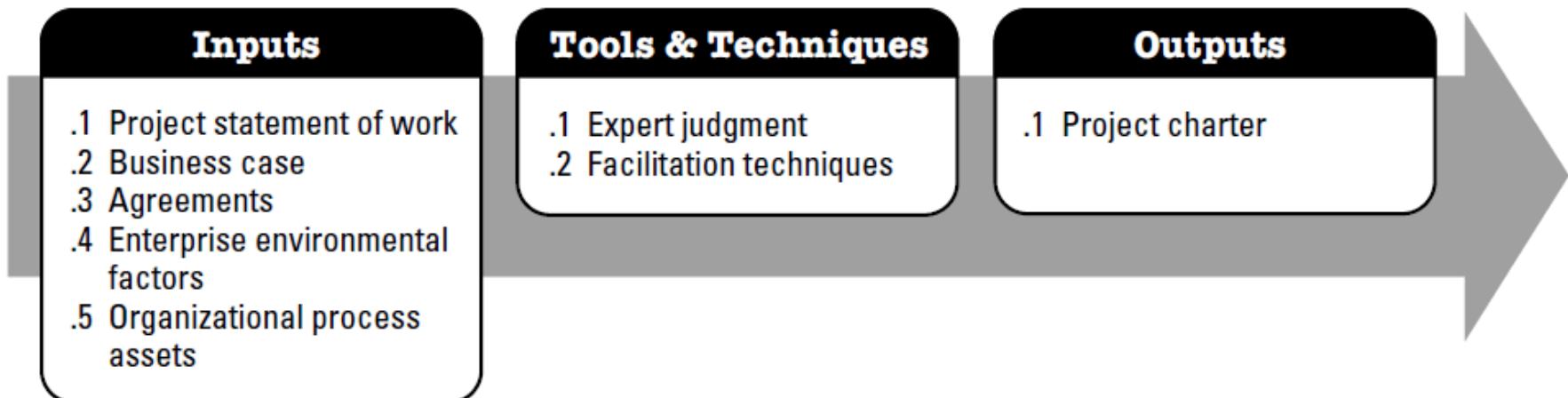
# Project Management Processes Groups

1. **Initiation:** Overall Project Definition & Approval
2. **Planning:** Detail what the project is and how it will be accomplished
3. **Executing:** Complete the work
4. **Monitoring & Controlling:** Track, review, and adjust
5. **Closing:** finalize all activities



# 1. Develop Project Charter

- The process to define and formally authorize a project
- Benefits
  - Well-defined project scope and boundaries (avoid scope creep)
  - Formal record of project and mechanism for management to accept and commit to project



# Charter Summary for: title of the SIA

Unclassified Unlimited Release



## Problem Statement:

- One to three sentences describing a specific problem and the specific consequence (the impact) if the problem is not resolved.
- Tells why the SIA needs to be done, not what the solution might be

## Objectives:

- Major goals/objectives of SIA (i.e., SMART objectives) which:
  - Drive action
  - Specifically relate to the problem statement
  - Measurable outcomes
- What the champion and sponsor want the team to accomplish by the end of the SIA

## SIA Scope Information:

- Provides the framework for the SIA
- Helps to clarify and document the limitations and other relevant factors that may affect the team's efforts and may include the following:
  - Process boundaries (i.e., Start and End points)
  - List any commandments (i.e., non-negotiable policies and positions)
  - List any monuments (i.e., machinery, systems, etc. that cannot be moved or altered as part of the SIA)
  - Customer Value: Brief statement of what the end-user values
  - Takt time
  - Return on Investment

## Strategic/Business Objective Tie:

- Linkage to organizational objectives, program excellence plans, performance measures, etc.
- What triggered the need for the SIA? (customer survey, audit finding, etc.)

## SIA Dates:

**Champion:** (i.e., member of senior management)

**Sponsor:** (i.e., process/budget authority)

**Team Leader:** (i.e., positional authority)

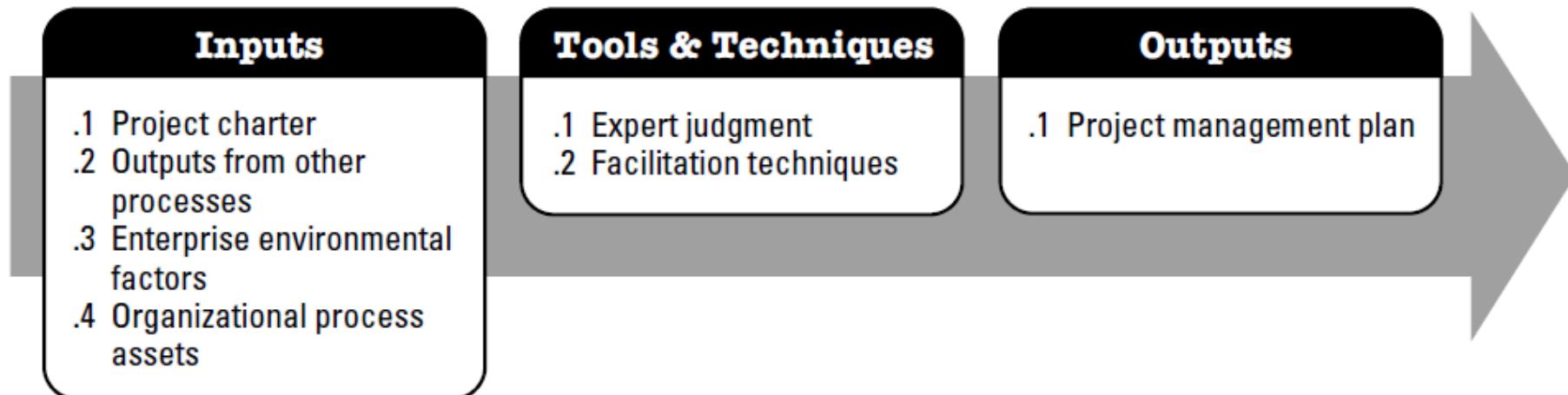
**SIA Facilitator:** SIA facilitator(s) (i.e., BB/GB and coach/mentor as applicable)

## Team Members:

- List team members which may include:
  - 4-10 active participants – mostly members from work area
  - Customer Voice
  - Internal partners
  - Suppliers
  - Outside eyes willing to ask “why?”
  - On-call subject matter experts
    - Financial Analyst
    - Facilities
    - Security
    - Quality
    - ES&H
    - Legal
    - HR
    - IT

## 2. Develop Project Management Plan

- The process of defining, preparing, coordinating, and integrating all subsidiary management plans
- Benefits
  - Central document that defines the basis of all work
    - Documents what the project is and how it will be managed



# PM Plan: Components

- Project Scope
- Project Management Approach
- WBS
- WBS Dictionary
- Scope Management Plan
- Schedule Management Plan
- Cost Management Plan
- Communications Management Plan
- Procurement Management Plan
- Quality Management Plan
- Risk Management Plan
- Risk Register
- Staffing Management Plan
- Schedule, Cost, Scope Baselines
- Change Management Plan

**Takeaway: Your PM Plan  
must reflect the needs of your  
project!**

# PM Plan: Example

## Service Center Initiative Project



Sandia National Laboratories

### Service Center Initiative Project Management Plan

Version 3.0

Prepared by: Tristan Walters

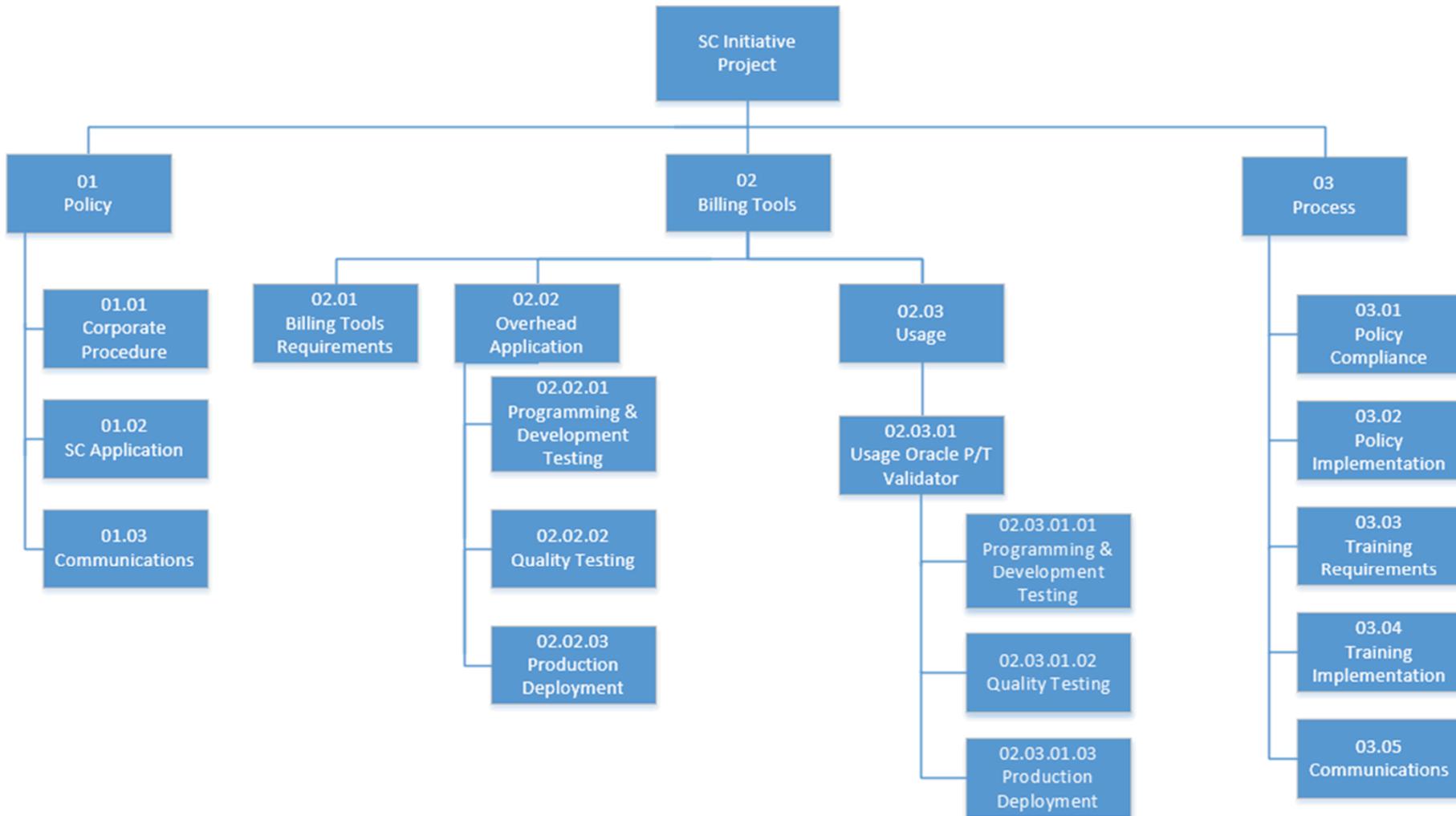
#### CHANGE HISTORY

Version	Change Description	Issue/Revision Date	Submitter/Reviewer/Approver
1.0	Original Issue	2/27/2015	Tristan Walters
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3.0	Usage Processing Scope and associated requirements, WBS, and milestones have been removed per sponsor agreement.	9/9/2015	Tristan Walters

## Service Center Initiative Project

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# PM Plan: Scope Management



# PM Plan: Schedule Management

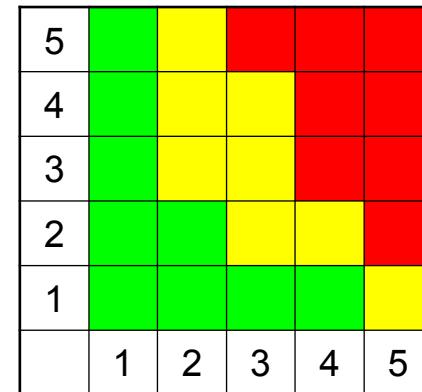
WBS	Milestone	Description	Date
01 Policy	Clearing House Approval Received	Presentation to Clearing House has been conducted and Clearing House committee has given approval to proceed	2/4/15
	Updated Corporate Procedure published to Corporate Policy System	Corporate Procedure has received all necessary approvals and is published and available in the Corporate Policy System	3/18/15
	Service Center Application Complete	Service Center Application has been revised to reflect new procedure and is ready to be released to SC community	3/13/15

# PM Plan: Risk Management

Event (IF)	Impact (THEN)	Value	Handling Strategy
IF a solution is deployed without full review by SC Providers, SC Admins, and associated Management that are not directly on the project team	THEN the solution may not meet customer requirements resulting in rework after deployment.	Medium	<p><b>Mitigation:</b> Planned engagement of line customers will be addressed in the Communications Management Plan but generally it will require a two-pronged approach.</p> <ol style="list-style-type: none"> <li>1. Communications regarding new tools and associated feedback requests will be pushed to impacted individuals.</li> <li>2. Utilize SC Providers management chain to ensure communication.</li> </ol>
IF critical team member(s) leave the project due to personnel transfer(s)	THEN key project deliverables may be delayed or not delivered at all.	Low	<p><b>Mitigation:</b> 1. Active engagement and communication with sponsors will increase early identification of potential personnel changes.</p> <ol style="list-style-type: none"> <li>2. All team members' roles and responsibilities will be identified in the Team Member Directory and this document will be used to identify the skillset(s) needed for replacement resources.</li> </ol>

# Risk Matrix

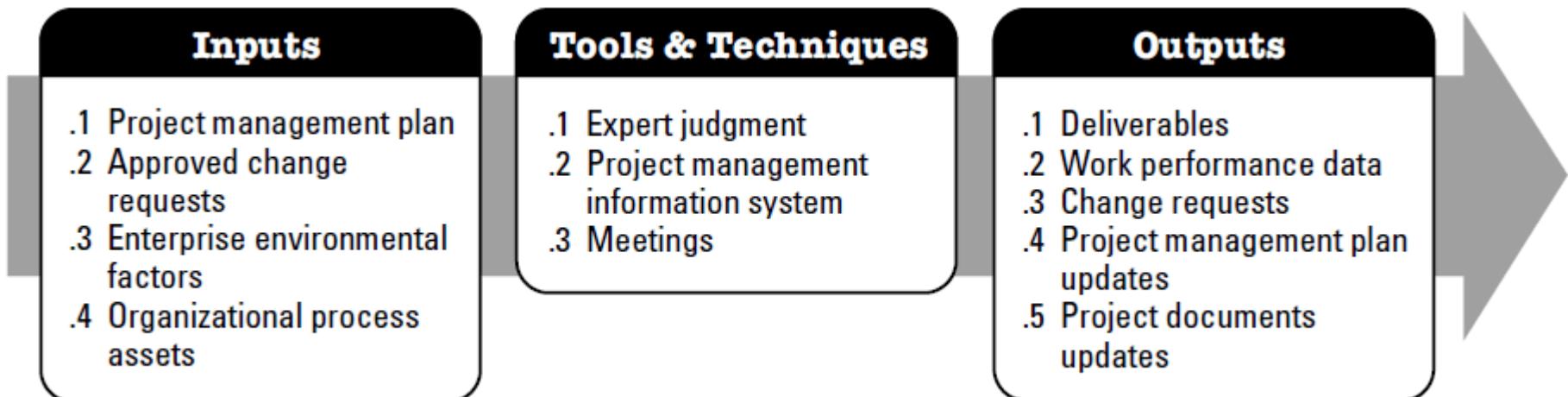
Risk Likelihood Criteria		
Level	Likelihood	Criteria
1	Very Unlikely	The probability of occurrence is < 20%
2	Unlikely	The probability of occurrence is > 20%, but < 40%
3	Possible	The probability of occurrence is > 40%, but < 60%
4	Likely	The probability of occurrence is > 60%, but < 80%
5	Very Likely	The probability of occurrence is > 80%



Risk Consequence Criteria					
Level	Impact	Cost	Schedule	Performance	
1	Negligible	No apparent increase to planned cost of executing the project	No impact to the schedule of the final project deliverable	Project can still meet all acceptance criteria of final project deliverable.	
2	Marginal	Less than 10% cost increase over planned costs	0-2 Month delay in schedule of the final project deliverable.	Project can meet all material aspects of the acceptance criteria of final project deliverable. Some minor scope changes are needed.	
3	Significant	10-20% cost increase over planned costs	2-4 Month delay in schedule of the final project deliverable.	Project cannot meet some of the acceptance criteria of final project deliverable. Some scope changes are needed, but the original intent of the project can still be accomplished.	
4	Critical	20-40% increase over planned costs	4-6 Month delay in schedule of the final project deliverable.	Project cannot meet a majority of the acceptance criteria of final project deliverable. Significant scope changes must occur to accept final deliverable, and the scope changes do not meet the original intent of the project.	
5	Crisis	Greater than a 40% increase over planned costs	> 6 Month delay in schedule of the final project deliverable.	Project cannot meet any acceptance criteria of final project deliverable. Project must be abandoned.	

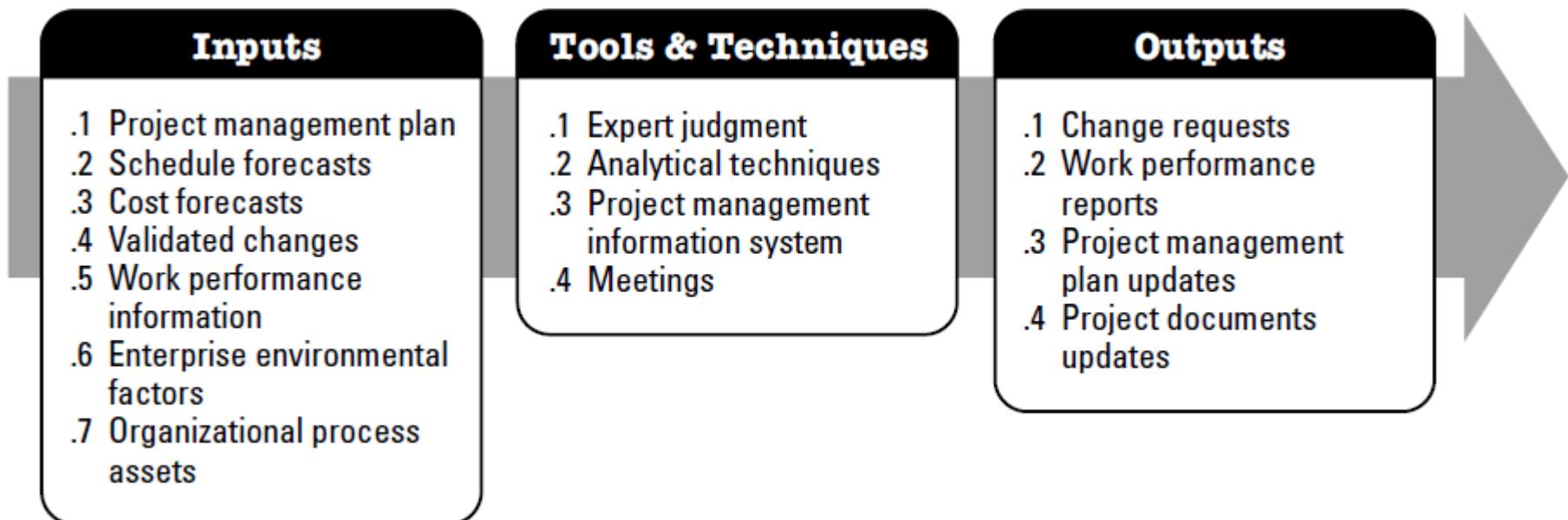
# 3. Direct & Manage Project Work

- Process of leading and performing work & implementing approved changes
- Benefits
  - Overall management of project work



# 4. Monitor & Control Project Work

- Process of tracking, reviewing, and reporting project progress
- Benefits
  - Allows stakeholders to understand current state of project

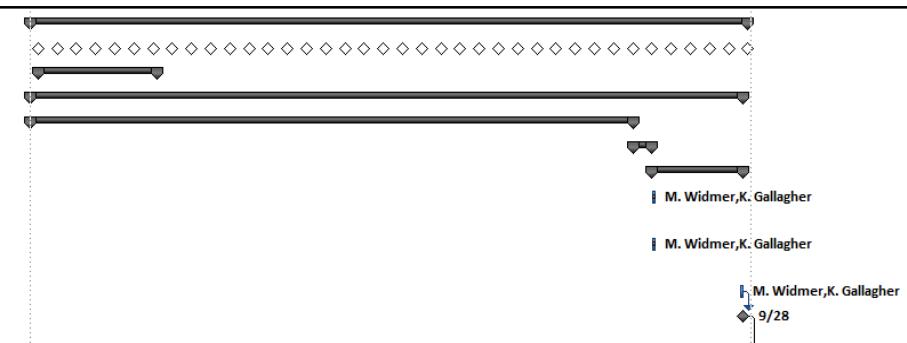


# Direct & Manage

# Monitor & Control

Overhead Application Weekly Status																	
Date:	7/21/2015																
Location:	Teleconference																
Attendees:	<table border="1"> <thead> <tr> <th>Attended</th><th>Absent</th></tr> </thead> <tbody> <tr> <td>Jay Clise</td><td></td></tr> <tr> <td>Tristan Walters</td><td>Mike Widmer</td></tr> <tr> <td>Kim Gallagher</td><td></td></tr> <tr> <td>Sangeetha Tripuraneni</td><td></td></tr> <tr> <td>Rick Calvert</td><td></td></tr> </tbody> </table>					Attended	Absent	Jay Clise		Tristan Walters	Mike Widmer	Kim Gallagher		Sangeetha Tripuraneni		Rick Calvert	
Attended	Absent																
Jay Clise																	
Tristan Walters	Mike Widmer																
Kim Gallagher																	
Sangeetha Tripuraneni																	
Rick Calvert																	
Previous week's deliverables:	<ol style="list-style-type: none"> <li>1. Input screens for the O/H Application Tool are complete.</li> <li>2. Testing for the O/H Application Tool on labor and total cost bases are complete.</li> <li>3. TEDS has gotten the P/T validator to work in development. Preliminary results indicate that its use could result in cutting kickouts in half.</li> <li>4. Testing with Chadwick and Robbie (CEE Toolbox and NWIS) has not made any progress. This has been escalated, ultimately, the outcome is that if the developers do not test or implement the validator, the financial analysts will not see any benefit. However, it will not impede the ultimate implementation or deliverable from the billing team's perspective.</li> <li>5. Usage (SOA) has completed quality testing and ready for production.</li> </ol>																
Current week's deliverables:	<ol style="list-style-type: none"> <li>1. IT resources will be involved with SPP recast.</li> <li>2. Input screens will be reviewed by Mike and Kim on 7/22. They will be reviewed by the team on 7/23.</li> <li>3. Kim will work TEDS to move their DBLink into quality.</li> </ol>																
Risks/Issues:	None at this time																
Action Items:	<table border="1"> <thead> <tr> <th>Description</th><th>Due</th><th>Responsible</th></tr> </thead> <tbody> <tr> <td>1. Determine availability of room 3400/A&amp;B for Overhead Application User testing and coordinate with Mike on testing schedule. (Plan is to conduct Development testing July 30 and Quality testing the week of Aug 10.) Send email to Rick and Tristan on the outcome.</td><td>7/21</td><td>Kim Gallagher</td></tr> </tbody> </table>					Description	Due	Responsible	1. Determine availability of room 3400/A&B for Overhead Application User testing and coordinate with Mike on testing schedule. (Plan is to conduct Development testing July 30 and Quality testing the week of Aug 10.) Send email to Rick and Tristan on the outcome.	7/21	Kim Gallagher						
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<input checked="" type="checkbox"/>	<input type="checkbox"/>	R. Calvert	<input type="checkbox"/> Billing Tools	185 days	Mon 1/12/15	Thu 10/1/15	94%
<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> + Billing Team Weekly Status Meeting	182 days	Thu 1/15/15	Thu 10/1/15	0%
<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> + Requirements Development	31.5 days	Thu 1/15/15	Fri 2/27/15	100%
<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Overhead Application Tool	183 days	Mon 1/12/15	Mon 9/28/15	99%
<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> + Programming & Development Testing	156 days	Mon 1/12/15	Wed 8/19/15	100%
<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> + Quality Testing	5 days	Thu 8/20/15	Wed 8/26/15	100%
<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> Production Deployment	22 days	Thu 8/27/15	Mon 9/28/15	67%
<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Widmer, K. Gallagher	Migrate screens	1 day	Thu 8/27/15	Thu 8/27/15	100%
<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Widmer, K. Gallagher	Migrate code	1 day	Thu 8/27/15	Thu 8/27/15	100%
<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Widmer, K. Gallagher	Update Job Control Stream	1 day	Mon 9/28/15	Mon 9/28/15	0%
<input checked="" type="checkbox"/>	<input type="checkbox"/>	M. Widmer, K. Gallagher	Enable programming logic and make live	0 days	Mon 9/28/15	Mon 9/28/15	0%



## Cost

**Budget is now needed to support Creative Services filming and editing. The not to exceed estimate is \$10K.**

No explicit budget is defined for the project manager and project team members representing the functional users as they are all supported by their respective projects and tasks or have been assigned an appropriate P/T. In addition IT support for develop the Overhead Application Tool is supported within 9540's existing IMS budget.

## Risk/Issues

Event (IF)	Impact (THEN)	Value	Handling Strategy
IF the required courses cannot be developed and delivered prior to the start of FY16 operations	THEN the SC community may not have the necessary knowledge to utilize the new billing tools, maintain compliance with the revised policy, and/or execute SC operations in an effective manner.	Medium	<b>Mitigation:</b> Even though we have assumed responsibility for course development this risk still exists as the schedule for course development is very aggressive. A detailed schedule has been developed, and weekly stand-up meetings are occurring.
IF IT resources are not specifically dedicated to the Usage Processing Applications development and deployment	THEN a Jan 31, 2016 delivery date will not be possible.	Medium	<b>Mitigation:</b> 1. In addition to the above handling strategy, this specific risk is being addressed with management of both functional and IT groups to determine if additional resources are available or if a schedule slip is tolerable. 2. If maintaining schedule is critical then the team may pursue standardization opportunities in terms of file formats and uploads.
IF there is not a clear delineation of what is owned by the Process and Policy Control Accounts and a plan to transition from one to the other	THEN benefits and objectives of the overall Initiative may not be realized.	Medium	<b>Mitigation:</b> 1. Policy and Process Leads will work closely to determine ownership and provide details on how the integration between the two control accounts will happen and who will be responsible. 2. Risk will be closely monitored through status meetings with Project Sponsors and action will be taken (decisions made) if necessary.
IF a solution is deployed without full review by SC Providers, SC Admins, and associated Management that are not directly on the project team	THEN the solution may not meet customer requirements resulting in rework after deployment	Medium	<b>Mitigation:</b> Planned engagement of line customers will be addressed in the Communications Management Plan but generally it will require a two-pronged approach. 1. Communications regarding new tools and associated feedback requests will be pushed to impacted individuals. 2. Utilize SC Providers management chain to ensure communication.

## Schedule

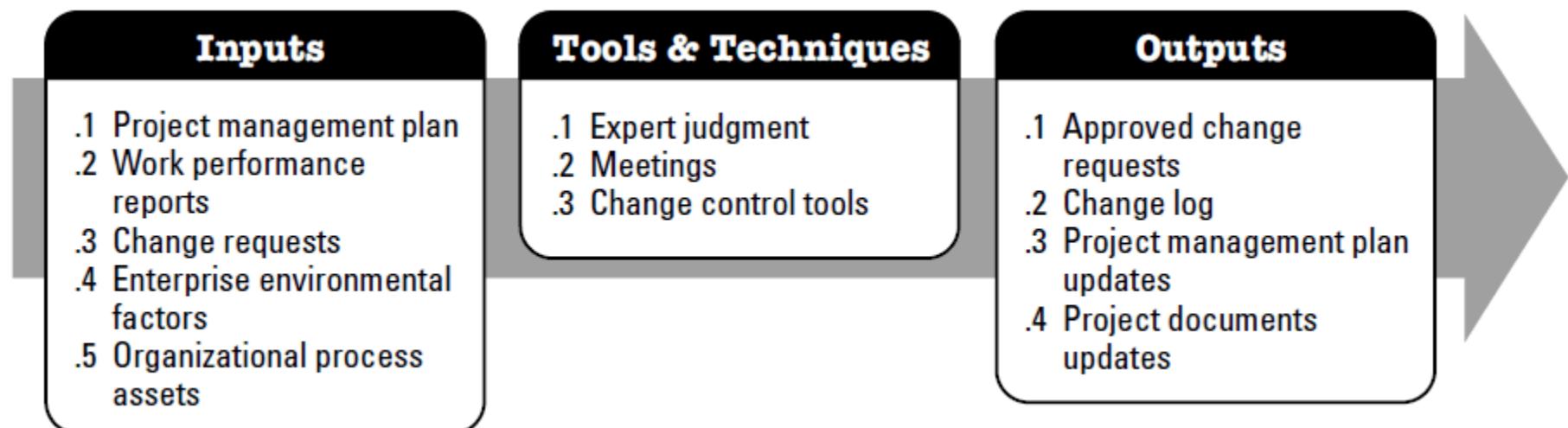
- OA Tool approved to move to Quality Environment – 7/24
- Usage Application Tool Oracle P/T Validator approved to move to Quality Environment – 7/1
- Procedure Recommendations Gap Analysis Complete – 5/8
- **Classes released in TEDS – 7/8. This has slipped from 6/15 as a result of the shift to developing courses internally. This does not currently impact final deliverable.**

## Scope/ Performance

- Project Management – No updates
- Policy Control Account – All scope is complete, control account is closed.
- Billing Tools Control Account – OA continues unit testing in Quality due to schedule conflicts in OADV1. Due to delays in Accounting Redesign, OA will likely not move back to OADV1 until 6/1. Impact is negligible since OA can continue using Quality environment, but the value of testing in OADV1 will be significantly diminished. The move back to OADV1 is necessary per software quality development practices. Feeder applications (NWIS, TEDs, etc.) continue testing Usage P/T Validator.
- **Process Control Account – Training team schedule has been revised to reflect current plan to develop and conduct classes with internal resources. Creative Services is being engaged for video recording, and pilots will be conducted as appropriate. Schedule is extremely aggressive.**

# 5. Perform Integrated Change Control

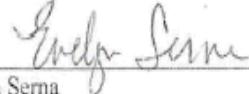
- Process of reviewing all change requests, approving changes, and managing changes to deliverables
  - Benefits
    - Documents requests, consideration, and implementation of changes
    - Reduces risks to project by ensuring impacts to project are considered prior to implementing changes



# Change Control

## Change Management Plan

“Any significant changes to scope of this project, increase or reduction, as described in this plan require a baseline change request be initiated and approved. In this context “significant” is defined as adding or removing a Control Account and/or Work Package or altering the final deliverables to the extent it no longer meets its original objective. In addition, any changes that impact the budget as described in this Plan or the date of critical milestones also require a baseline change request.... “

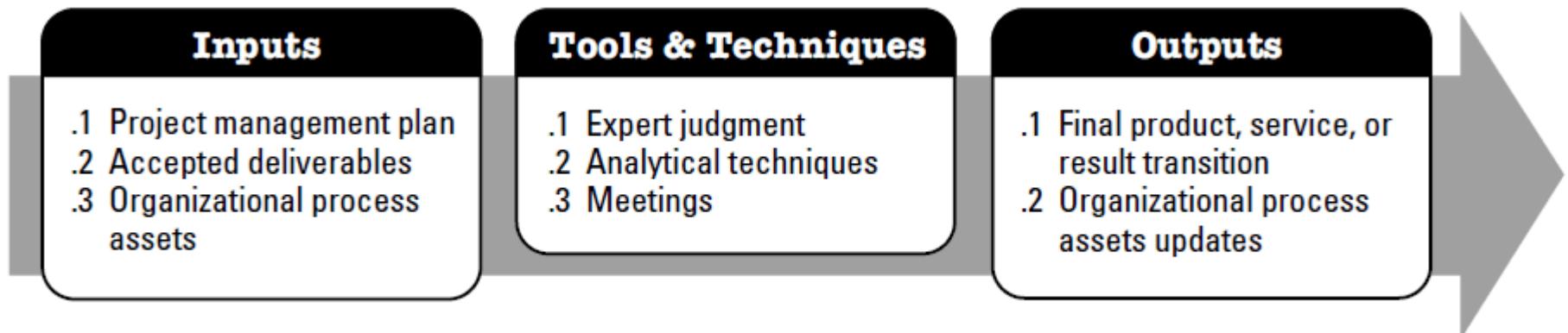
Sponsor Acceptance	
	Date: 9/8/15
Evelyn Serna 10510 Senior Manager, Controller Operations	
	Date: 9/21/2015
Jesus Ontiveros 10590 Senior Manager, Division Business Operations	
	Date: 9/21/2015
Ed Saucier 9540 Senior Manager, Enterprise Information Systems	
	Date: 9/21/15
Tristan Walters SC Initiative Project Manager, Controller Operations	

## CHANGE HISTORY

Version	Change Description	Issue/Revision Date	Submitter/Reviewer/Approver
1.0	Original Issue	2/27/2015	Tristan Walters
2.0	The critical milestone in the Policy Control Account of Releasing the updated Corporate Procedure in CPS did not occur until 3/18/15. Baseline date was 3/13/15. Schedule slip did not impact other critical milestones	3/30/2015	Tristan Walters
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# 6. Close Project or Phase

- Process of finalizing all activities to formally complete the project or phase
- Benefits
  - Formal documented end to the project work
  - Lessons Learned
  - Releases resources



# Service Center Initiative

## What We're Doing

Tristan Walters

- Update and improve the corporate procedure and best practices to eliminate ambiguity and potential CAS concerns
- Develop billing tools that improve efficiency and accuracy
- Provide appropriate training to ensure projects are in compliance with the new procedure and ready to begin FY16 operations

## Why We're Doing It

- Simplify and increase transparency and consistency in the overall SC/MOC HP process and structure
- Provide a more consistent and efficient method for Service Center billing
- Provide a more enabling curriculum for Service Center Business Professionals
- Lead the Complex as a model 21<sup>st</sup> century government-owned and contractor-operated national laboratory



## Status

### Completed Milestones:

- Overhead Application: Input Screens in Production (4 weeks ahead of schedule) 7 Service Centers have entered 132 rates for FY16.
- Usage P/T Validator (SOA): In Production (8 weeks ahead of schedule)
- Usage P/T Validator (DBLink): In Production (1 week ahead of schedule)
- Training: All 7 courses released in TEDS, *Service Center Rates Course* conducted 8/27. Policy has been updated to reflect new training recommendations

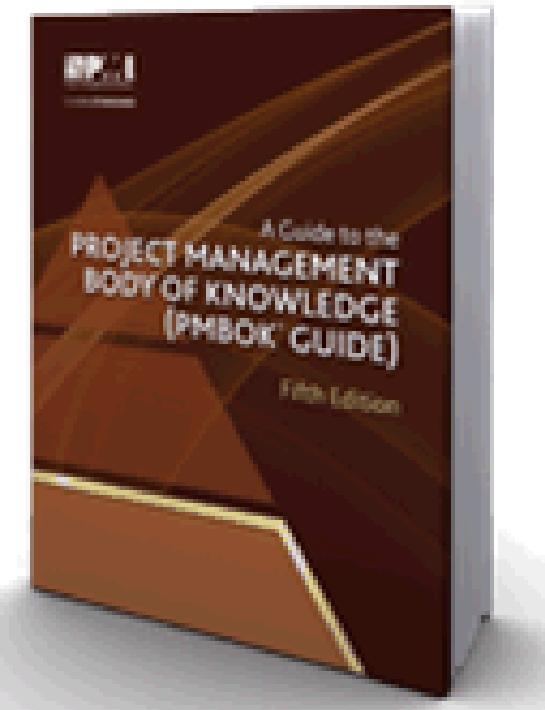
### Concerns

- IT resource limitations in conjunction with additional high priority projects have caused the Usage Processing tool schedule risk to be realized. Requirements have been renegotiated resulting in this deliverable being removed from the scope of the original project. However if there is still a need for this scope, a new project will be stood up to deliver it.

# Back up

# PMBOK Guide

- **Project Management Institute (PMI)** develops & publishes the Project Management Body of Knowledge Guide
- **PMBOK Guide** = Recognized standard for the Project Management Profession (5<sup>th</sup> Edition)
  - Purpose
    - 1. Identify the subset of the overall Project Management Body of Knowledge that is considered good practice
    - 2. Provides a promotes a common language and vocabulary



## 10 Knowledge Areas

Integration  
Mgmt

Scope  
Mgmt

Time  
Mgmt

Cost  
Mgmt

Quality  
Mgmt

HR  
Mgmt

Commn  
Mgmt

Risk  
Mgmt

Procurement  
Mgmt

Stakeholder  
Mgmt

I Saw Two Crows Quietly Having Coffee and  
Reading Poetry Simultaneously

# Integration Management

- “Processes and activities to identify, define, combine, unify and coordinate the various processes and PM activities within the PM Process Groups”
  - Pull together all the facets of Project Management such that a project can be managed in a systematic and organized fashion
  - Ex: Developing a contingency estimate involves, Risk, Cost, & Time
- Project Integration Management Processes
  1. Develop Project Charter
  2. Develop Project Management Plan
  3. Direct & Manage Project Work
  4. Monitor & Control Project Work
  5. Perform Integrated Change Control
  6. Close Project or Phase