



***HUD Policy for Project Planning  
and Management (PPM)***

***Version 2.0***

***October 2015***



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## 1. Purpose

This Project Planning and Management (PPM) policy establishes PPM as the authoritative source of requirements, objectives, procedures, guidelines, and standards that govern effective information technology (IT<sup>1</sup>) project planning and delivery at the Department of Housing and Urban Development (HUD). As such, this policy makes PPM an IT project management requirement for all HUD IT projects.

PPM promotes effective and efficient processes for designing and operating information systems through a process of progressive steps that help ensure proper management review and approval. PPM also provides the flexibility to accommodate varying developmental approaches and project types. As a major component of the HUD Information Technology Management, (ITM) Framework, PPM enables the effective integration of the project and its outputs with HUD's enterprise architecture, IT security, IT acquisition management, IT operations, and IT capital management processes.

Anyone who acquires, develops, supports, has responsibility for, or operates an information system or services that collect or maintain information on the behalf of HUD has a responsibility to understand and follow this policy.

This is the second issuance of this policy. It overrides any conflicting policies that were published prior to its issuance.

## 2. Background

Successful IT management requires an effective project development approach that 1) incorporates best government and commercial practices through a consistent and repeatable process, and 2) provides a standard structure for planning, managing, and overseeing IT projects over their entire life cycle.

The PPM Life Cycle establishes a solution development and accountability environment within which HUD IT projects achieve consistently successful outcomes that maximize alignment with Department-wide and individual program goals and objectives, while advancing the HUD IT target architecture. Implementation of the PPM Life Cycle enables HUD to improve the quality of project planning and execution, reducing overall project risk.

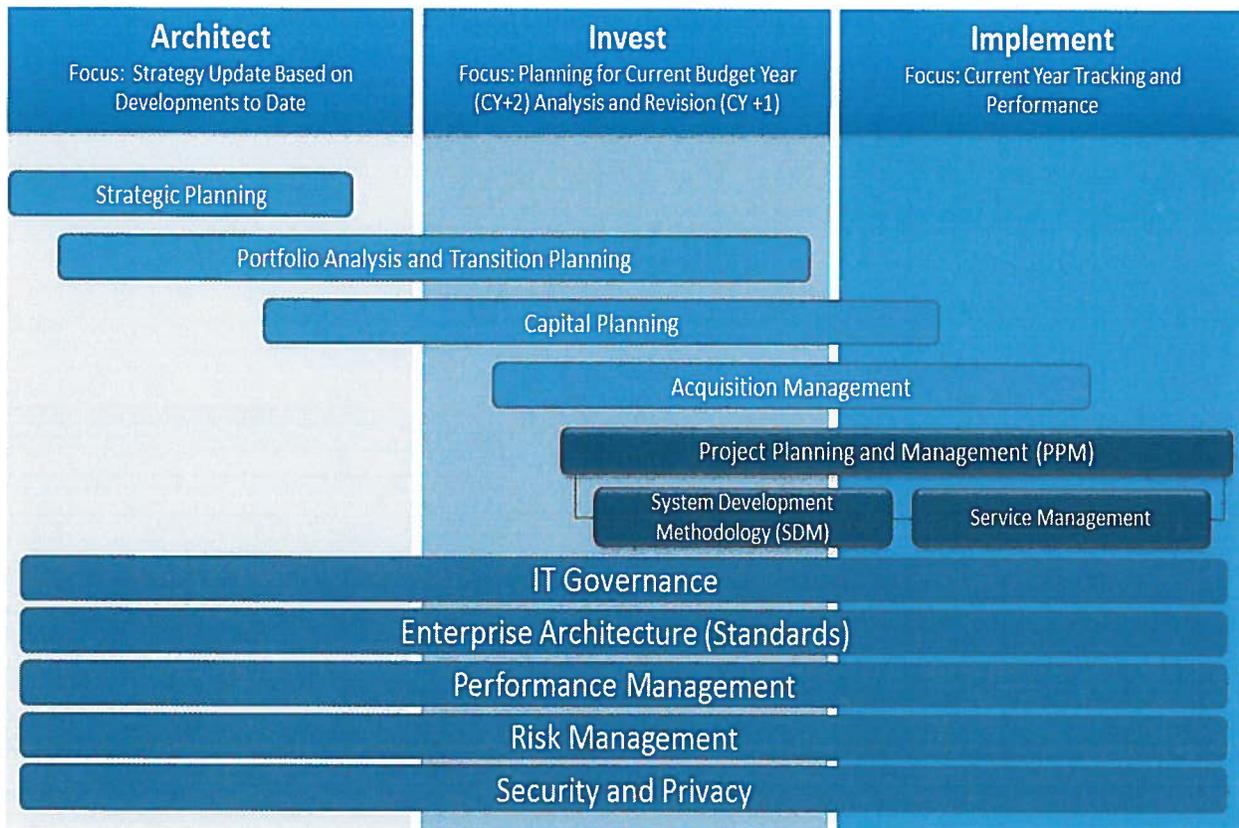
The PPM Life Cycle as part of the ITM Framework enables HUD to manage IT projects with more transparency, accountability, and responsibility (Figure 1). The ITM Framework describes the basic components and information flows required for the effective and transparent management of HUD's IT investments from the IRM strategy through measurement of project outcomes.

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<sup>1</sup> Information Technology (IT), as used throughout this and all of the policies of the IT Management Framework refers to any services or equipment or the personnel that support any part of the lifecycle of those services or equipment, or interconnected system(s) or subsystem(s) of equipment, that are used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the Department of Housing and Urban Development (HUD).

Figure 1 - PPM as a Component of the IT Management Framework

## Components of IT Management Framework



While future iterations of the ITM framework may not include specific SDM, the updated framework will be used to structure, plan and control the process of developing an information system. Common methodologies to include PPM V2.0, prototyping, iterative and incremental development, spiral development, rapid application development, and extreme programming can be used depending on specific needs and requirements.

### 3. Scope

This policy applies to all HUD IT projects, including all information systems and services acquired, developed, enhanced, or maintained by or for HUD. This policy applies to applications and general support systems and services — whether internal or contractual, infrastructure, or programmatic — and administrative systems and services. The policy scope also covers Federal shared services models. These projects are usually designated as development, modernization and enhancement (DME) investments, which include IT projects to meet legislative and regulatory requirements.

This policy excludes small desktop applications, and mobile applications.

Title III, Sec 309 of the National Housing Act exempts all systems that are leased, owned, or operated for or on behalf of Ginnie Mae.



## 4. Policy

This policy mandates the use of the PPM Life Cycle for the management of HUD IT projects. This policy requires:

1. All HUD projects that involve planning for and the acquisition, management, and use of IT capital assets to be managed in accordance with the HUD PPM Life Cycle.
2. All HUD IT stakeholders, including primary segment sponsors, project sponsors, IT project managers, business leads, and project team members, are to participate in HUD IT projects in accordance with the requirements of the PPM Life Cycle.
3. All IT projects are to have an assigned primary segment sponsor, project sponsor, IT project manager, and business lead(s), which possess the required competencies, experience, and certifications for the project(s) being managed.
4. Each IT project is to produce a detailed project schedule that defines tasks at a level of detail that provides tasks, milestones, and resources necessary to ensure successful project execution.

This policy is part of a set of integrated policies defined by HUD's Information Technology Management (ITM) Framework. All IT investments must follow these policies. Please see the HUD Policy for Information Technology Management for more detail. See Roles and Responsibilities for the HUD Information Technology Management Framework to understand the specific roles and responsibilities as they apply to this policy. See the Authorities and Guidelines for the HUD Information Technology Management Framework for the list of authorities and guidelines upon which this policy is based. All of these documents are located on HUD's Intranet at this location:

[http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/cio/ITMHOME/ITMPolicies](http://portal.hud.gov/hudportal/HUD?src=/program_offices/cio/ITMHOME/ITMPolicies).

The elements of this policy are based on guidance from both the Office of Management and Budget (OMB) and the Government Accountability Office (GAO) and incorporate practices and standards from the National Institute of Standards and Technology (NIST), the Project Management Institute (PMI) and other industry information technology management groups. The specific directives on managing IT investments are listed in Appendix A in the HUD Policy for Information Technology Management.

### Implementation Note

In order to promote an orderly transition from PPM V1.0 to PPM V2.0, existing HUD projects must, upon publication of this updated PPM policy, select the project type most applicable to the project and meet PPM V2.0 requirements for all remaining phases in their project life cycles. Prior documentation completed in PPM V1.0 will be utilized in PPM V2.0. If the project has completed the Need/Concept through Design Phase Control Gates, the project will not be required to re-perform tasks or re-create artifacts for those phases that have already been completed. In general for PPM V2.0, control gates in this phase should be determined by consulting with the governance board Technical Review Committee (TRC) Chair so they best map to the incremental development approach and/or project type the project is following. In Execution and Control Phase of the project life cycle in PPM V1.0, the project manager should continue to proceed in PPM V1.0 until completion. In the case of a contracting requirement to utilize PPM V1.0 within the project, refer to the contracting officer, PPM Lead and TRC for special instructions to meet the intent of this policy. All projects must move to the latest version of PPM.



## 5. Overview of the HUD Project Planning and Management Life Cycle

The HUD PPM Life Cycle is an ordered series of activities that identify a need for a solution; define the project scope; design, develop, acquire, install and configure the solution; and test and deploy it in a formal way. An IT-related solution can be an information system or another IT-related activity, such as the development and delivery of an IT service or application to include desktop and mobile applications.

Procedures, standards, and guidance supporting PPM describe the appropriate activities, processes, and techniques to be employed during each phase of the PPM Life Cycle. The outputs of the activities are the key deliverables that elucidate the actual solution, including deliverables such as the Requirements Definition Document, the Solution Architecture Document, and the Technical Design. The tasks executed throughout the project planning and management phases (which vary by project type) produce artifacts designed to satisfy Federal IT requirements as well as to promote efficient and effective project planning and management. System documentation must be reviewed and updated as needed throughout the project life cycle. PPM will help significantly reduce the need for *ad hoc* data calls that can interrupt project execution.

### PPM Phases

The PPM Life Cycle at HUD consists of four phases with control gates for advancement between phases:

1. Initiation
2. Planning
3. Execution & Control
4. Close Out

Depending on the project type, project approach, and project performance, more Control Gates may be deemed necessary by the Technical Review Sub-committee (TRC), the governance entity that conducts control gate reviews. The TRC is established under the authority of the Clinger-Cohen Act (PL 104-106 at 40 USC, Chapter 25, and functions under the provisions of the Office of Management and Budget (OMB) Circular A-130, revised. Functional oversight of the TRC is provided by the CIO, the Customer Care Committee (CCC), and the Executive Investment Board (EIB). The TRC has the authority to establish working groups to support its roles and responsibilities. The TRC shall dissolve, amend or otherwise revise the charter of designated working groups. All HUD projects that involve planning for the acquisition, management, and use of IT must comply with Section 508 of the Rehabilitation Act and provide employees and members of the public with disabilities with access comparable to the access provided to persons without disabilities.

The **Initiation Phase** consists of those processes performed to validate the original decision to pursue a new project and to start the project. Within the initiating process for a project, the preliminary scope is further defined and initial financial resources are committed. Internal and external stakeholders who will interact and influence the overall outcome of the project are identified. If not already assigned, the IT project manager will be selected and will complete and submit the Project Initiation Form (PIF) which signals the commencement of the project and serves as the official request for Office of the Chief Information Office (OCIO) resources. The key purpose of this phase is to align the stakeholders' expectations with the project's purpose, give them visibility about the scope and objectives, and show how their participation in the project and its associated phases can ensure that their expectations are achieved. It is assumed that the business case development and decision on funding are handled externally to the project boundaries.



In the **Planning Phase** the integrated project team (IPT) decides whether to modify and/or enhance an existing system, custom develop a new solution, install and configure a commercial or government off-the-shelf (COTS/GOTS) capability, or utilize a service provided by an external commercial or government entity to meet the identified business needs. The team may also procure resources per the Acquisition Strategy or Procurement Management Plan for the requirements' activities or Planning Phase activities only. It may also procure support for the entire project life cycle through deployment.

During the Planning Phase, the IPT develops a concept of operations and then gathers and documents detailed business and functional requirements supporting it. The team also develops a detailed project schedule for the project. A high-level Solution Architecture document is created and approved and other relevant project management planning activities are documented. The project baseline is established and approved at the Planning Phase control gate review, called the Project Baseline Review.

In addition, during the Initiation Phase or at the beginning of this phase (and approved separately), the specific route through the rest of the PPM is determined using the Project Tailoring Agreement, which includes the development methodology and acquisition approach. Once the planning sets of tasks and activities are completed and the resulting deliverables are created, the IPT compiles them into a Planning Phase package and submits it to the TRC for the final Planning Phase control gate review.

The **Execution & Control Phase** consists of those processes performed to complete the work defined in the Project Management Plan and Project Schedule to satisfy the project specifications. This involves coordinating people and resources, managing stakeholder expectations as well as integrating and performing activities of the project. This phase includes the development of the technical design as well as the full execution of those designs from planning to development, testing, and implementation.

The activities in this phase depend on the specific development approach selected for the project. Two key points are:

1. Execution must include testing and project reviews. Only solutions that have been through this testing process can be approved for deployment.
2. Execution must include the development of any artifacts (e.g., training, communications and messaging) that are required for use during deployment.

In addition, this phase establishes the solution in its production environment. If the solution is an information system, data are converted as needed, and sample testing is conducted to verify the system. Additionally, security certification is conducted and capital management reporting requirements must be met. The system or service must have a written authorization to operate in order to proceed *prior to* beginning the operations and maintenance phase (not within the PPM life cycle).

The **Close Out Phase** consists of those processes performed to conclude all activities across all project management processes to formally complete the project or contractual obligation. At project closure, the following may occur:

- Obtain acceptance by the customer to formally close the project,
- conduct a post-project review,
- record impacts of project tailoring to any process,
- document lessons learned,



- conduct any contract close out activities,
- and archive all relevant project documents.

### **Independent Verification and Validation**

Software validation ensures that the solution actually meets the client's needs, and that the specifications were correct in the first place, while software verification ensures that the solution was built (or is being built) according to the requirements and design specifications.

- Validation answers the question, "Are we building the right product?"
- Verification answers the question, "Are we building the product right?"

Maintaining independence of the verification and validation processes is an essential element of the IV&V process. In this activity, the IT PM and Business Lead define the project approach for IV&V. PPM V2.0 defines IV&V as a rigorous independent process that evaluates the correctness and quality of the project's solution to ensure that development is in accordance with customer requirements and well-engineered. It recognizes that IV&V partnerships provide high value to many projects and can be introduced at any phase of a project as determined by the project's sponsorship and/or governance requirements.

### **Integration with HUD's Project Management Methods and other ITM Framework Components**

PPM activities include many, but not all, standard project management requirements. Thus, there is a required integration of HUD project management methods throughout PPM. Some integration responsibilities are highlighted below.

1. The IT project manager is accountable for ensuring that the system/solution advances in an orderly fashion through the life cycle phases.
2. Activities must be planned in advance for each life cycle phase. PPM requirements are the same for general support/infrastructure systems and programmatic/administrative systems. The level of detail of each section should be consistent with the size and complexity of the system/solution. IT project managers, in consultation with the project sponsor and business lead, along with the project team members, are responsible for tailoring the project's life cycle processes and development and management of the Work Breakdown Structure (WBS) and Project Schedule.
3. Project planning and management requires documentation. Documenting each major step/task and the project's solution architecture helps ensure sound life cycle management, enterprise architecture compliance, and alignment with IT investment management processes.
4. An approved security plan is required for all operational components of a system. The security plan must also include those components under development.
5. The design aspects of the system/solution life cycle may require tailoring for COTS or GOTS acquisitions. Interactions with other systems or modifications to the COTS or GOTS products require appropriate documentation.
6. The IT project manager, in consultation with the business lead, is responsible for communicating project information, assigning and developing the project team, managing the project work environment, and other project management activities that are not specifically included in the



PPM approach. These expectations are detailed further in various HUD PPM guidance materials and artifact templates.

## 6. Responsibilities

### Office of the Chief Information Officer:

- Maintains and evolves the HUD PPM Life Cycle based on HUD and other Federal experience and best practices within both the project management and the IT industries.
- Provides IT stakeholders with the training, templates, and other implementation and support required for them to use the PPM Life Cycle approach effectively.
- Ensures that IT projects are delivering value to customers and project deliverables are traceable to program objectives and strategic goals.

### IT Project Managers:

- As leader of the project team, responsible for managing tasks, schedules, resource assignments, and for getting artifacts completed by subject matter experts
- Oversees the day-to-day execution of the project, facilitates resolution of issues, and reports status at regular intervals
- Develops and maintains effective methods of communication between the project's shareholders, creating and implementing the project's Communications Plan and Risk Management Plan
- Follows the IT cost accounting structure established and maintained by the HUD Office of the Chief Financial Officer.
- Identify, plan, and execute the life cycle phases needed to deliver a desired information system or related solution based on the specific requirements of the business function. The order of implementing the phases and the level of detail required to complete them will vary on a project-by-project basis. For each project, the key to effectively using the PPM process lies in adapting the phases and deliverables that best suit the needs and characteristics of the project.
- Defines projects in a manner that delivers usable functionality in six- to nine-month increments.
- Uses a software development methodology consistent with HUD technical standards and when required, an Earned Value Management (EVM) measurement approach. The use of methodologies such as Rational Unified Process (RUP), Rapid Application Development (RAD), Agile, and, Spiral, as well as the use of pilots and prototyping, is encouraged. Such adaptation must be documented and receive signed agreement by the Technical Review Committee. (See Appendix B for complete glossary terminology on technical standards and requirements.
- Whenever possible, uses shared services, software-as-a-service (SaaS), COTS, or GOTS solutions to meet mission requirements. HUD business processes should be modified to match the functional features of the products to the extent practicable.
- Plans for Technical Review Committee control gate reviews to advance from one life cycle phase to the next.



- Ensures the project is compliant with the PPM life cycle prior to the submission of any Request for Contract Services package so as not to extend the acquisition effort needed.
- Receives management approval before deploying all information system solutions.
- Produces a Project Schedule following HUD's MS Project Template and manages project schedules using the enterprise version of MS Project Server when established for this purpose.
- Participates in Project Health Assessments, submit appropriate documentation to the official HUD document repository as designated by the TRC, and complete any corrective action items as needed.
- Participates in TechStats as directed by the CIO, submit appropriate documentation to the official HUD document repository as designated by the TRC, collaborate as directed by the TechStat Team, and complete any corrective action items as needed.

**Business Lead:**

- Represents the customers' and users' interests/needs on the project
- Coordinates with the Project Sponsor when needed to resolve any issues/concerns that may arise
- Thinks about changes to the business environment that are needed to support the solution as designed
- Provides guidance for the IT project on business area strategy and intended outcome

**Customer Relationship Coordinator (CRC):**

- Acts as the single point of contact and entry to CIO for business areas and business user communities
- Serves as a key member of the Segment team, providing mission and business owners guidance throughout the IT collaborative planning process
- Anticipates the needs of OCIO's business customers, works with OCIO entities to identify relevant solutions, and initiates necessary activities to develop and deploy IT solutions
- Informs project stakeholders of ongoing progress and risks associated with an assigned IT project
- Coordinates for the IT aspects of ongoing IT-related projects

**Enterprise Architecture Lead**

- Owns the EA-related activities in the Architect Phase of the IT Management Framework and works closely with other stakeholders throughout other ITM phases
- Oversees HUD enterprise processes and solutions to ensure alignment of IT solutions to the enterprise roadmap
- Works closely with IT capital planning team to ensure that duplication of systems and applications are minimized and ultimately eliminated



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### **Government Technical Representative (GTR) / Government Technical Monitor (GTM)**

- Prepares the HUD Request for Contract Services package for contracted support, hardware, and/or software for an IT project
- Provides support for and acts as a liaison between the contractors and OCIO staff
- Participates in developing the Project Schedule (WBS)
- Ensures contract performance data is communicated for use in future program and project planning activities and resource decisions
- Ensures IT procurements associated with program/project have been reviewed and approved by CIO

### **Integrated Project Team (IPT)**

- Individuals who have a stake in the success or failure of the project and who have been assigned as members by OCIO leadership, Project Sponsor and/or Business Lead. The IT Project Manager is in most cases the IPT chair. Membership may change during the PPM Life Cycle
- Assists in creating/updating all artifacts and activities required within the PPM Life Cycle

### **IT Operations Manager**

- Assists with keeping the project running smoothly after it has been deployed and addresses any issues/concerns that may arise

### **IT Security Specialist**

- Ensures key security systems' requirements are properly created and implemented
- Responsible for getting all security-related certifications for the solution Lead Solution Architect
- Leads the creation and updating of the project's solution architecture
- Leads the development of the technical design document that translates business requirements into software solutions
- Works with the Enterprise Architecture Lead to ensure that project solution is aligned with EA
- Office of the Chief

### **Procurement Officer (OCPO)**

- Primarily responsible for obtaining all contracted goods and services required by the Department efficiently and in the most cost-effective manner possible to enable the Department to meet its strategic objectives
- Ensures requests for proposals and contracts incorporate and reference the Project Planning and Management (PPM) Life Cycle policy
- Verifies that all acquisitions of IT resources have been reviewed by the CIO and does not execute the procurement of IT goods and services without approval of the CIO



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**Office of the Customer Relationship and Performance Management/Investment Management (OCRPM/IM)**

- Manages IT investments financially by coordinating with the CFO
- Ensures alignment of IT acquisitions with IT investments
- Chairs the Investment Review Sub-Committee (IRC)
- Participates in Technical Review Sub-Committee (TRC) as a non-voting member

**Office of the Customer Relationship and Performance Management/Program Management Office (OCRPM/PMO)**

- Manages customer relationship coordinators
- Provides IT Project Managers to lead IT projects and serve on IPTs
- Holds IT project status review meetings
- Maintains policies, practices, standards, guidelines, tools, and training guidance for HUD's PPM Life Cycle

**Privacy Lead**

- Ensures that all requirements for the protection of personally identifiable information are met by HUD IT investments
- Ensures that adequate safeguards against disclosure of information protected under the Privacy Act are incorporated into the system

**Program Area Stakeholders**

- Individuals in Program Areas who impact or are impacted by the project because of their work responsibilities, and would likely be identified by the Business Lead, Project Sponsor or Investment Owner

**Project Change Control Board**

- As a work group of the IPT, performs the project's change management responsibilities
- Controls the changes that occur to the project and its associated documentation

**Project Sponsor**

- Provides oversight of customer resources, oversees the Business Lead's actions, and serves as the business approval authority for project funding and execution
- Serves as the investment owner's primary representative for the investment

**Release Manager**

- Assists in the testing and deployment of solutions

**Requirements Lead**

- Gathers, organizes and manages the project's requirements and updates the Requirements Definition document, the Requirements Management Plan and the Requirements Traceability Matrix



**Solution Development Lead**

- Reviews design documentation to ensure it matches the actual architectural design
- Works with IT PM to schedule and oversee development resources

**Solution Developers**

- Develop the technical components of project throughout the PPM Life Cycle

**Technical Review Committee**

- Conduct PPM control gate reviews based on the project cost and (TRC)/ Customer Care Committee (CCC) authorized thresholds
- Prior to control gate reviews, review submitted artifacts for specific PPM phase
- Prioritize HUD’s Segment Architecture investments (CCC)
- Review and support the Enterprise Roadmap (CCC)
- With EA, manage HUD’s architecture and technical standards (TRC)
- Recommends architectural changes to the CCC and EIB (TRC)
- Applies governance oversight criteria (TRC)
- Coordinates with IRC, CCC, and EIB (TRC)

**Testing Lead**

- Uses the Requirements Definition document and Requirements Traceability Matrix to develop solution test cases
- Works with the IT PM to schedule testing and testing resources
- Oversees all solution testing and validates test results
- Works with IV&V to coordinate review efforts

**7. Effective Date/Implementation**

HUD began the transition to version 2.0 of PPM in February 2014. A robust year long program of stakeholder engagement including orientations, open houses, and finally deep dive training sessions was implemented.

**8. Approved**

  
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Rafael C. Diaz, Chief Information Officer

2/4/16  
\_\_\_\_\_  
Date





## 9. Appendix A: Tailoring Projects

The PPM Life Cycle may be tailored to address the circumstances of each individual project using cost, interoperability, and exposure indicators. It aims to capture the minimum level of detail necessary to ensure project success. The decisions of PPM tailoring are captured in the Project Process Agreement (PPA), which documents the reasons for using, combining, or skipping specific artifacts applicable to the project.

Projects are classified as small, medium or large based on the following criteria:

**Cost** - A project’s estimated development, modernization, or enhancement (DME) life cycle cost is an indicator of potential risk. Projects with high DME costs have typically greater opportunities to derail and may require additional documentation than those with low DME costs.

**Interoperability** - Refers to the number of business areas or systems impacted by the project. Interoperability describes the extent to which systems and devices can exchange data, and interpret that shared data. For two systems to be interoperable, they must be able to exchange data and subsequently present that data such that it can be understood by a user.

**Exposure** - Defined as the level of interest in meeting project goals, i.e., business unit branch or division, mission area leader, the Secretary, OMB, Congress or other external entities (Shared Services). The classification also determines the level of oversight and decision-making that is applicable to the project. The Technical Review Sub-Committee (TRC) is the decision making authority for small projects; the Customer Care Committee (CCC) for medium projects; and the Executive Investment Board (EIB) for large projects. Decision making authority is illustrated in this table.

| Dollar Threshold | Cost                     | Interoperability            | Exposure           | Decision Making Authority |
|------------------|--------------------------|-----------------------------|--------------------|---------------------------|
| Small            | Less than \$500,000      | One program area            | None of the below  | TRC                       |
| Medium           | \$500,000 to \$5 million | Two program areas           | GDAS interest      | CCC                       |
| Large            | Greater than \$5 million | Three or more program areas | Secretary interest | EIB                       |



## 10. Appendix B: External Authorities

| DIRECTIVE  | SUMMARY   |
|--|---|
| Federal Information Technology Acquisition Reform Act (FITARA) | Enacted on December 19, 2014, the Federal Information Technology Acquisition Reform Act (FITARA) increases the role and significance of CFO Act agency CIOs in the acquisition of IT products and services as well as writing PortfolioStat and the Federal Data Center Consolidation Initiative into law. The new legislation increases the visibility of planned IT expenditures as well as enhances the rigor of agency governance.  |
| Chief Financial Officer (CFO) Act of 1990                      | Provides overview of the role of the Chief Financial Officer specific to developing and maintaining integrated accounting and financial management systems; directing, managing, and providing policy guidance and oversight of all agency financial management personnel, activities, and operations; approving and managing financial management systems design and enhancement projects; developing budgets for financial management operations and improvements; implementing agency asset management systems, including systems for cash management, credit management, debt collection, and property and inventory management and control; and monitoring the financial execution of the agency budget in relation to actual expenditures.  |
| Clinger Cohen Act of 1996                                      | The Clinger Cohen Act requires agencies to align IT resource planning to support their strategic missions; to implement a capital planning and investment control process that links to budget formulation and execution; and rethink and restructure the way they do their work before investing in information systems. 5125 (b) The Chief Information Officer of an executive agency shall be responsible for (2) developing, maintaining and facilitating the implementation of a sound and integrated information technology architecture for the executive agency; and (3) promoting the effective and efficient design and operation of all major information resources management processes for the executive agency, including improvements to work processes of the executive agency. |
| Computer Fraud and Abuse Act of 1986 (PL 99-474)               | This Public Law also codified in, 18 US Code 1030, addresses fraudulent and related activities in connection with computers.  |
| Computer Matching and Privacy Protection Act of 1988           | This Act amended the Privacy Act by describing the manner in which computer matching involving Federal  |



| DIRECTIVE   | SUMMARY  |
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|   | agencies could be performed and by adding certain protections for individuals applying for and receiving Federal benefits.   |
| Contingency Planning Guide for Information Technology Systems, NIST SP 800-34 | Addresses specific contingency plans for seven IT platforms and provides strategies and techniques common to all systems. The document also defines a seven-step contingency process that an agency may apply to develop and maintain a viable contingency planning program for their IT systems. These seven progressive steps are designed to be integrated into each stage of the system development life cycle (SLDC). |
| E-Government Act of 2002, as amended  | Codifies the President's Management Agenda to expand E-Government initiatives, sets new management, human resource management, program decisions. Codifies the Chief Information Officer Council.  |
| Electronic Communications Privacy Act of 1986 (PL 99-58)                      | Provides a definition of electronic communications and prohibits unlawful access and disclosure to electronic communications.  |
| Federal Acquisition Streamlining Act of 1994 (FASA)                           | The comprehensive acquisition reform legislation streamlines the federal government's \$200 billion-a-year acquisition system and dramatically changes the way the government performs its contracting functions. A key provision in FASA is the strongly stated preference for buying commercial "off-the-shelf" items, rather than purchasing through the detailed bidding process for government-unique items.          |
| Federal Financial Management Improvement Act (FFMIA) of 1996                  | Provides consistency of accounting by agencies from one fiscal year to the next and establishes uniform accounting standards throughout the Federal Government.  |
| Federal Information Security Act (FISMA) of 2002                              | FISMA requires each federal agency to develop, document, and implement an agency-wide program to provide information security for the information and information systems that support the operations and assets of the agency, including those provided or managed by another agency, contractor, or other source. Reporting requirements and supplemented by annual OMB Memoranda.                                       |
| Federal Managers Financial Integrity Act, (PL 97-255)                         | Requires ongoing evaluations and reports of the adequacy of the systems of internal accounting and administrative control of each executive agency.  |
| Federal Records Act of 1950 (as amended)                                      | The Act establishes the framework for records management programs within Federal agencies.   |
| Freedom of Information Act (PL 93-502)  | This act allows for full or partial disclosure of previously   |



| DIRECTIVE                                      | SUMMARY   |
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|  | unreleased information and documents controlled by the United States Government.  |
| Government Funding Transparency Act of 2008    | S.2590 Sec 2 (b) ...the Office of Management and Budget shall,...ensure the existence and operation of a single searchable website accessible by the public at no cost to access, that includes for each Federal award- (A) the name of the entity receiving the award; (B) the amount of the award; (C) information on the award including transaction type, funding agency, the North American Industry Classification System code or Catalog of Federal Domestic Assistance number (where applicable), program source and an award title descriptive of the purpose of each funding action; (D) the location of the entity receiving the award, and the primary location of performance of the award, including the city, State, congressional district, and county; (E) a unique identifier of the entity receiving the award and of the parent entity of the recipient, should the entity be owned by another entity; and (F) any other relevant information specified by the Office of Management and Budget. |
| Government Paperwork Elimination Act of 1998   | The Act develops procedures for the use and acceptance of electronic signatures by executive agencies.  |
| Government Performance and Results Act of 1993 | Chapter 3 of title 5, United States Code, Section 306 (a) ...the head of each agency shall submit to the Director of the Office of Management and Budget and to the Congress a strategic plan for program activities. Such plan shall contain-(1) a comprehensive mission statement covering the major functions and operations of the agency; (2) general goals and objectives, including outcome-related goals and objectives, for the major functions and operations of the agency; (3) a description of how the goals and objectives are to be achieved, including a description of the operational processes, skills and technology, and the human capital, information and other resources required to meet those goals and objectives.   |
| IT Equipment                                   | Refer to Appendix 6 of HUD Handbook 2400.1, REV-1, CHG 2, regarding "Limited Personal Use" of Government Office Equipment Policy  |
| The Rehabilitation Act                         | Section 508 mandates that when federal agencies develop, procure, maintain, or use electronic and information technology- such as phones, office equipment, websites, multimedia, computer hardware and software – employees and members of the public  |



| DIRECTIVE                           | SUMMARY  |
|-------------------------------------|--|
|                                     | with disabilities must have access comparable to the access provided to persons without disabilities. All technology developed, procured, maintained or used by an agency must either comply with the standards published by the U.S. Access Board or provide substantially equivalent access.   |
| The Rehabilitation Act, Section 508 | Section 508 mandates that when federal agencies develop, procure, maintain, or use electronic and information technology – such as phones, office equipment, websites, multimedia, computer hardware and software – employees and members of the public with disabilities must have access comparable to the access provided to persons without disabilities. All technology developed, procured, maintained or used by an agency must either comply with the standards published by the U.S. Access Board or provide substantially equivalent access. |

## 11. Appendix C: GLOSSARY

| System Development Methodology Types |   |
|--------------------------------------|---|
| Agile                                | <p><b>Agile software development</b> is a group of <u>software development methods</u> in which requirements and solutions evolve through collaboration between self-organizing, <u>cross-functional teams</u>. It promotes adaptive planning, evolutionary development, early delivery, continuous improvement and encourages rapid and flexible response to change. It is a conceptual framework that focuses on frequently delivering small increments of working software.</p>  |
| Prototyping                          | <p><b>Software prototyping</b> is the activity of creating <u>prototypes</u> of software applications, i.e., incomplete versions of the <u>software program</u> being developed. It is an activity that can occur in <u>software development</u> and is comparable to <u>prototyping</u> as known from other fields, such as <u>mechanical engineering</u> or <u>manufacturing</u>.</p>   |
| RAD                                  | <p><b>Rapid application development (RAD)</b> is both a general term used to refer to alternatives to the conventional <u>waterfall model</u> of software development. In general, RAD approaches to software development put less emphasis on planning tasks and more emphasis on development. In contrast to the waterfall model, which emphasizes rigorous specification and planning, RAD approaches emphasize the necessity of adjusting requirements in reaction to knowledge gained as the project progresses.</p> |
| RUP                                  | <p>RUP is not a single concrete prescriptive process, but rather an adaptable process <u>framework</u>, intended to be tailored by the development organizations and software project teams that will select the elements of the process that are appropriate for their needs. RUP is a specific implementation of the <u>unified process</u>.</p>  |
| Spiral                               | <p>The <b>spiral model</b> is a risk-driven <u>process model</u> generator for software projects. Based on the unique risk patterns of a given project, the spiral model guides a team to adopt elements of one or more process models, such as <u>incremental</u>, <u>waterfall</u>, or <u>evolutionary prototyping</u>.</p>   |