



Commonwealth IT Project Manager Orientation

Instructor: Patty Samuels, PMP





Agenda

1. Introduction
2. IT Governance and Oversight
3. IT Policies, Standards and Guidelines (PSGs)
4. Project Manager Selection and Training
5. Commonwealth Project Management Methodology



Class Objectives

Key Class Objectives:

1. Understand the value of the Commonwealth's IT governance and oversight model and recognize governance and oversight roles;
2. Distinguish and apply PSGs promulgated by the Commonwealth Project Management Division (PMD);
3. Apply the Project Manager Selection and Training Standard, and the Project Manager Development Program (PMDP) tools to individual project management development and qualification; and,
4. Use the Commonwealth Project Management Standard to properly document a project through close out and post implementation review.



ITPM Orientation: IT Governance and Oversight





IT Governance and Oversight – The Big Picture

Why were the Commonwealth IT Governance and Oversight model and the Commonwealth Project Management (CPM) methodology initiated?

IT Project Failure!

In January 2003, the Joint Legislative Audit and Review Commission (JLARC) completed a study that identified a history of Commonwealth IT project failure:

- Projects were poorly funded or ill-conceived;
- Projects were not supported by stakeholders;
- Agencies applied an immature or inappropriate technology;
- Projects did not use a proven project management methodology;
- Agencies did not have an experienced and skilled project manager;
- No clear connection between the project and agency objectives; and,
- Projects had no clear return on investment.



IT Governance and Oversight - CPM Methodology

The objective of the CPM methodology is to define a structured, disciplined approach for project management in order to deliver anticipated benefits from business-driven IT investments.

- Deliver Anticipated Benefits: IT projects must accomplish measurable improvements in agency performance
- Business-driven: must establish a clear connection between IT project results and the achievement of agency business objectives



IT Governance and Oversight - Key Terms

Commonwealth IT Projects - any state agency information technology project that is under Commonwealth governance and oversight.

The current dollar threshold for Commonwealth IT Projects is \$250,000.



IT Governance and Oversight - Key Terms

Major IT Projects - Major IT Projects are defined in the Code of Virginia (§ 2.2-2006) as “any state agency information technology project that (i) meets the criteria and requirements developed by the Secretary of Technology pursuant to § 2.2-225 or (ii) has a total estimated cost of more than \$1 million.”

The designation of a project as a Major Information Technology Project drives certain reporting requirements defined in the *Code of Virginia*.

However, the governance and oversight of information technology projects is primarily driven by the Risk/Complexity level determined using the Commonwealth Project Governance Assessment.



IT Governance and Oversight - Key Terms

Project Category - The grouping of Commonwealth IT projects into four categories for project management governance and oversight purposes. The categories are based on current project risk and complexity, and they determine:

- Project documentation requirements
- Approval levels
- IV&V requirements
- Status reporting requirements
- Oversight committee requirements
- Scope, schedule, budget accuracy thresholds
- Post-Implementation Review requirements

Risk/Complexity

Project Categories

				Risk
		Low	Medium	High
	Low	4	3	2
Complexity	Medium	4	3	2
	High	3	2	1

* Numbers indicated in the matrix equate to Project Category e.g. Project Category 1 = High Risk/High Complexity



IT Governance and Oversight - Key Terms

Governance - The development and management of consistent, cohesive policies, processes, and decision-rights for a given area of responsibility.

Oversight - Management by overseeing the performance or operation of a person or group.



IT Governance and Oversight – Higher Ed.

Institutions of Higher Education that are covered by a Tier 2 or Tier 3 Management Agreement, or participate in VASCUPP (Virginia Association of State College and University Purchasing Professionals) have a different governance and oversight model for:

- Procurement/Project Approval Authority
- PM Qualification and Selection
- Research Projects Exception



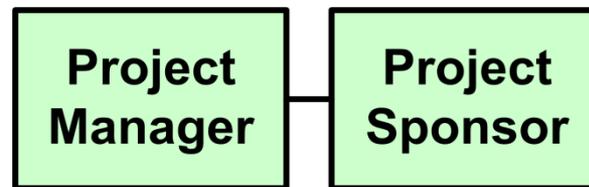
IT Project Governance and Oversight Model

**Project
Manager**

Project Manager – State agency or institute of higher education employee (full time or contractor) who is responsible for achieving project objectives.



IT Project Governance and Oversight Model



Project Sponsor – An individual, usually part of the organization management team, who makes the business case for the project. Usually has the authority to define project goals, secure resources, and resolve organizational and priority conflicts.

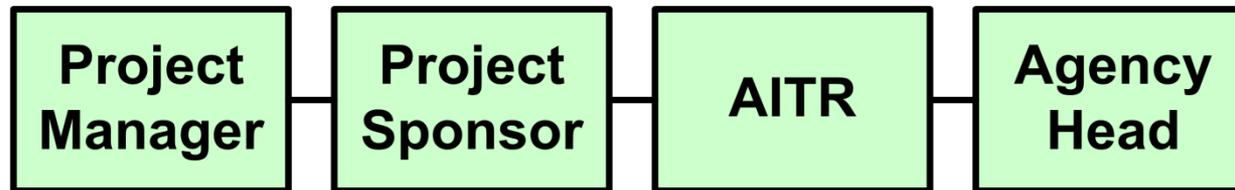
IT Project Governance and Oversight Model



AITR – The Agency IT Resource who is designated by the agency head to be responsible for the agency’s compliance with the procedures, policies, and guidelines established by the CIO of the Commonwealth.



IT Project Governance and Oversight Model



Agency Head – The chief executive officer of a department established in the government of the Commonwealth of Virginia.

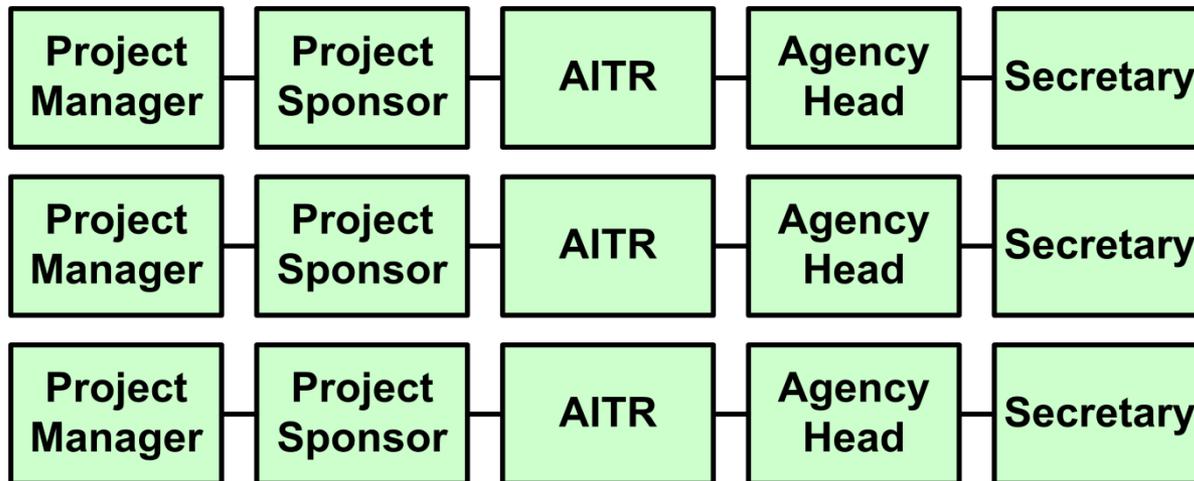


IT Project Governance and Oversight Model



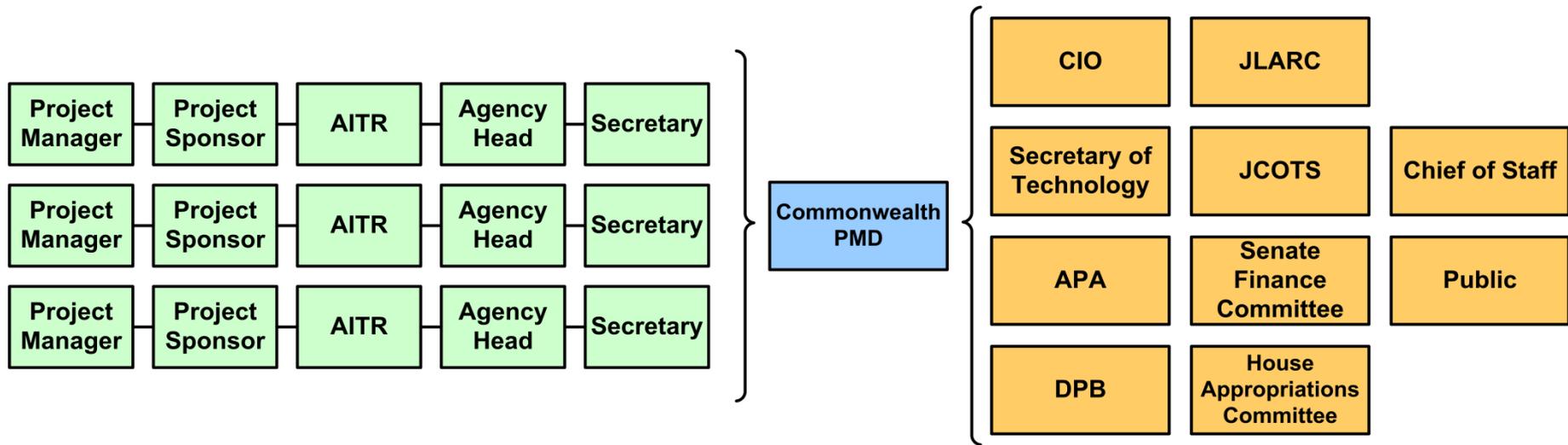
Secretary – An appointee of the Governor responsible for a group of state agencies: Administration , Agriculture and Forestry , Commerce and Trade, Education, Finance, Health and Human Resources , Natural Resources, Public Safety, Technology, Transportation, and Veterans Affairs and Homeland Security.

IT Project Governance and Oversight Model



Portfolio of Projects – All investment business cases and active Commonwealth IT projects.

IT Project Governance and Oversight Model



Commonwealth Project Management Division – PMD manages the Commonwealth’s IT project governance and oversight model, and the relationship between those who execute IT projects and those who have governance and oversight responsibility for IT projects.



IT Governance and Oversight - PMD

Commonwealth PMD

Under the direction of the Secretary of Technology and the Commonwealth Chief Information Officer (CIO), the Commonwealth Project Management Division (PMD) implements an enterprise strategy for the effective and efficient management of information technology investments. **Unlike most state agency divisions, the roles and responsibilities of PMD are established in Code.**

PMD won the 2009 National Association of State CIOs (NASCIO) award for outstanding achievement in IT Project and Portfolio Management.





IT Governance and Oversight - Project Management Division

**Commonwealth
PMD**

Project Management Division in the Customer Service Project Management Organization is responsible for:

- Agency project procurement reviews;
- Agency project oversight and reporting;
- Agency project management training, consulting, and assessment;
- Independent Verification & Validation (IV&V); and,
- Project Approvals.



IT Governance and Oversight - ITIM Office

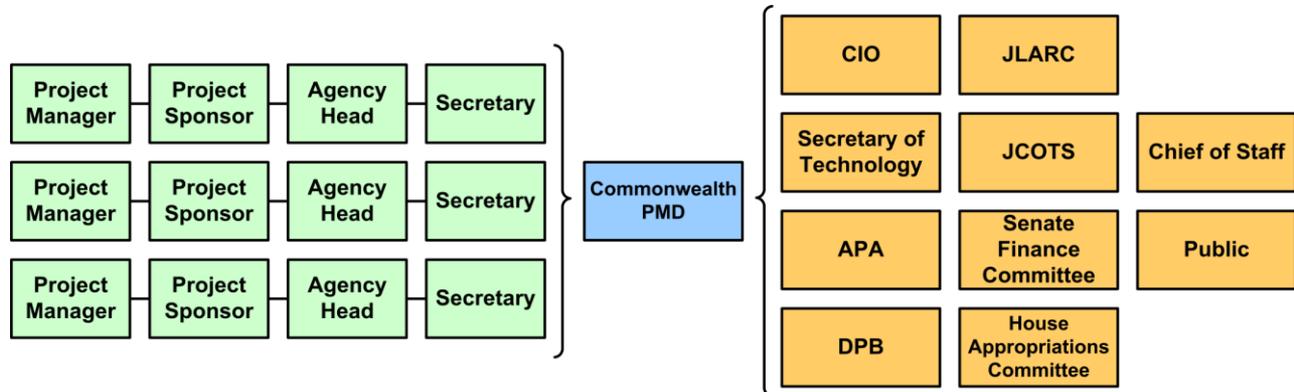
Commonwealth
PMD

The IT Investment Management Division in the Enterprise Solutions and Governance Directorate is responsible for:

- Agency IT Strategic Planning;
- Commonwealth Technology Portfolio;
- Recommended Technology Investment Projects (RTIP) Reports;
- Agency IT procurement reviews;
- Investment Business Case approvals;
- Technology Management policy, standard and guideline development; and,
- CIO, ITAC and Secretary of Technology support.

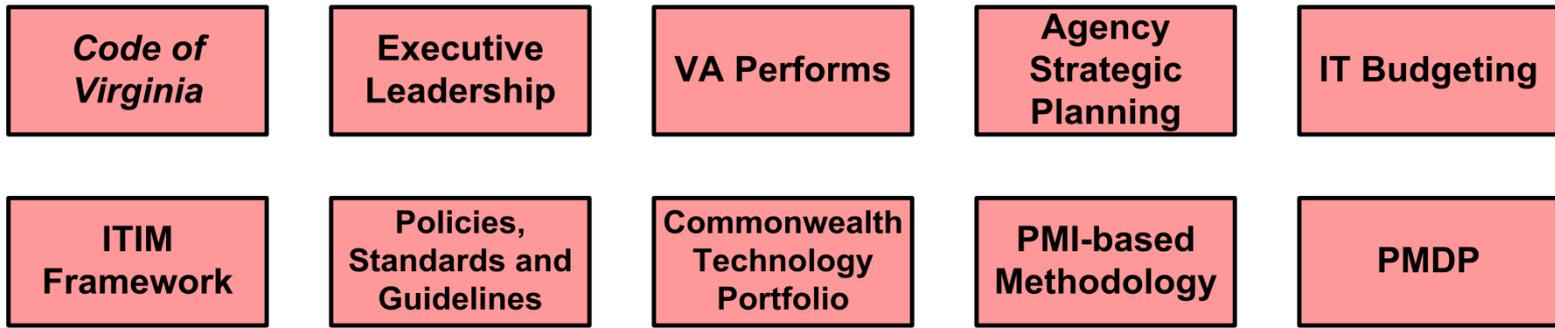
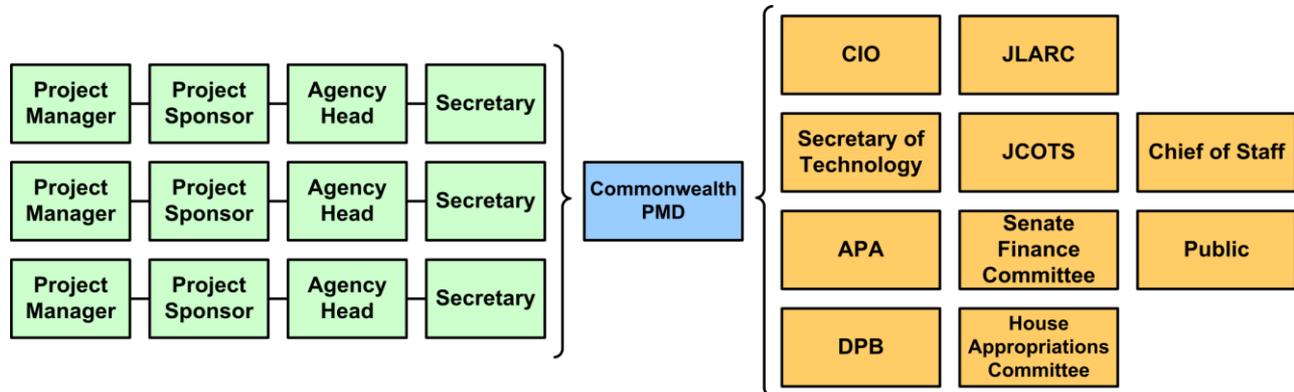


IT Project Governance and Oversight Implementation





IT Project Governance and Oversight Implementation





IT Governance and Oversight - IT Strategic Planning

Agency Strategic Planning

IT Strategic Planning is performed at various levels of government within the Commonwealth:

- Commonwealth agency strategic plans;
- The Commonwealth of Virginia Strategic Plan for Information Technology, or the Commonwealth Technology Business Plan;
- The long-term objectives set forth by the Council on Virginia's Future; and,
- The Governor's priority initiatives.



IT Governance and Oversight - Commonwealth Technology Portfolio

Commonwealth Technology Portfolio

The Commonwealth Technology Portfolio is a repository for agency information technology (IT) investments in the Commonwealth. Information from the system is used to:

- Support both Commonwealth and agency IT strategic planning;
- Better inform and standardize the overall Commonwealth IT Investment Management process;
- Improve IT investment decision making; and,
- Allow agencies to share information about their current portfolios.



Virginia Information Technologies Agency

ITPM Orientation: IT Project Management Policies, Standards and Guidelines (PSGs)





What are PSGs? - Definition of Policy

- Policies are general statements of direction and purpose designed to promote the coordinated planning, practical acquisition, effective development, and efficient use of information technology resources.
- Policies describe at a high level *what* needs to be done.



What are PSGs? - Definition of Standard

- Standards are specific and, where applicable, technical documents containing directives and mandatory specifications governing the management, development, and use of information technology resources.
- Standards describe *who* does what (from policy) and *when* they must do it.



What are PSGs? - Definition of Guideline

- Guidelines are directives and specifications, similar to standards, but advisory in nature. In essence, guidelines constitute recommendations which are not binding on agencies and institutions of higher education.
- Guidelines describe *how* things should be done according to current recommended practices.

Policies, Standards and Guidelines

Enterprise Architecture Policy

Commonwealth Technology Management Policy

1

Enterprise Architecture Standard

2

Enterprise Security Standard

3

IT Investment Management Standard

4

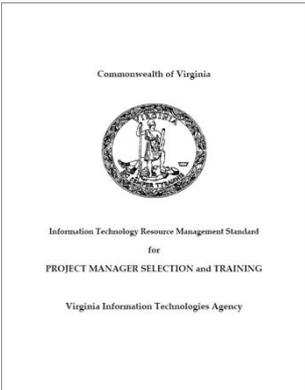
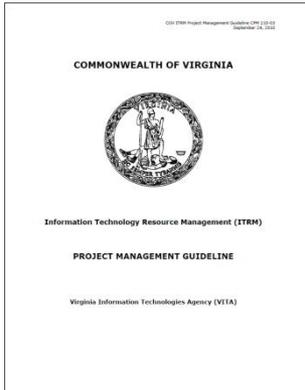
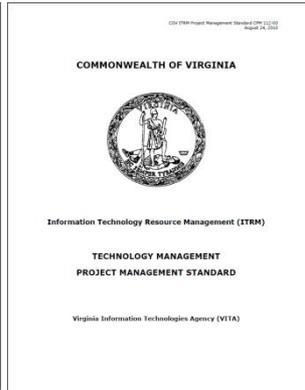
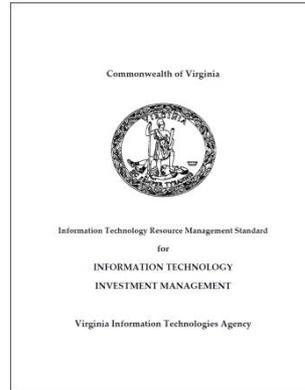
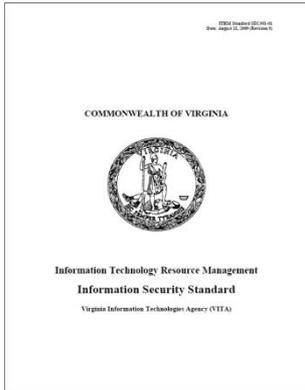
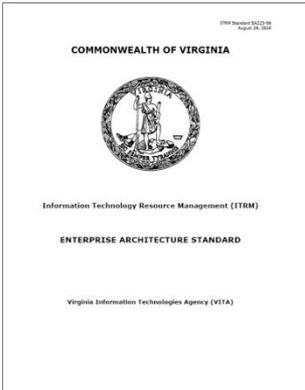
Commonwealth Project Management Standard

5

Commonwealth Project Management Guideline

6

Project Manager Selection and Training Standard

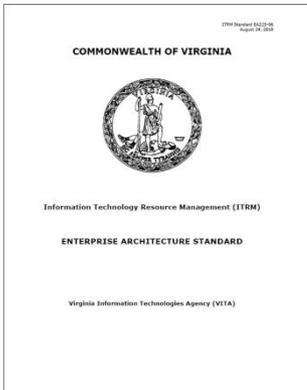


1

Enterprise Architecture Standard

Enterprise
Architecture
Standard

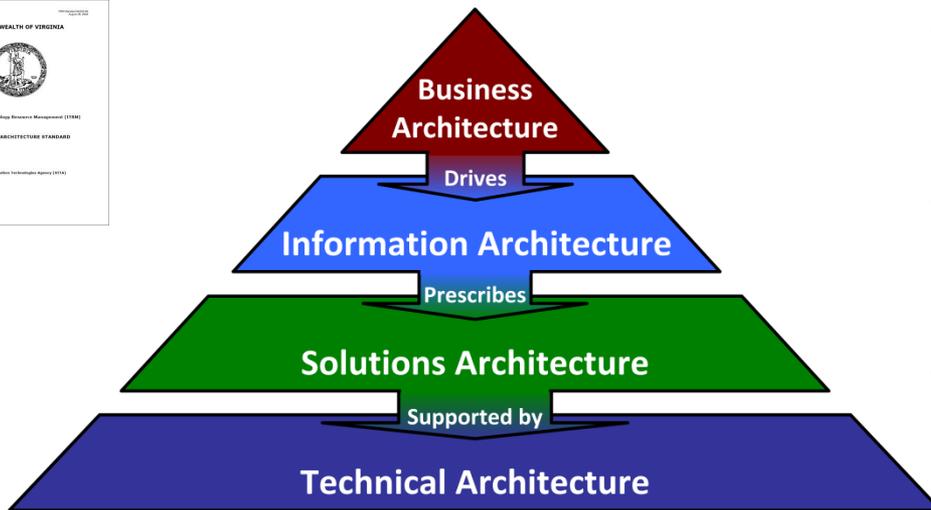
The Commonwealth's Enterprise Architecture Standard is used to manage and align the Commonwealth's business processes, IT infrastructure, and IT solutions with the Commonwealth's overall strategy.



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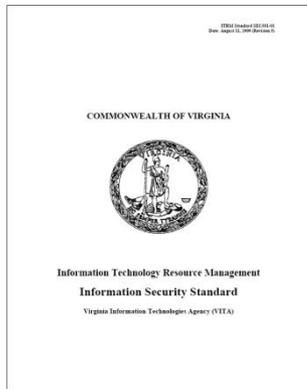


- Enterprise Business Architecture: defines the business of the Commonwealth
- Enterprise Information Architecture: describes the enterprise's information flows and value chains
- Enterprise Solutions Architecture: catalogues the information systems supporting or related to the business functions defined in the EBA
- Enterprise Technology Architecture: specifies a consistent set of technology infrastructure standards and models

Enterprise Security Standard

Enterprise
Security
Standard

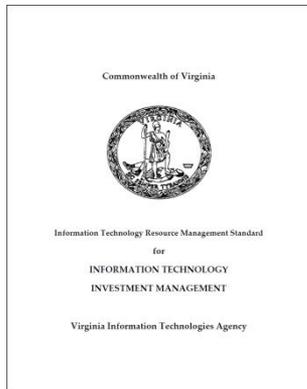
The Commonwealth's Enterprise Security Standard establishes a baseline of information security and risk management requirements for Commonwealth agencies. These requirements provide for the protection of, and mitigate risks to, agency information systems and data.



ITIM Standard

IT Investment
Management
Standard

The Commonwealth IT Investment Management (ITIM) Standard enable agencies to minimize risks, maximize return on investments, and support business decisions to maintain, migrate, improve, retire, or obtain IT investments.



ITIM Standard

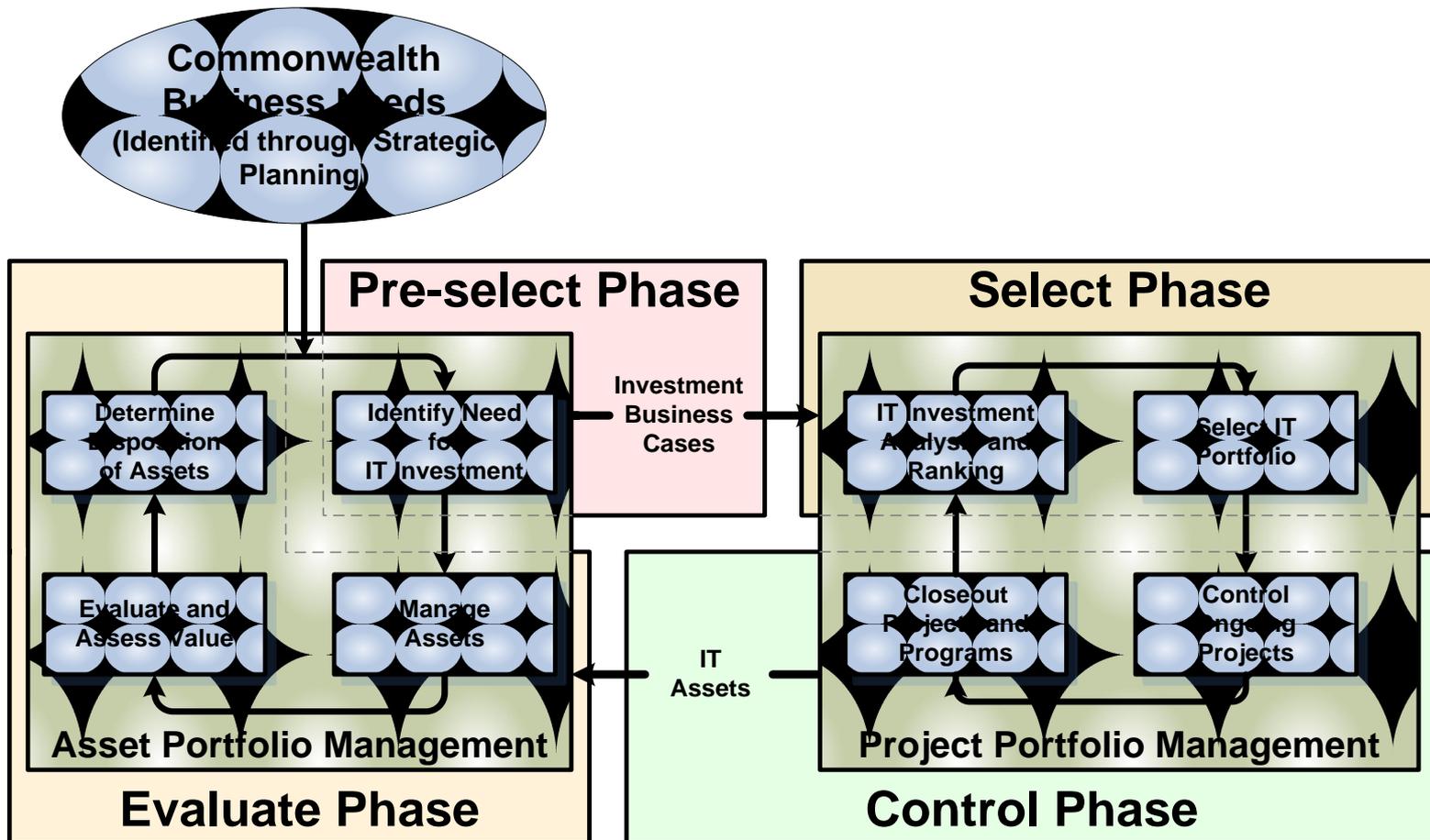
IT Investment
Management
Standard

The Commonwealth IT Investment Management (ITIM) Standard enable agencies to minimize risks, maximize return on investments, and support business decisions to maintain, migrate, improve, retire, or obtain IT investments.

ITIM is the basis for the Commonwealth's approach to technology management as approved in the Commonwealth Technology Policy.



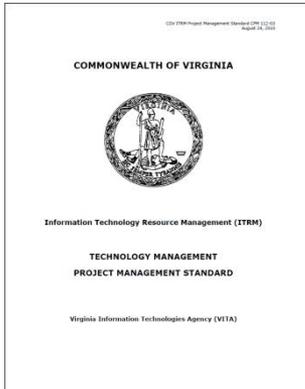
ITIM Standard - IT Investment Management (ITIM)



Project Management Standard

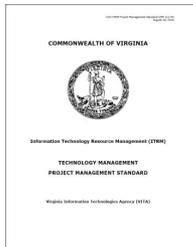
Commonwealth
Project
Management
Standard

The Commonwealth Project Management Standard increases IT project success through sound investment decisions, management commitment and oversight, implementation of a recommended practice-based project management methodology, and the establishment of defined processes that measure and evaluate project progress throughout the project lifecycle.

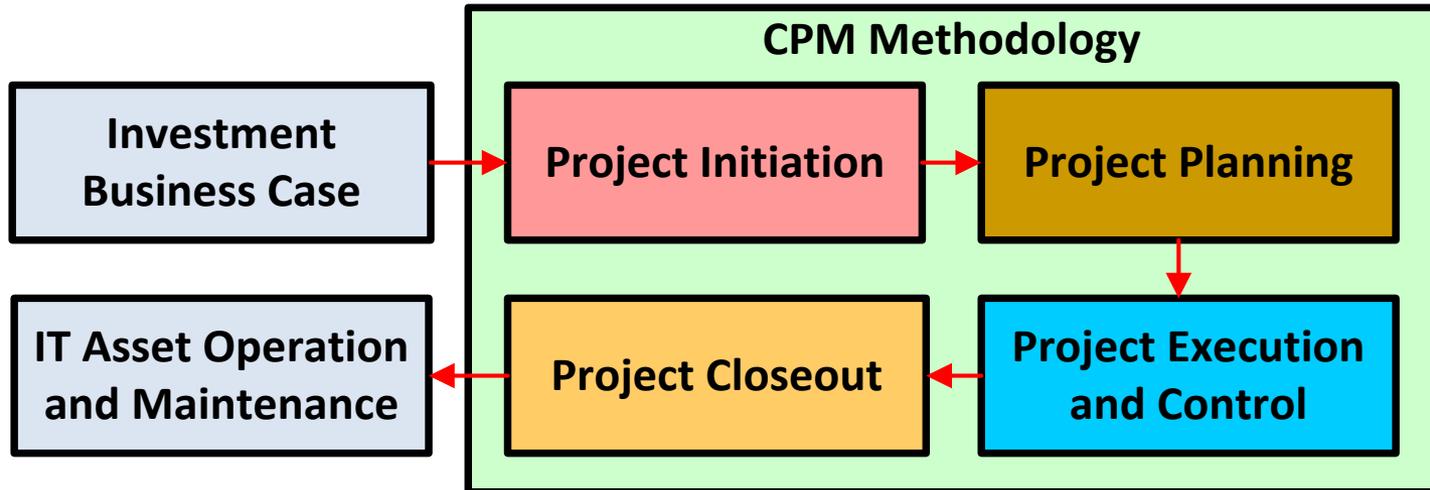


Project Management Standard - CPM Methodology

Commonwealth
Project
Management
Standard



The Commonwealth Project Management Standard increases IT project success through sound investment decisions, management commitment and oversight, implementation of a recommended practice-based project management methodology, and the establishment of defined processes that measure and evaluate project progress throughout the project lifecycle.



4

Project Management Standard – What is a Project?

Commonwealth
Project
Management
Standard

The Commonwealth Project Management Standard increases IT project success through sound investment decisions, management commitment and oversight, implementation of a recommended practice-based project management methodology, and the establishment of defined processes that measure and evaluate project progress throughout the project lifecycle.



A project is a temporary endeavor undertaken to deliver a unique product, service or result.

- Temporary: a definite beginning and end
- Unique: different in some distinguishing way from all other products or services provided by the organization

Project Management Standard - Project vs. Operations

Commonwealth
Project
Management
Standard

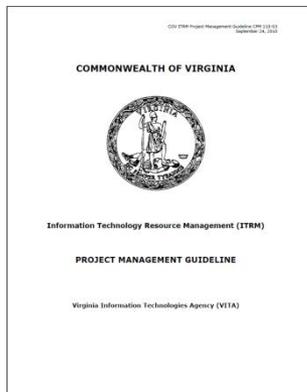


The Commonwealth Project Management Standard increases IT project success through sound investment decisions, management commitment and oversight, implementation of a recommended practice-based project management methodology, and the establishment of defined processes that measure and evaluate project progress throughout the project lifecycle.

- Operations and maintenance activities, supporting an existing product or service, are not projects so long as the focus of the activity is the continued use of the current product or service.
- An activity is a project if it leads a new product or service or the modification of an existing product or service, resulting in a new unique capability within the operational or organizational environment.

Project Management Guideline

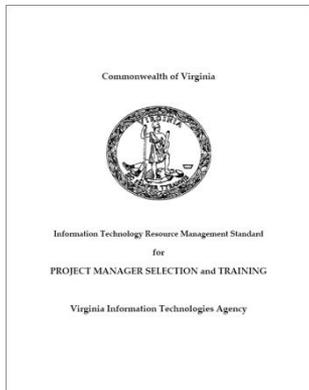
Commonwealth
Project
Management
Guideline



The Commonwealth Project Management Guideline describes the recommended methods for managing IT projects and completing project documentation. The guideline is applicable to any project, however, Commonwealth IT projects are required to be documented in the Commonwealth Technology Portfolio.

Project Manager Selection and Training Standard

Project
Manager
Selection and
Training
Standard



- Establishes a method for identifying Project Managers who are qualified to manage Commonwealth IT projects, and assuring that qualified Project Managers are selected to lead agency IT projects;
- Identifies the required skills, training and experience Commonwealth Project Managers need to have in order to be considered qualified to manage Commonwealth IT projects; and,
- Describes the steps a project sponsor must take in selecting a qualified Project Manager to manage a Commonwealth IT project.



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ITPM Orientation: IT Project Manager Qualification





Project Manager Qualification – Objectives

- Improve project management performance;
- Establish a community of qualified IT Project Managers with appropriate balance of training and experience; and,
- Address *Code of Virginia* mandate.



Project Manager Qualification Standard

	Hours - Experience	Education	Passed - Core Processes Test	Passed - Facilitation Processes Test	Complete Commonwealth IT PM Orientation	Completed Commonwealth Portfolio Tool Training
Agency - level Projects	1,500 Hours	Associate's Degree 				
Category 4	2,000 Hours	Bachelor's Degree 				
Category 3	4,500 Hours	Bachelor's Degree 				
Category 2	4,500 Hours	Bachelor's Degree 				
Category 1	4,500 Hours	Bachelor's Degree 				

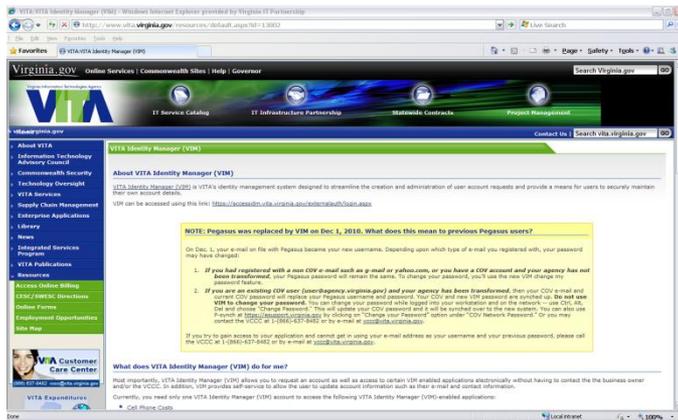


Project Manager Experience

	Hours - Experience	Exhibited Team Building and Leadership Skills	Special qualifications in applicable functional - technical field	PM - @ least one Agency-level IT Project (successfully performed)	PM - @ least one Commonwealth IT Project (successfully performed)	PM - @ least one Commonwealth IT Project over \$250,000 (successfully performed)	PM - @ least one Commonwealth IT Project Category 1, 2,3 (successfully performed)
Agency - level Projects	1,500 Hours						
Category 4	2,000 Hours						
Category 3	4,500 Hours						
Category 2	4,500 Hours						
Category 1	4,500 Hours						



Project Manager Qualification – Obtain VIM Account

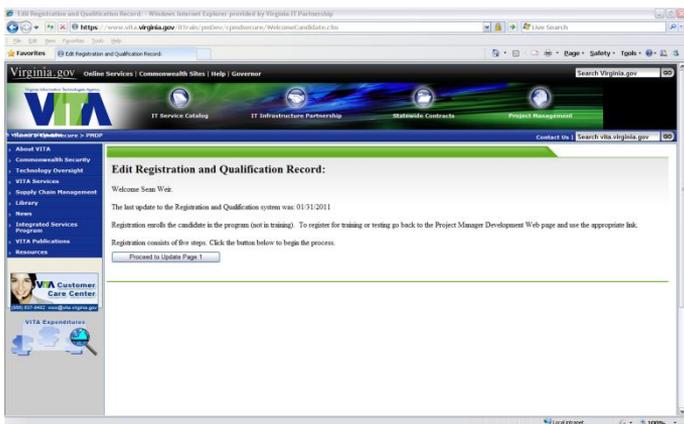


- Users must obtain a VIM account prior to accessing specified Commonwealth web-based applications, including the PMDP application.
- To request an account, go to <http://www.vita.virginia.gov/resources/default.aspx?id=13002>



Project Manager Qualification— Establish a Qualification Record

- Use your VIM account to access the PMDP application
- Enter your personal information, training and experience
- Notify your supervisor to authenticate your training and experience (supervisors will require a VIM account as well)





Project Manager Qualification – Commonwealth Technology Portfolio Training

Commonwealth Technology Portfolio Training is held quarterly, usually the same week as Commonwealth IT PM Orientation.

- Registration is available through the PMD Required Training web page;
- Requires a CTP seat license (your agency may already have one for you);
- PM must be already assigned to manage a Commonwealth IT Project; and,
- PMs who are not employed (either as an employee or a contractor) by a state agency or institution of higher education cannot attend Commonwealth Technology Portfolio Training.



Project Manager Qualification - Qualification Exams

- The exams are provided over the Internet using a secure online testing system
- Each exam is broken down into sections called topic areas. The topic areas are the same as the topics identified in the Core Processes and Facilitating Processes Knowledge Standards
- There is one test for each topic area
- The exams are open book, multiple choice, and timed



Project Manager Qualification - Core Processes Topic Areas

1. Project Initiation and Solution Analysis
2. Cost Benefit Analysis, Return on Investment Analysis, and Earned Value Analysis
3. Scope Definition
4. Work Breakdown Structure
5. Organizational Breakdown Structure
6. Activity Definition and Sequencing
7. Resource Planning
8. Schedule Development
9. Budget Planning
10. Performance Planning



Project Manager Qualification - Facilitating Processes Topic Areas

1. Risk Planning
2. Communications Planning
3. Quality Management Planning
4. Procurement Planning
5. Change Control and Configuration Management
6. Project Execution and Control
7. Project Reporting
8. Project Closeout



Project Manager Qualification - Topic Area Tests

- Each Core and Facilitating Process Topic Area test contains 10 to 15 questions
- To pass, the candidate must score at least a 75% on each topic area test, and achieve an overall score of 80% or higher across all topic area tests in the exam
- The allotted time is 30 to 40 minutes per Topic Area



Project Manager Qualification – Exam Registration

- Qualifications exams are administered by the Community College Workforce Development Alliance.
- To register for the exams, follow the directions on the PMDP Registration and Testing Process page:

<http://www.vita.virginia.gov/oversight/projects/default.aspx?id=607>



Project Manager Qualification – Exam Preparation

Material

- Commonwealth Project Management Standard
- Commonwealth PM Selection and Training Standard
- Commonwealth Project Management Guideline
- Calculator
- PMI's PMBOK (4th Edition)

Pre-work

- Practice navigation of material
- Take practice test (available on CCWA test site after registration)



Project Manager Qualification - PMD Consultant by Secretariat

Name	Role	Phone	E-mail
Michael Sandridge	Division Head (Education, Agriculture and Forestry Secretariats)	(804) 416-6188	michael.sandridge@vita.virginia.gov
Rich Barnes	Project Management Consultant (Health and Human Resources Secretariat)	(804) 416-6119	rich.barnes@vita.virginia.gov
Linda Bell-Sinclair	Project Management Consultant (Natural Resources and Finance Secretariats)	(804) 416-6045	linda.bell-sinclair@vita.virginia.gov
Aziz Bulling	Project Management Consultant (Transportation Secretariat)	(804) 416-6046	aziz.bulling@vita.virginia.gov
Chris Hinkle	Project Management Consultant (Technology, Commerce and Trade, Administration Secretariats)	(804) 416-6185	chris.hinkle@vita.virginia.gov
Pat Reynolds	Project Management Consultant (HIT/MITA Program)	(804) 416-6184	patrick.reynolds@vita.virginia.gov
Patty Samuels	Project Management Consultant (Public Safety Secretariat)	(804) 416-6022	patty.samuels@vita.virginia.gov



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ITPM Orientation: Commonwealth Project Management (CPM) Methodology





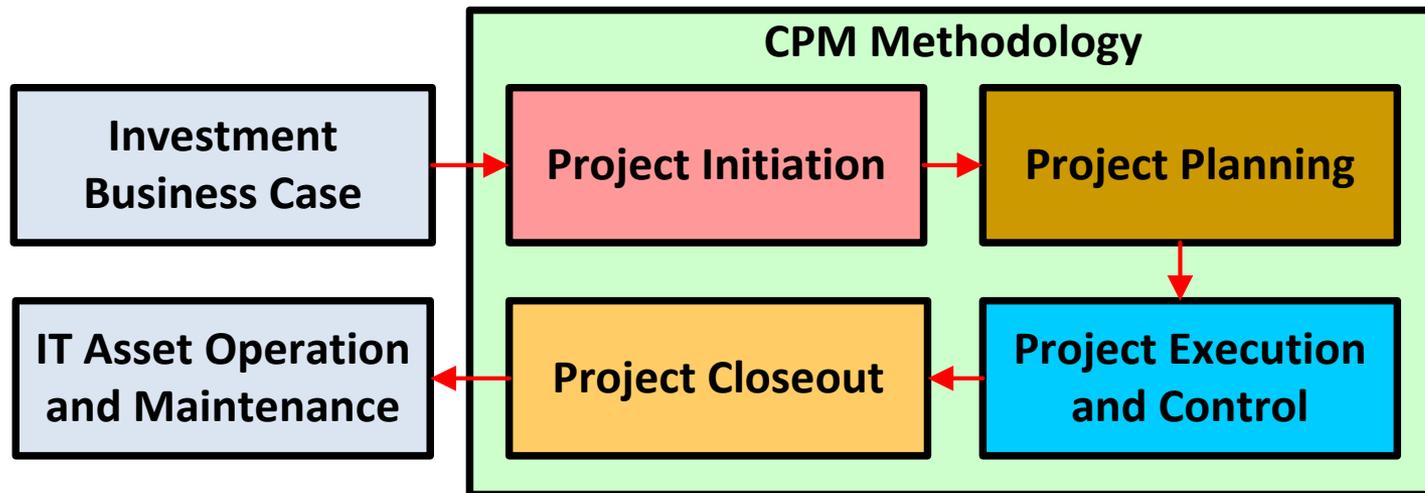
CPM Methodology - Context

The CPM Methodology is based on industry best practice project management lifecycles (such as PMI's PMBoK). The CPM Methodology accommodates:

- The ITIM lifecycle
- IT Governance and Oversight stakeholders
- The Commonwealth's Strategic Planning and Budgeting cycles

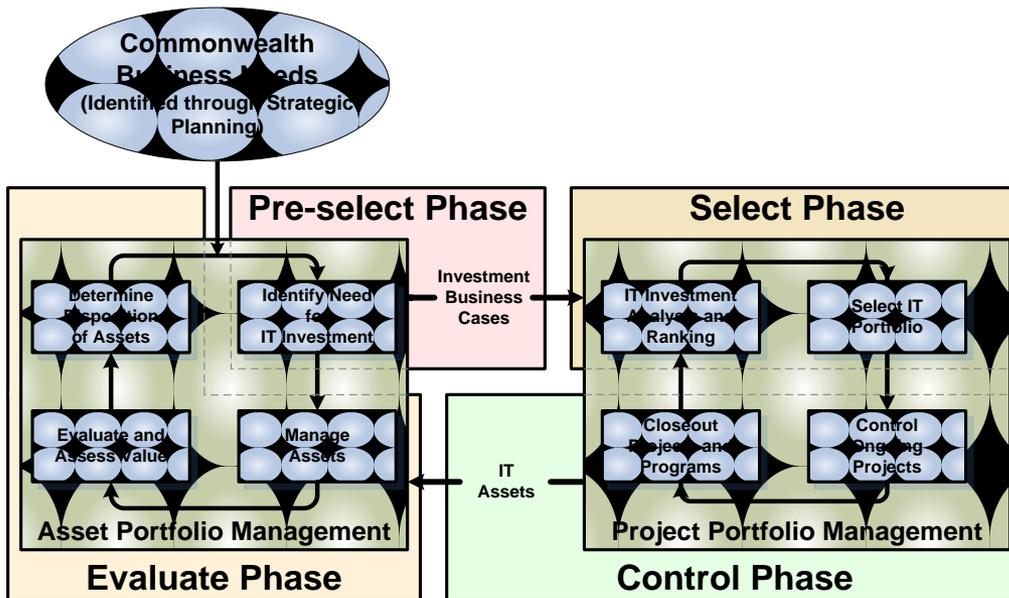
CPM Methodology – Input to Output

With the input of an approved Investment Business Case . . .



. . . the output is a new or enhanced IT asset that meets the agency’s expectation for improved citizen services, increased operational efficiency, and/or strategic alignment.

CPM Methodology – Investment Business Case



Review:

- The IBC is drafted in the ITIM Pre-select Phase, is finalized in the ITIM Select Phase, and becomes the core business document in the CPM Methodology
- Completing the IBC isn't the only activity in the Select Phase, but it is the primary activity that impacts project managers



CPM Methodology – Investment Business Case



CPM Methodology – Project Initiation Phase



CPM Methodology – Supply Chain Management

- VITA's Supply Chain Management (SCM) is the Commonwealth's IT procurement and sourcing hub.
- SCM responsibilities include:
 - Announcing, awarding, and maintaining statewide contracts for the purchase of IT and telecommunications goods and services
 - Providing sourcing expertise and contracting assistance for state agencies and institutions procuring IT and telecommunications goods and services
 - Delegating IT procurement authority
 - Approving the procurement method for agency IT and telecommunications goods and services over \$100,000



CPM Methodology – Balanced Scorecard

- Balanced Scorecard Categories
 - Stakeholder Perspective
 - Business Process Perspective
 - Project Management Perspective
 - Financial & Economic Perspective
 - Enterprise Perspective

PMD modified Delphi scoring supports recommendation to CIO and SoTech.



CPM Methodology – Detailed Plan Approval



CPM Methodology – Independent Verification & Validation

IV&V is a review of the project plans and other project artifacts by a disinterested third party to confirm that the project is “doing the right thing,” and doing it in the “right way.”

- Periodic IV&V reviews are required of all Category One, Two and Three Projects.
- IV&V strategy must be approved as a part of the Detailed Project Plan;
- IV&V reports will supplement and validate monthly status reporting
- Can be requested by the CIO



CPM Methodology – Execution Phase



CPM Methodology – Project Status Reports

Status reporting will continue until the Project Closeout Report is submitted on the following schedule:

- The Project Manager will complete the Project Status Report by the fifth business day of the month following the end of the reporting period;
- The Project Sponsor will review and approve the Project Status Report, and provide a Project Status Assessment (on-track, warning or problem) by the eighth business day of that month. Beyond this date, the Project Manager should not attempt any further edits of that month's report;
- The Proponent Secretariat will review and approve the Project Status Report, and provide a Project Status Assessment (on-track, warning or problem) by the tenth business day of that month; and.
- On the 11th business day of the month, the reports will be made available to the Project Management Division and the CIO.



CPM Methodology – Status Reports Organization

- Summary
 - Key Status Indicators (KSI's)
 - On Track / Warning / Problem
 - Earned Value Measurement (EV)
- Project Background
- Measures of Success
- Planned & Actual Costs
- Baseline & Milestones
- Scope
- Risk Assessment
- Change Control Description
- Approval



CPM Methodology – Closeout Phase



CPM Methodology – Closeout Report

The Project Closeout Report captures the planned vs. actual:

- Scope
- Schedule
- Budget/expenditure
- Measures of success/business objectives
- Lessons learned
- Plans for the Post-Implementation Review



CPM Methodology – Approval Periods

Agencies should ...

- Allow at least 15 business days for review and approval of the Investment Business Case;
- Allow sufficient time to conduct the technical and economic analysis of the project solutions and to develop the project proposal and charter;
- Allow at least 15 business days for review and recommendation for Project Initiation Approval, and an additional five days if SoTech approval is needed;
- Allow at least 10 business days for review and approval of an RFP, IFB, or procurement request, and 10 business days for review and approval of a proposed contract



CPM Methodology – PM Information Clearinghouse

- **Finding and Sharing Project Management Experience**
- **Best Practices**

Best practice is a process, practice, or system identified in public and private organizations that performs exceptionally well and is widely recognized as improving the performance and efficiency of organizations in specific areas
- **Lessons Learned**

A Lesson Learned documents the experience gained during a project



CPM Methodology – Post Implementation Review

The Post-Implementation Review (PIR) is an ITIM process that occurs in the Evaluate Phase.

- Every completed Commonwealth IT project will undergo a PIR six to twelve months after Project Closeout.
- The Project Sponsor will convene the PIR and include the project stakeholders identified in the Project Charter and Proposal and a representative from PMD.
- The PIR evaluates whether the products or services are delivering the expected results and is focused, therefore on validating the project CBA and return on investment analysis projected in the Project Charter.



Virginia Information Technologies Agency

ITPM Orientation: Wrap Up





Commonwealth IT Project Manager Orientation

What we covered today:

- The Commonwealth's approach and framework for IT project management and governance
- The Project Manager Development Program and project manager qualification process
- The project management activities across the ITIM and project life cycles
- The Commonwealth Project Management Division project management Web site and project management tools
- The value of Commonwealth Project Management (CPM) Methodology in promoting successful Commonwealth IT projects



Commonwealth IT Project Manager Orientation

OK, what do I do now?

- **You have now completed the mandatory orientation!**
- If you need to be designated as a qualified Commonwealth Project Manager:
 1. Get a VIM account, record your background & IT experience in a PMDP qualification record
 2. Study for, take, and pass one or two CPM qualification tests (if not already PMI certified)
 3. Depending on tests & experience, you will be qualified to manage the appropriate Category of Commonwealth IT Projects
 4. Take the *CTP – Project Manager* training if you've been assigned to a Commonwealth IT Project
- Know and follow the Project Management Standard
- Don't hesitate to contact your PMD Project Management Consultant with questions – contact them early and often!



Instructor Contact Information

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For other PMD contacts:

<http://www.vita.virginia.gov/oversight/projects/default.aspx?id=529>

Q&A

