SSA IT Guide to

CPIC | Capital Planning Investment Control

SOCIAL SECURITY ADMINISTRATION USA

socialsecurity.gov

1   INTRODUCTION

1.1 PURPOSE

The *Social Security Administration's (SSA's) Guide to Information Technology Capital Planning and Investment Control,* herein referred to as the Guide, defines SSA's Capital Planning and Investment Control (CPIC) process. The Guide gives staff members practical information to better understand SSA Information Technology (IT) planning and how the agency is meeting the Office of Management and Budget (OMB) requirements. It also serves as a framework within which SSA can formulate, justify, manage, and maintain a portfolio of IT Investments.

The Guide is issued in compliance with the Federal Information Technology Acquisition Reform Act (FITARA), the Clinger Cohen Act of 1996, OMB Circular A-130, and OMB Circular A-11. In addition to Federal legislation and OMB directives, the following SSA issuances also drive and complement IT Capital Planning:

- SSA Directive 8000.01 – formalizes the Chief Information Officer's (CIO) authority over all agency IT, including the SSA IT budget.
- SSA Policy 8100.01 – requires the implementation of IT CPIC processes that effectively manage the selection, control, and evaluation of IT Investments, ensuring prioritization and sound management.

See SSA Manual 8205.01 Federal Legislation and Requirements for a list of applicable guidance.

1.2 SCOPE

The Guide addresses requirements of the SSA IT Capital Planning process. The Guide will be updated, at a minimum annually, to include any new internal and/or external process changes. See the Issuance Library for SSA directives, policies, and manuals mentioned in the Guide.

2   TERMINOLOGY

For consistency and clarity, the following terms and their meanings are applied to this Guide. For a complete glossary see SSA Manual 8200.01 Issuance Library Glossary.

Information Technology: Any 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 agency.

84 **Issuance:** The action of supplying or distributing something, especially for official purposes. The action of formally
85 making something known. At SSA we have four types of IT issuances: directives, policies, directive type memos, and
86 manuals.

87 **IT Investment**: This term refers to the expenditure of IT resources to address mission delivery and management support.
88 An IT Investment may include a project or projects for the development, modernization, enhancement, or maintenance
89 of a single IT asset or group of IT assets with related functionality, and the subsequent operation of those assets in a
90 production environment. All IT Investments should have a defined life cycle with start and end dates, with the end date
91 representing the end of the currently estimated useful life of the Investment, consistent with the Investment's most
92 current alternatives analysis if applicable. When the asset(s) is essentially replaced by a new system or technology, the
93 replacement should be reported as a new, distinct Investment, with its own defined life cycle information.

94 **Project:** This term refers to a temporary endeavor undertaken to accomplish a unique product or service with a defined
95 start and end point and specific objectives that, when attained, signify completion. Projects can be undertaken for the
96 development, modernization, enhancement, disposal, or maintenance of an IT asset. Projects are composed of
97 activities. When reporting project status, to the maximum extent practicable, agencies should detail the characteristics
98 of "increments" under modular contracting as described in the Information Technology Management Reform Act of
99 1996 (ITMRA, also known as the "Clinger-Cohen Act") and the characteristics of "useful segments," as described in OMB
100 Circular A-130.
101 **Product:** This term refers to the overall experience provided by a combination of capabilities that are created through a
102 process, supported by data, and provide value to a customer in order to achieve agency goals. It is a software
103 technology and/or service that fills a need and delivers value to internal and external SSA customers while achieving
104 agency goals and mission. Depending on the size and/or complexity of the product, product management
105 methodologies require development through implementation of one or more projects. A project creates or enhances a
106 product. A project is the 'how' and 'when' in product development while a product is the
107 'why' and 'what.'

108 # 3 OVERVIEW TO IT CAPITAL PLANNING

109

110 Each year SSA submits a budget request to OMB to justify its funding needs. Included in the budget request is a separate
111 petition and justification for IT spend. OMB uses the data to:

112 • Inform their leadership of how SSA plans to invest the IT budget and to answer complex budget questions.
113 • Initiate conversations to clarify inconsistence with IT Dashboard (ITDB) and Chief Financial Officer (CFO) data.
114 • Finalize budget recommendations and prepare congressional justification.

115 Once the President approves the government budget, approximately in January, SSA resubmits the budget request
116 consistent with the approved funds. The process for justifying and strategically managing the IT spend is called Capital
117 Planning and Investment Control and it consists of four phases.

118 The Guide will walk through each of the CPIC phases along with the factors that influence the process. For a detailed
119 diagram of the process see Appendix A: SSA CPIC Process Flow.

120

121

3.1 PLAN -> SELECT -> CONTROL -> EVALUATE

Capital Planning and Investment Control refers to a decision-making process that ensures IT Investments integrate strategic planning, budgeting, procurement, and management of IT in support of agency missions and business needs.[1] It consists of three phases: select, control, and evaluate. SSA's process includes an additional phase, plan. *Figure 1* below shows the CPIC process phases.

- **Plan.** The CPIC process begins with an idea, initiative, or legislation that requires IT resources to accomplish a mission. Once the business need and vision are clearly defined by the sponsor, a proposal is developed. The proposal includes justification for the business need, projected lifecycle costs, and an alternatives analysis with quantitative and qualitative results.

- **Select.** During the Select Phase a proposal is presented to the Information Technology Investment Review Board (IT IRB) for approval. The IT IRB selects IT Investments that best support SSA's mission. For investments that will be a Major IT Investment, the proposal is the foundation of the OMB business case that justifies the funding request.

- **Control.** Progress is tracked for all investments against the planned results. Major IT Investments require performance measures, contractor oversight/vendor management, and risk reporting. This information feeds into the CIO rating and is used to populate the OMB ITDB.

- **Evaluate.** Projects and investments are selected for Post-Implementation Reviews (PIRs) to determine if objectives were met and document areas of improvement that can influence pre-select and select. In addition, major investments complete an Operational Analysis to ensure that the investment is performing well enough to merit continued funding.

---

[1] FY 2020 IT Budget - Capital Planning Guidance
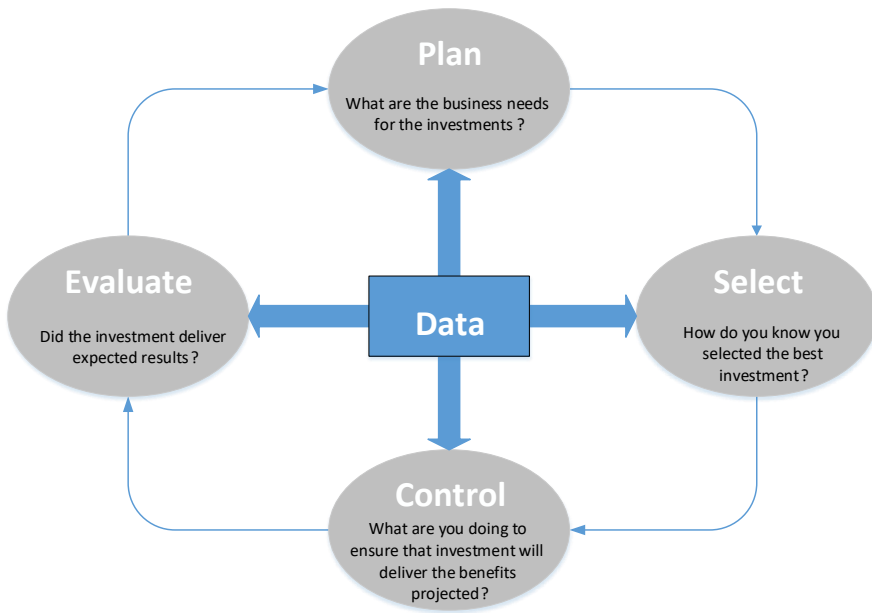
Figure 1 - CPIC Overview

4   FACTORS THAT INFLUENCE THE CPIC PROCESS

The political climate and current administration influence the CPIC process, using it to accomplish their goals/objectives. As a result, SSA's mission and/or how the agency will achieve the mission shifts. Appendix A: SSA CPIC Process Flow depicts the key external drivers, how it intersects with SSA's mission, and subsequently impacts the CPIC process.

4.1   EXTERNAL DRIVERS

4.1.1   President's Management Agenda

The President's Management Agenda (PMA) is the President's strategy for improving the management and performance of the Federal government. Whether the PMA reinforces existing guidance or implements new strategies, SSA adjusts to the new priorities.

4.1.2   Legislation

Congress continues to pass laws to enforce accountability and ensure proper management of government resources. One of the ways this is done is by grading CFO Act Agencies' implementation of FITARA using the FITARA Scorecard. To meet the Administration's expectations and fulfill our responsibilities to the American public, SSA incorporates the changes into its mission.

4.1.3 Executive Orders

161
162 The authority vested in the President by the Constitution allows him/her to issue executive orders that have the force of
163 law, but do not have to be approved by Congress.[2] Executive orders usually are based on existing statutory powers and
164 have been used to give additional impetus to the Clinger-Cohen Act and FITARA.

4.1.4 Litigation

165
166 The Administration continues to adhere to Judicial decisions that affect the administration of SSA programs, ensuring
167 fair and equitable treatment in the application of laws, regulations, rules, and policy for the American people.

4.1.5 Office of Management and Budget

168
169 OMB is responsible for overseeing Federal agencies' information technology practices. As a part of this core function,
170 OMB develops and ensures implementation of policies and guidelines that drive enhanced technology performance and
171 budgeting across the Executive Branch.
172

4.2 SSA's Mission

4.2.1 Commissioner's Priorities

174
175 Each Commissioner establishes objectives to achieve during his/her tenure. The objectives involve ways to improve the
176 customer experience, reduce backlogs, the way we do business, and transform IT.

4.2.2 CIO's Priorities

177
178 As outlined in SSA Directive 8000.01, the CIO is responsible for all IT at the agency which encompasses major areas such
179 as: (1) strategic planning, (2) planning, programming, and budgeting, (3) investment management, (4) information
180 security, and (5) workforce. The CIO provides guidance to improve the five areas, to adopt new technologies that
181 transforms the way SSA does business, to institute a new software development methodology, to implement critical
182 legislation, or to provide strategic direction that will impact SSA's compass.

4.2.3 Agency Strategic Plan (ASP) /Agency Performance Plan (APP)

183
184 The ASP provides general and long-term goals that SSA aims to achieve, the actions the agency will take to realize the
185 goals, the strategies planned, how SSA will deal with challenges and risks that may hinder achieving results, and the
186 approaches it will use to measure progress.[3] All proposals for IT Investments must align with a strategic goal and
187 objective to be approved.

188 In the APP, SSA establishes current year and budget year performance goals, measures, and targets for the objectives
189 outlined in the ASP. The APP is included as part of the agency's annual budget request to OMB.

4.2.4 Digital Modernization Strategy (DMS)

190
191 Digital modernization is a "whole of agency" effort to upgrade or replace current processes, policies, and technologies to
192 improve the customer and employee experience, and to improve the overall organization. This effort intersects business

---

[2] Cornell Law School
[3] OMB Circular No. A-130

193 priorities with technology needs to provide tangible benefits to the public. We will transform current business
194 processes, adopt new business processes and architecture, improve data governance, reduce our technical burden, and
195 implement new technologies with a focus on enhancing customer experience (CX) to remove barriers to service.
196
197 SSA's DMS is a four-year plan (Fiscal Year 2023 to Fiscal Year 2026) that focuses on upgrading systems, applications, and
198 software to meet the growing needs of the public. As we transform into a digital workforce, we aim to create new
199 digitalized services that will improve the customer and employee experience. The Run, Grow, and Transform model was
200 used to set the criteria for the DMS investments, and it has enabled us to prioritize initiatives that will help SSA's IT
201 capabilities continue their evolution into a new digital platform:
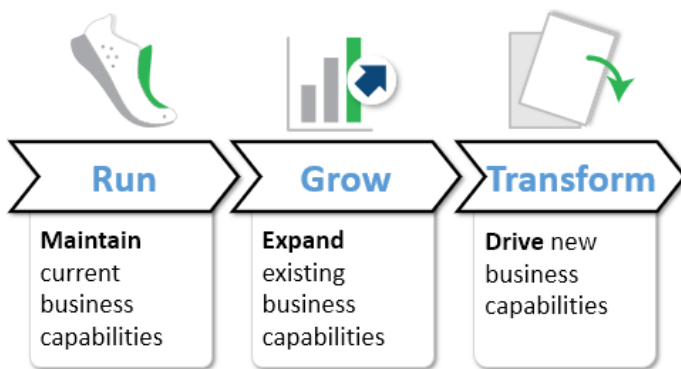
202

Figure 2 – Run Grow Transform Investment Model

203 Furthermore, the DMS provides a unique opportunity for us to align across the President's Management Agenda
204 priorities and Agency Strategic Priority goals. This alignment will keep the scope of DMS-related activities and
205 investments focused and prioritized on delivering results that are relevant to our country's current needs.
206
207

208 **4.2.5   Information Security Policy (ISP)**
209 The Information Security Policy serves as a protocol to protect, enable, assure, and secure SSA's IT resources and data.
210 The Federal Information Security Modernization Act (FISMA) of 2014 requires the CIO, through the Commissioner, to
211 establish an agency-wide Information Security program, and the supporting policies to support that program. The ISP
212 documents how SSA complies with FISMA and implements National Institute of Standards and Technology (NIST)
213 standards and other Federal regulatory requirements.

214 # 5   GOVERNANCE AND ENTERPRISE PROCESSES
215

216 **5.1   EXTERNAL OVERSIGHT EXPECTATIONS AND GUIDANCE**
217 Requirements defined in the Clinger-Cohen Act, FITARA, and related OMB and Government Accountability Office (GAO)
218 guidance outline Federal agencies' responsibility to properly budget scarce resources, to align with agency goals, as well

219 as the need to monitor those resources after they are allocated. OMB, GAO, and the SSA's Office of the Inspector
220 General (OIG), and others, address the needs from different perspectives, described below.

5.1.1 Office of Management and Budget

222 OMB's Capital Programming Guide is intended to help agencies achieve disciplined capital programming processes.
223 OMB's guidance for planning and budgeting begins with processes that aim to achieve tight integration between
224 program performance objectives and planning, providing SSA with an opportunity to fulfill requirements and to develop
225 and use Enterprise Architecture (EA) as a framework for logical requirements and capital asset planning. Individual
226 activities include establishing a baseline plan, assessing options and alternatives, analyzing risks, and preparing
227 acquisition baselines and strategies that support more effective management.

228 On an annual basis, OMB produces the IT Budget Capital Planning Guidance included in section 55 of OMB Circular A-11.
229 The IT Budget Capital Planning Guidance outlines the requirements for all agencies that adhere to the Chief Financial
230 Officer Act to report their IT budget and management information to the ITDB.

231 The IT budget and management information consists of three parts:

232 • Agency IT Portfolio Summary (AITPS)
233 • Major IT Business Case (MITBC)
234 • Standard Investment Report (SIR)

5.1.2 Government Accountability Office and SSA Inspector General

236 GAO and OIG provide an independent evaluation of how the Federal government spends taxpayer dollars. GAO's
237 mission is to support the Congress in meeting its constitutional responsibilities and to help improve the performance
238 and ensure the accountability of the Federal government for the benefit of the American people. OIG has authority to
239 inquire into all SSA programs and IT activities, to conduct audits, inspections, and investigations. Audit findings and
240 recommendations often factor into establishing the priority of various IT Investments that will address those
241 recommendations or help to eliminate weaknesses found in SSA processes, services, or program management. SSA
242 strives to incorporate the recommendations into its business process, not as a compliance exercise, but rather as means
243 of increasing efficiencies and reducing waste.

5.1.3 The CIO Council

245 The Federal CIO supports goals[4] of greater transparency, accountability, and citizen participation in Federal Government
246 using innovative IT strategies. The Federal CIO works to ensure information security, protect individual privacy, and save
247 taxpayer dollars by creating a Federal Government that strategically, efficiently, and effectively uses IT to serve and
248 protect U.S. citizens.

249 The Federal CIO and the CIO Council establish standards against which the success of all agency programs can be
250 measured, including:

251 • Monitoring the year-to-year performance improvement of Federal Government programs
252 • Attracting and retaining a high-performance IT workforce

---

[4] CIO.gov

253   •   Optimizing Federal Government information resources and investments

254   •   Aligning IT solutions with Federal enterprise business processes

255   •   Adopting and sharing best IT management practices

256   •   Managing risk and ensuring privacy and security

5.2 INTERNAL GOVERNANCE STRUCTURE

257

258 Enterprise IT governance provides the framework for the decision making and accountability required to ensure IT
259 Investments efficiently and effectively meet agency strategic and business objectives. SSA has established a two-step
260 review process for executive oversight of its IT Investment planning, which includes the IT IRB and the Architecture
261 Review Board (ARB).

5.2.1 Information Technology Investment Review Board

262

263 The IT IRB is an agency-wide executive board that governs the IT Investment management process. It provides a forum
264 for deliberations about SSA IT, and information resource investments needed to achieve the agency's mission needs and
265 business requirements. The CIO chairs the IT IRB with the assistance of the CFO. The IT IRB governs the agency's IT
266 Investment management process to focus on up-front investment planning, informed investment selection, transparent
267 investment control, and relevant investment evaluation to provide the greatest benefit to the agency's mission.[5]

5.2.2 Architecture Review Board

268

269 SSA's ARB is part of a common approach to the practice of Enterprise Architecture (EA) throughout the Executive Branch
270 of the U.S. Federal Government. Federal law and policy require agency heads to develop and maintain an agency-wide
271 EA that integrates strategic drivers, business requirements, and technology solutions. This includes principles for using
272 EA to help agencies eliminate waste and duplication, increase shared services, close performance gaps, and promote
273 engagement among government, industry, and citizens.

274 The ARB serves as a cross-component decision making body chaired by the Chief Architect, under the authority of the
275 Chief Information Officer (CIO), to align IT initiatives with Enterprise Architecture standards as well as agency IT goals,
276 strategies, and objectives. SSA's priority is to reduce the agency's technical debt and align technology investments with
277 business objectives and capabilities. The ARB is typically made up of key, executive-level stakeholders across the agency
278 to ensure IT initiatives align with enterprise goals and strategies while meeting development standards and best
279 practices.

5.2.3 Solution Architecture and Advisory

280

281 Solution Architecture and Advisory facilitates obtaining guidance from EA Solution Architects and Application
282 Architecture and Infrastructure Architecture Advisory Groups. EA Solution Architects and the Advisory Groups provide
283 consultation, feedback and guidance towards well architected solutions that are EA compliant. The advice and
284 recommendations provided to Application Teams, Tech Leads and Architects is published with transparency for
285 referencing in the EA Assessment processes.

---

[5] IT IRB Charter

286

5.2.4 Division of Resource Management and Acquisition

The Division of Resource Management and Acquisition (DRMA) provides timely, standardized, and objective market assessment reports using repeatable processes before budgets are approved. DRMA will review agency requirements, SSA owned software solutions, and utilize multiple third-party consulting experts to produce objective cost analysis.

5.2.5 Office of the Chief Business Officer (OCBO)

The CBO identifies strategic changes to the agency's business processes that will both improve service to the public and improve the efficiency of the agency's service. This includes increasing the self-service options available to the public, while enhancing the agency's internal systems to facilitate more efficient in-person services. Through its roadmap for future business modernization, the office identifies innovative solutions that optimize and provide a consistent level of service across all channels. CBO regularly collaborates with OITFMS to manage information technology investments and Products.

5.2.6 Product Management

Product Management at SSA is the practice of designing modern products (software and hardware) which provide value experienced by internal and external SSA customers. It also includes Core IT products and Operations and Maintenance (O and M) activities. The goals of product management at SSA are:

1. Identify better targets and create greater value to customers;
2. Transform the way SSA conducts business; and
3. Maximize Return on Investment (ROI) for the agency. This approach is flexible and allows the agency to pivot based on changing market needs and technology.

Product Managers work closely with IT investment management over the course of an IT investment lifecycle to enable effective performance.

Additional information on Product Management can be located on the Product Management SharePoint site.

5.2.7 Office of Information Technology and Management

The Office of IT Financial Management and Support (OITFMS) plays a key role in the execution of the CPIC process by performing the following:

- Ensures the development of IT Investments that support the SSA strategic plan and its missions, goals, strategies, and priorities.
- Ensures agency and government-wide guidance and training are provided to assist PMs in their implementation and documentation of the IT CPIC processes.
- Prepares and updates the Guide, detailing guidelines, and procedures for implementing IT capital planning.
- Performs ITDB submissions and monitors investment health.
- Performs analysis on investments to support the development of investment value measures and ensure the accrual of business value according to an investment's approved plan.
- Coordinates guidance to address the requirements of OMB Circular A-11, including the AITPS and MITBC.
- Ensures compliance with appropriate SSA issuances.
- Develops and publishes IT plans, including the SSA IT strategic, capital, and operational plans.

323 • Ensures that the CPIC, EA, IT security, enterprise engineering, and program management processes are properly
324 synchronized and linked.
325 • Aligns funding with Full-Time Employee (FTE) and contractor support to execute work.
326

327 ## 5.3 TECHNOLOGY BUSINESS MANAGEMENT

328 ### 5.3.1 Background
329 Technology Business Management (TBM) is an IT management framework that implements a standard IT spend
330 taxonomy. TBM enables organizations to disaggregate IT spending into smaller, consistent categories to provide CIOs
331 and other executive-level stakeholders with a more accurate and detailed understanding of their organization's IT costs.
332 This allows CIOs to identify duplicative or unnecessary spending and to make better informed decisions regarding future
333 investments.[6]

334 ### 5.3.2 TBM Adoption in the Federal Government
335 The TBM Council created the IT COST Commission (ITCC) and tasked it with developing recommendations and best
336 practices in the Federal space. The ITCC report states, "Federal technology leaders need the ability to generate accurate,
337 reliable, and benchmarkable IT cost data that is consistent across the Federal government." Implementing a standard
338 TBM taxonomy will provide tremendous business value to agencies and stakeholders, including:

339 *Figure 3 - Benefits of TBM*
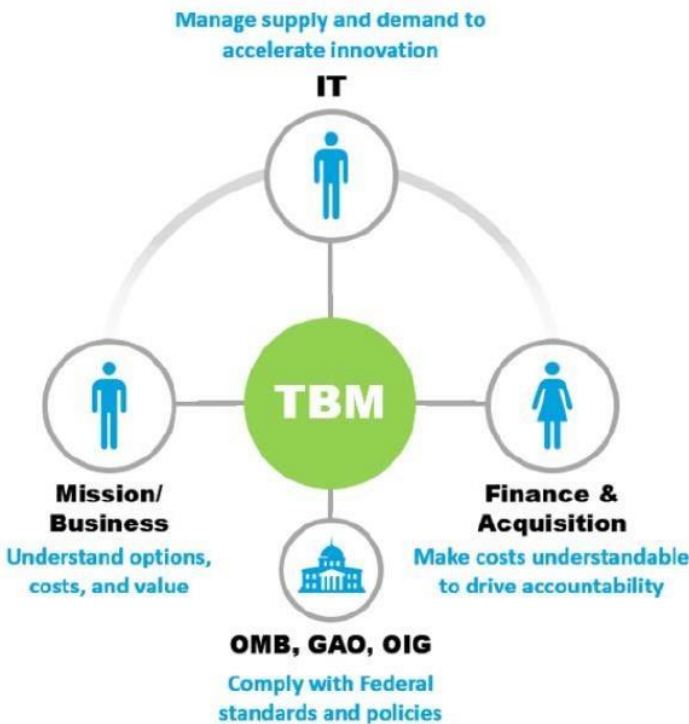
Standardized IT budget data: standardized cost models give agencies the ability to benchmark costs, prove the business value of IT Investments, and track trends over time.

• Transparency: standardized measurement tools help IT leaders optimize costs and get the best value for their IT dollar.

• Better communication: standardization provides a common starting point for cross agency collaboration around shared challenges.

• Improved efficiencies: a common framework to benchmark IT infrastructure costs across agencies highlights successful IT Investments and fosters replication of best practices.

In addition, TBM solidifies the partnership between the CIO, CFO, and the mission/business partners to provide the facts they need to collaborate on business aligned decision and capitalize on new opportunities. *Figure 3* illustrates the

357 collaboration between the respective functions/roles; Mission/Business refers to mission/business partners; IT refers to the CIO;
358 Finance & Acquisition refers to the CFO.

---

[6] CIO.gov

360 ### 5.3.3 SSA Implementation

361 OMB requires TBM implementation for all CIO Act agencies and publishes requirements in A-11. SSA follows all OMB
362 requirements for TBM implementation. In FY2019 submission, SSA started with the most significant portion of the IT
363 Budget by mapping the infrastructure programmatic area to the TBM IT towers. This pilot laid the foundation for
364 mapping the remaining IT Budget to TBM IT towers in the FY2020 submission. With the FY2020 submission, SSA
365 completed implementation by mapping the IT budget to Cost Pools and restructuring infrastructure investments into
366 the TBM-aligned standard investments. To leverage industry best practices and lessons learned from the government
367 early adopters, SSA participates in the Federal Technology Investment Management Community of Practice.

368 # 6 CPIC ROLES AND RESPONSIBILITIES

370 ## 6.1 PROGRAM AND PROJECT MANAGERS

371 The Program Manager (PgM) and Project Managers (PMs) oversee the completion of the IT Investment. The PgM/PM
372 also track the project plan against the baselines and furnish the updated cost, schedule, and performance information
373 required to support CPIC decision making throughout the life cycle. Other responsibilities of the PgM/PM are as follows:

374 • Submit all reports in a timely manner.
375 • Ensure all projects are utilizing the proper software development methodology.
376 • Obtain the Federal Acquisition Certification for Program and Project Managers (FAC-P/PM) to stay current with
377 project management processes and understand acquisition practices.
378 • Obtain senior level (level 3) FAC-P/PM certification to lead or manage major IT Investments.
379 • Follow the guidelines in the Office of Systems Project Management Guidebook

380 In addition, the Office of Budget (OB) worked with several components to develop the Project Management
381 Improvement Accountability Act (PMIAA) approach and framework, as well as identify the agency's non-IT acquisition
382 programs. OB considered the following criteria: Mission Impact, Cost, Legislative, Executive Order and Judicial Mandate,
383 and Political Interest. Based on these criteria, OB identified 3 portfolios and 9 non-IT acquisition programs that aligned
384 with the Agency Strategic Plan goals and objectives as required by legislation. The agency has combined the Program
385 Management Improvement Officer (PMIO) role with the Performance Improvement Officer (PIO) role to establish
386 project management guidelines, aid the PgM/PMs and implement the PMIAA. The Deputy Commissioner for Budget,
387 Finance and Management is assigned to the PMIO role.

7 OFFICE OF MANAGEMENT AND BUDGET SUBMISSION

7.1 INVESTMENT TYPES

To obtain funding, the agency is required to submit the President's Budget, or AITPS, to OMB each fall. It includes IT Investments from all funding sources. SSA's AITPS consists of the following investment types:

- Major IT Investments
- Non-major IT Investments
- Standard Infrastructure Investments
- Non-Standard Infrastructure Investments
- Funding Transfer Investments

7.1.1 Major IT Investments

Major IT Investments require special management[7] attention because it meets one of the criteria below:

- Designated by the SSA CIO as critical to the agency mission or to the administration of programs, finances, property, or other resources
- Has significant program or policy implications
- Has high executive visibility
- Contains high development, operating, or maintenance costs
- Provided by an unusual funding mechanism

The agency is required to submit Major IT Business Cases to OMB for all major IT Investments. The Major IT Business Cases describe the justification, planning, implementation, and operations of individual capital assets included in the agency IT Portfolio Summary and serve as key artifacts of the agency's EA and IT capital planning processes. The Major IT Business Case is comprised of two components:

1) The Major Business Case itself, which provides key high-level investment information to inform budget decisions, including general information and planning for resources such as staffing and personnel.
2) The regular information updates to the Major IT Business Case, which provides more temporal information, related to tracking management of an investment, such as projects and activities, risks, and operational performance of the investment. This includes the CIO's responsibility to assess each Major IT Investment.[8]

7.1.2 Non-Major IT Investments

SSA is also required to submit Non-Major IT Investments. These are defined as IT Investments that do not meet the definition of "Major IT Investment," "Standard Infrastructure," "Non-Standard Infrastructure," or "Funding Transfer."

A proposal/business case is required for Non-Major IT Investments when an investment is presented to the IT IRB.

---

[7] FY 2020 IT Budget - Capital Planning Guidance
[8] OMB Circular A-11 Section 55

7.1.3   Standard/Non-Standard Infrastructure Investments

IT Infrastructure costs are broken into standard investments for Network, End User, Data Center and Cloud, Application, Delivery, and Platform to align to the IT Tower level of the TBM taxonomy. SSA leverages Non-Standard Infrastructure Investments where costs still need to be realigned.

7.1.4   Funding Transfer Investments

Investments can also be categorized as "Funding Transfer Investments." This investment category is primarily used to indicate the partner contribution to a Lead Agency Investment through inter- or intra-Agency transfers. The description of the IT Investment should indicate the Unique Investment Identifier of the managing partner investment.

7.2   OMB TIMELINE

Figure 3 outlines a national schedule of the yearly OMB submission process. Output from the CPIC phases become input for the submission. This cycle begins with planning. Appendix B: SSA Timeline outlines SSA's schedule to adhere to the OMB submission process.
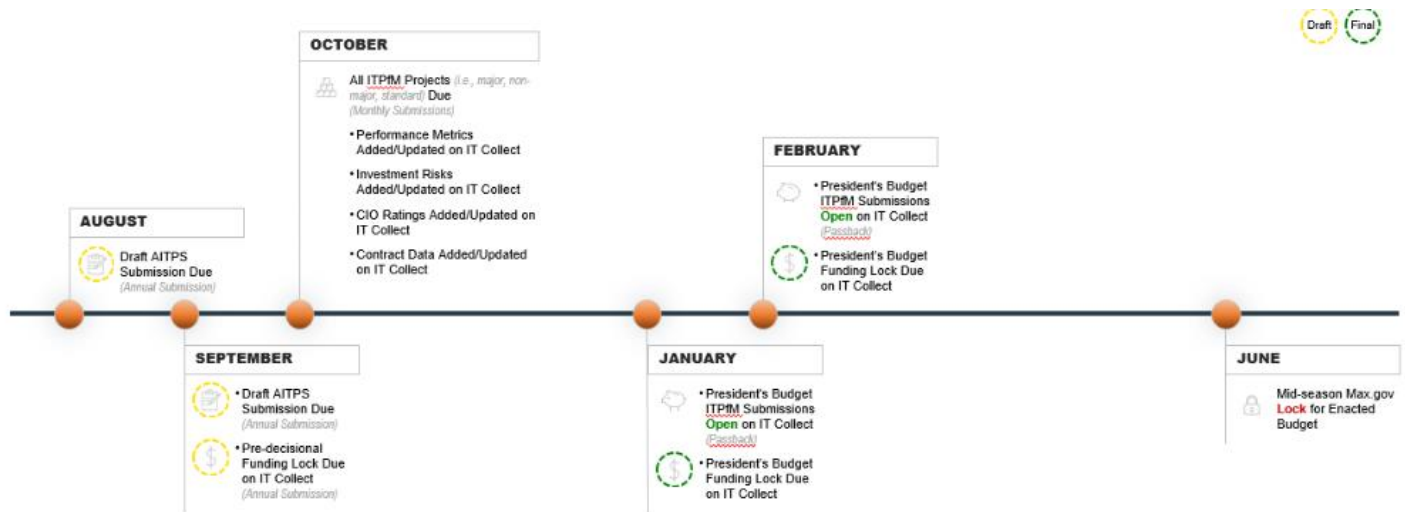
Figure 4 - National Submission Schedule

8   PLAN

8.1   PURPOSE OF THE PLAN PHASE

The Plan phase provides a process to assess proposed IT solutions for unmet requirements. It is during this phase that the business or funding need is identified and relationships to the agency strategic planning efforts are established. During this phase the actual investment proposal is developed and documented.

8.2 SSA IT BUDGET STRUCTURE

SSA has a single IT budget that is managed by the CIO. It is divided into two parts and consists of funding for:

•   Full-Time Employees and Contractors formulated into investment proposals for IT IRB approval.

•   Operational Expenses and Information Technology Services (ITS) that are formulated into funding requests for CIO approval.

451
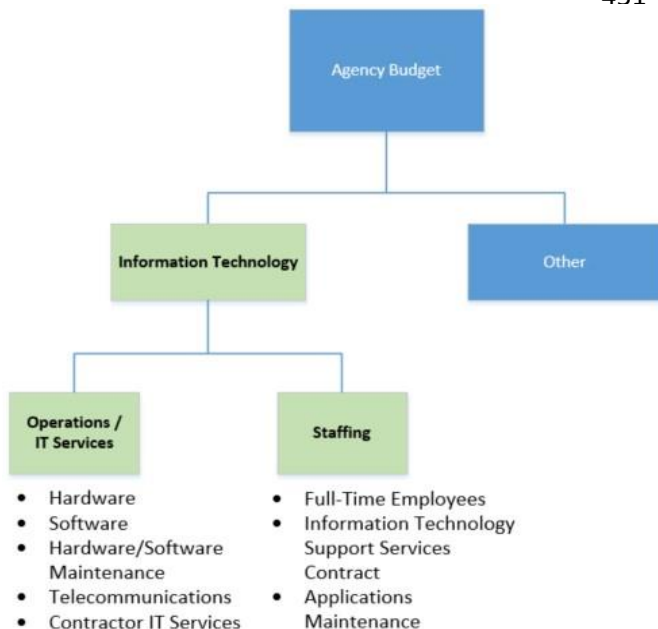
Figure 4 depicts SSA's IT budget structure. Both investment proposals and funding requests must align with the IT Guiding Principles.

Figure 5 - SSA IT Budget Structure

8.2.1 Investment Proposals

The Plan phase begins with the Business Sponsor identifying a business need. An analysis is done to ensure that the business need harmonizes with the agency's goals and objectives. OITFMS confers with the business sponsor to discuss if the current solution satisfies the business need. Once OITFMS determines that the business need has merit, a check is performed to determine if:

(1) An IT solution already exists at the agency to satisfy the business need.
(2) The proposed concept can be supported by the agency Infrastructure.
(3) The proposed concept aligns with the agency IT strategy.

468 After it is determined that the concept aligns with the agency's EA practices and architectural standards, the business
469 need, and proposed concept are articulated into the business case for an IT Investment. The Planning phase provides an
470 opportunity to focus efforts and further the development of the initiative's concept. It allows project teams to begin the
471 process of defining business requirements and associated system performance metrics, benefits, value realization, and
472 costs, as well as subsequent completion of a business case and initial investment planning efforts in preparation for
473 inclusion in the agency's investment portfolio. Project teams also assert expected business and customer value that
474 their respective investment will deliver. For a detailed explanation and resources associated with value realization
475 during Plan, reference the ITIP Value Realization policies and procedures.

476 For a detailed explanation of the Plan Phase and required artifacts see the Information Technology Investment
477 Management Process.

8.2.2 Funding Request

479 SSA's operational budget is used to provide IT equipment, software, hardware, network access, and IT security for the
480 agency. Each year a control is issued to gather the ITS requirements from among the agency's offices. Components
481 formulate their requirements into funding requests that include:

482 • Identification and alignment with related or dependent investments;
483 • Comprehensive narrative with an issue statement, proposed strategy, costs, alternatives considered, Return on
484 Investment (ROI), security compliance and costs, funding impact and dependencies, and supporting
485 documentation; and
486 • Procurement details for the Advanced Procurement Plan and Procurement Requisition.

8.2.3 Value Realization

488 Value Realization refers to the development of value measures to inform investment planning, selection, management
489 and oversight, and evaluation. Value Realization seeks to ensure that every investment has articulated the business
490 value of the investment, supports investment oversight and management, and provides meaningful data for reporting
491 investment progress and health to senior leadership. To execute on these goals, IT Investment Management works
492 closely with the business sponsor and staff to do the following:
493   1. Identify expected value realized during investment planning;
494   2. Baseline the current state of value and estimate future state investment impact; and
495   3. Collect and track investment value throughout the investment lifecycle.
496
497 During the Plan phase, an investment representative, typically the business lead for an investment, asserts high-level
498 points of value that will be delivered during initial investment intake. Following intake outcome selection, the
499 investment representative then provides details of each value point's impact on stakeholders, timing of delivery, current
500 state baselines, and future state estimates to inform value targets. This information is included in the investment
501 proposal and is based on overall business outcome.
502
503 For a detailed explanation and resources associated with value realization, reference the ITIP Value Realization policies
504 and procedures.
505

8.3 PLAN PHASE KEY OUTPUTS AND OUTCOMES

The key outputs of the Plan phase are new investment proposals/funding requests that are complete, thorough, and meet the minimum requirements to be effectively evaluated during the Select phase.

The key outcome of the Plan phase is improved quality of investment proposals/funding requests through the implementation of standard components and requirements.

9   SELECT PHASE

9.1 PURPOSE OF THE SELECT PHASE

The purpose of the Select phase is to assess the costs and benefits of all proposed investments/funding requests and to select the optimal portfolio of IT Investments. The Select phase is focused on the development and selection of an IT portfolio that supports the agency's EA and meets the agency's mission and strategic goals. Individual investments are evaluated in terms of technical alignment with other IT systems and other cost, schedule, performance, benefit, value, and risk criteria. Investments are also reviewed to evaluate whether there is a potential duplication of an initiative or existing agency system application. In this phase, IT initiatives are reviewed and prioritized to inform decisions about which investments/funding request will be financed in the coming year.

The Select process is supported and implemented through the agency's IT governance program and requires the participation and collaboration of all IT PgM/PMs with OITFMS, the CIO, the CFO, and the IT Investment Review Board (IRB). Within the agency, the Select process is closely tied to the budget process, and therefore, the CIO and CFO are an integral part of the Select phase.

9.1.1   Investment Selection Process

During the Select phase final proposals are sent to the IT IRB for a ruling[9]. IT Investments are selected for portfolios based on defined selection criteria consistent with the requirements of OMB A-11 and A-130, and SSA Policy 8020.01 Selection, Management, and Evaluation of IT Investments. Approved investments are then prepared for prioritization.

9.1.2   Funding Request Review

Each component's funding request is reviewed. Analysis incudes the assessment of need, appropriateness, reasonableness, and alignment with the agency's goals and objectives.

The funding requests may be referred to various offices for review and consideration. Technical and procurement experts may also provide an assessment to ensure that requested items are a viable technical solution. Feasible requests are mapped to the TBM IT Towers and prepared for prioritization.

9.1.3   Prioritization

The goal of prioritization is to rank the agency's IT Investments according to priorities. During prioritization, the agency's senior leadership review the requests for both new and inflight investments to determine the amount of IT resources that will allocated for FTEs, Contractors, and funding requests. The analysis considers the relative operational, technical,

---

[9] See the IT IRB Charter for more details.

539 financial, and institutional strengths and weaknesses of each initiative. The agency's objective is to maintain a balanced
540 IT Investment portfolio that ensures, for any given funding investment, the best return to the agency's mission and
541 functions.

542 Based on the results of prioritization and the final IT planned budget outlined in the IT Capital Plan, Program Teams and
543 OITFMS are asked to validate and, if necessary, revise their respective budgets, business cases, value realization, IT
544 portfolios, and funding requests. Once the required revisions to the IT business cases and portfolios are made, the draft
545 consolidated agency IT portfolio is presented by the CIO for final approval.

546 **9.1.4   OMB Budget Submission**
547 The second phase of the SSA Select process is preparing the overall AITPS, including major, non-major, standard,
548 nonstandard, and funding transfer IT Investments for submission to OMB. The final AITPS is submitted to OMB for
549 budget review in September of each fiscal year in accordance with OMB A-11 guidance. The MITBCs and SIRs are
550 required documentation for OMB that are used to justify funding major IT Investments. OITFMS offers training and
551 guidance for major and standard investments and issues data calls for draft and final submission of the MITBCs and SIRs
552 to OMB.

553 ## 9.2   SELECT PHASE KEY OUTPUTS AND OUTCOMES
554 The IT budget funding is developed in competition with other funding needs of the agency. The top line budget is
555 provided by the Commissioner. The key outputs of the Select phase include:

556 • A prioritized portfolio of IT Investments that are approved for funding in the upcoming Budget Year.
557 • A budget for the above portfolio that has been reviewed and concurred by the agency's CIO and CFO.

558 The key outcomes of implementing Select phase processes include:

559 • Improved justification of the IT portfolio through standard, published criteria.
560 • Increased coordination between the agency's budget and IT CPIC processes.
561 • Improved management oversight and review over the IT portfolio.

562

10 CONTROL PHASE

___

10.1 PURPOSE OF CONTROL PHASE

The purpose of the Control phase is to ensure, through timely oversight, quality control, and executive review, that IT initiatives are conducted in a disciplined, well-managed, and consistent manner within the agency. This process enables the effective management of the agency's IT Investments. The Control phase sets in place a structured process to provide senior managers with accurate information that will allow them to make timely decisions.

10.2 OVERVIEW OF CONTROL PHASE

The Control phase begins after investments/funding requests have been selected, budgeted, and funding has been received. The Control phase of the agency's IT CPIC process requires monitoring of ongoing IT initiatives during the planning, acquisition, deployment, maintenance, and operational phases of the IT Investment lifecycle. The primary objective of the Control phase is to assess the performance of investments and enable the effective management of all Major IT Investments.

The ability to adequately monitor IT initiatives relies heavily upon outputs from effective investment execution and management activities. The agency has made significant strides in controlling its IT Investments by establishing review processes. The review processes include the Milestone Reviews, Operational Analysis, CIO Ratings, TechStat Reviews, ITDB Reporting, Risk Management, Quarterly Health Reporting, CIO PM Engagement, Funding Assessments, and Value Realization. All Major IT Investments are reviewed in the areas of project management qualification, cost and schedule variance, and performance goals. "Passing" scores have been defined for each performance area.

10.2.1 Milestone Reviews

The PM is responsible for establishing realistic project management and execution plans, procedures, and practices to support initiative monitoring activities. The PM is also required to report to the CIO on the status of the initiative's cost, schedule, and technical baselines each quarter. Baselines provide the framework and sufficient detail to assess the status of the initiative's major milestones, decisions, activities, work products, and deliverables.

10.2.2 TechStat Reviews

While there are regular reviews of IT Investments, there are also ad-hoc reviews that occur on IT Investment data. One such ad-hoc review is the TechStat review. Building on the foundation of the IT Dashboard, OMB launched the TechStat Review, which is an evidence-based, data-driven review of an IT Investment via face-to-face accountability sessions with investment stakeholders, agency leadership, and OMB. The intent of the TechStat Review is to gain a shared understanding of the objectives of the investment and understand the risks associated with continued investment. Investments are selected based on cost, schedule, performance data, and CIO evaluations reported on the IT Dashboard. Investments with a "high-risk" CIO evaluation rating on the IT Dashboard for 2 or more quarters are required to undergo a TechStat review. The investments are analyzed with a focus on problem-solving that leads to concrete action to improve performance. TechStat Reviews enable the agency to turnaround, halt, or terminate non-performing IT Investments. Once the TechStat is complete, the IT Dashboard CIO evaluation is updated.

10.2.3 IT Dashboard Reporting

OMB requires that the agency submit all IT portfolio and investment data to the IT Dashboard. The IT Dashboard is a website enabling Federal agencies, industry, and the public to view details of Federal IT Investments, providing transparency on the effectiveness of government IT programs. The IT Dashboard provides access to individual Major IT Investments, including projects and activities associated with an investment (reported regularly), and the agency's IT Portfolio (reported annually).

All Major IT Investments should be maintained on the IT Dashboard to reflect the most current information available for performance metrics, risks, projects, and/or activities[10]. Regular IT Dashboard reporting includes a review of project cost and schedule variances, performance metrics, project and operational risks, and CIO Evaluation.

10.2.4 Risk Management

PMs also develop risk strategies to address problems or issues related to their investments. The resolutions of all issues are documented, and mitigation actions tracked. A mitigation action to resolve deficiencies depends on the extent of change that would be required to the initiative's overall project plan, considering the cost (in terms of dollars and/or time) to make the change, and the calculated severity of the deficiency.

10.2.5 CIO PM Engagement

The CIO meets with the Major IT Investment PgMs each quarter. During the session the PgM reports the investment's status as published on the IT Dashboard, explains any variances or statuses that are red or yellow, addresses pertinent risks, and proposes a CIO Rating/Comment. This engagement allows the CIO to have a pulse on each investment and provide recommendations/assistance where necessary. In addition, it prepares the CIO to:

1. Update the CIO Rating/Comment on the IT Dashboard, if necessary.
2. Discuss the status of the Major IT Investments at the quarterly health meeting.

10.2.6 CIO Evaluation

CIOs are required to assess the current level of risk for the investment in terms of its ability to accomplish its goals.[11] The rating is informed by the following factors:

- Performance
- Risk Management
- Requirements Management
- Human Capital
- Incremental Development

To assist the CIO with the Rating/Comment, the PgMs and PMs perform a self-assessment of their projects. The project ratings are rolled up to an investment level. At the quarterly PgM engagement meeting, the PgM reports their recommended CIO Rating/Comment, along with justification. The CIO makes the final decision and publishes the comments/rating to the IT Dashboard.

---

[10] FY 2020 IT Budget - Capital Planning Guidance

[11] FY 2020 IT Budget - Capital Planning Guidance

10.2.7 Inflight Investment Reviews

ITIP utilizes Programmatic Area (PA) reviews to track high-level performance and issues through transparent discussions at the DC/ADC meeting. These reviews occur twice per fiscal year for each PA and include investment-level cost, risk, and value data. The intent of the DC/ADC meeting reviews is to raise awareness across Programmatic Areas and executives of their performance and address any challenges they face. ITIP staff pulls data from various sources and reviews with the PA stakeholders in preparation for the presentations. The data that is pulled is meant to guide the conversation consistently across all PAs, but the PA Lead determines the specific points to cover.

10.2.8 Quarterly Health Reporting

The CIO engages with the Commissioner and executive sponsors on a quarterly basis to report on the health of the IT portfolio. The quarterly health meeting sets in place a structured process to provide senior management with decision making information and to meet the goals and objectives that were established in the business cases submitted to OMB as part of the budget submission process. The agenda typically involves a discussion the IT budget spend, incremental development, health assessment indicators, Major IT Investment health, and Non-Major IT Investment health.

The principal objectives of the quarterly health review include:

- Determine whether investments under review continue to support mission and business functions.
- Assess the extent to which investments continue to meet planned cost, schedule, value, and technical baselines.
- Identify deficiencies and track the completion of corrective actions.
- Certify incremental development.

10.2.9 PortfolioStat

PortfolioStat refers to a face-to-face, evidence-based review of an agency's IT portfolio, initiated by OMB. Reviews can be used to identify and address a broad range of issues, including management of commodity IT, duplication of Investments, and alignment with the agency's mission and strategy[12]. In accordance with FITARA requirements, SSA participates in PortfolioStat at OMB's request.

10.2.10 Value Realization

As discussed in 8.2.3, Value Realization refers to the development of value measures to inform investment planning, selection, management and oversight, and evaluation. During the Control phase, an IT investment representative, usually the business lead, regularly reports the actual value delivered monthly. This enables IT Investment Management and leadership to analyze and manage actual value realized against targets set during investment planning.

10.3 CONTROL PHASE KEY OUTPUTS AND OUTCOMES

The key outputs of the control phase include:

- Regular investment updates to the IT Dashboard
- Quarterly Health Assessment
- Value Realization analysis

---

[12] FY 2020 IT Budget - Capital Planning Guidance

The key outcomes of the control phase include improved oversight and management over the IT portfolio. Successful implementation of control phase processes will:

- Improve the identification of poorly performing projects
- Decrease time to correct poorly performing projects
- Improve investment risk management

11 EVALUATE PHASE

11.1 PURPOSE OF EVALUATE PHASE

The purpose of the Evaluate phase is to examine whether an IT Investment has met its intended objectives and yielded expected benefits as projected in the business case. The Evaluate phase 'closes the loop' of the IT Investment management process by comparing actual against estimates in order to assess the performance and identify areas where decision-making can be improved.[13]

11.2 OVERVIEW OF EVALUATE PHASE

The Evaluate phase includes an Operational Analysis, Post-Implementation Review (PIR) on implemented or cancelled investments, Project Close Out, as well as an assessment of IT CPIC processes. These activities are essential to the contributions that IT Investments make toward the accomplishment of the agency's strategic goals and objectives.

11.3 OPERATIONAL ANALYSIS

Operational Analysis is a method of examining the current and historical performance of the operations and maintenance (steady state) investments and measuring that performance against an established set of cost, schedule, and performance parameters. An Operational Analysis is, by nature, less structured than performance reporting methods applied to developmental projects. Operational Analysis is more subjective in nature and should trigger considerations of how to better meet objectives, save costs, provide alternative methods of achieving the same results, and determine whether the organization should even perform a particular function.

Steady State Investments complete an Operational Analysis annually in the place of an Alternatives Analysis and monthly EVM processing. Mixed life-cycle Investments may complete an Operational Analysis annually, in addition to an Alternatives Analysis and monthly EVM, if a significant portion of the investment is Steady State.

In addition to the developmental performance measures of "Are we on schedule?" and "Are we within budget?" an Operational Analysis answers more subjective questions in the specific areas of:

- Customer Satisfaction
- Strategic and Business Results
- Financial Performance

---

[13] GAO's Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-Making

698 • Innovation

699 Operational Analysis will lose much of its value-added benefits to the capital programming process if an opportunity to
700 make a course correction is missed due to inattention to early warning indicators. Analysis of such indicators may show
701 a need to apply an improvement methodology, such as value management, to identify if there are better ways for the
702 asset to meet its life-cycle cost and performance goals. Operational indicators for a given asset may include any of the
703 following: effectiveness, energy usage, efficiency, reliability, productivity, maintainability, availability, and security.

11.4 PROJECT CLOSEOUT

705 As defined in SSA's Office of Systems Project Management Guidebook, the goal of the Project Closeout phase is to
706 conduct closeout activities at the project level. This phase begins after all release activities have finished and includes:

707 • Evaluating the outcome of the project against the Project Scope Management Agreement
708 • Ensuring that any lessons learned are shared
709 • Releasing resources used by the project
710 • Reviewing benefits achieved at the end of the project
711 • Conducting PIR activities, if required
712

11.5 POST IMPLEMENTATION REVIEWS (PIR)

11.5.1 PIR

715 The Office of Management and Budget requires SSA to assess IT investment performance. SSA defines that assessment
716 as completing Post-Implementation Reviews (PIRs) of implemented or cancelled IT investments, examining the degree
717 to which each IT investment realized its planned mission impact, business assumptions, cost, return on investment &
718 value, risk, schedule, enterprise architecture goals, and functional requirements. The purpose of an investment PIR is to
719 track and measure the impact and outcomes of implemented or cancelled IT Investments to ensure they meet the
720 program mission and/or obtain lessons learned. Within the CPIC process, PIRs become a driving force for assessing IT
721 investments agency-wide to improve related strategies, operations, value levers, and key outcomes.

722 A PIR is performed on IT systems typically 6-18 months after they are fully deployed. This review is important not only
723 to determine the future viability of the IT Investment[14], but also to assist IT managers in improving IT proposal business
724 case requirements to better inform future IT selection decision-making. The PIR, in essence, closes the loop regarding
725 the IT CPIC process by facilitating feedback on an investment's overall processes and its refinement. The need to
726 evaluate an investment's ability to effectively meet the organization's mission needs, both functionally and
727 economically, does not end at investment deployment. Rather, it is a continuous process to ensure that the investment
728 still supports both the users' and mission needs.

729 Each PIR assesses eight (8) sections of the SSA PIR Framework. The sections help to organize and create uniformity in the
730 report.

731 1. **Mission Impact:** measures the degree to which the project met its mission-oriented goals.

---

[14] SSA performs PIRs projects once they are complete. In addition, SSA conducts PIRs on investments for a more holistic approach.

732   2. **Business Assumptions:** validates the documented business assumptions and their relative impact on project
733   success.
734   3. **Costs:** compares planned vs. actual costs to understand deviations.
735   4. **ROI & Value:** compares planned vs actual ROI/benefits to understand deviations.
736   5. **Schedule:** compares planned vs actual schedules to improve future planning.
737   6. **Enterprise Architecture:** validates project's compliance with SSA EA standards
738   7. **Functional Requirements:** assesses planned functionality against delivered
739   8. **Risk Management:** assesses the impact of risk management techniques on project success.
740

741 ## 11.6 ASSESSMENT OF IT CPIC PROCESS

742 The Evaluate phase includes an assessment of the IT CPIC process to ensure that the desired outcomes for IT Investment
743 Management are achieved. Using the collective results of annual IT CPIC evaluation assessments and PIRs, SSA is able to
744 identify potential modifications to the IT CPIC Plan, Select, Control, and Evaluate processes based on lessons learned.
745 Such an assessment provides insight into the strengths and weaknesses of the processes and procedures performed in
746 the IT CPIC phases. As a result, improvement recommendations are developed, and the IT CPIC processes are updated as
747 needed.

748 ## 11.7 EVALUATE PHASE KEY OUTPUTS AND OUTCOMES

749 The key outputs of the Evaluate phase are:

750   •   A completed Operational Analysis for active systems
751   •   A completed PIR for recently completed investments
752   •   Improvement recommendations for the agency's overall IT CPIC process

753 The key outcomes of implementing Evaluate phase processes are:

754   •   Greater accountability in meeting goals and expectations
755   •   Improved insight into areas of the IT portfolio requiring future investment
756   •   Increased maturity in the agency's IT CPIC process

757

758

APPENDIX A: SSA CPIC PROCESS FLOW

760

SSA CPIC Investment Process

761

762

763 # APPENDIX B: SSA TIMELINE

764
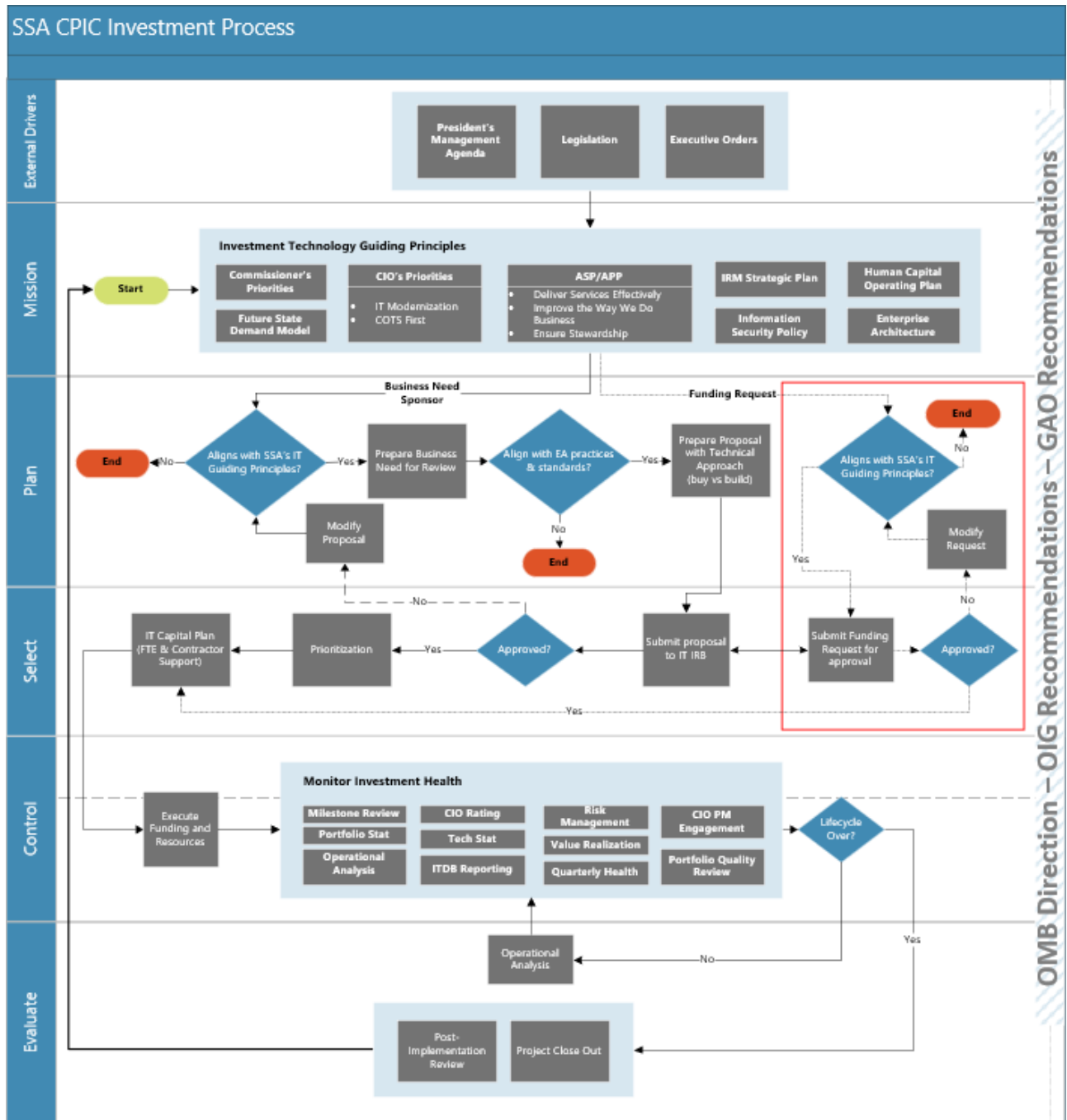
Tasks	Dates
Regular Major and Standard Investment IT Dashboard updates	Monthly
Prioritization	Annually
IT IRB holds an investment decision session	Monthly
Develop investment proposals	Ongoing
Draft of AITPS due to OMB	August
IT Budget submission to OMB	September
Passback	January
* The timeline is subject to change as it is mapped to annual OMB guidance.	

765

766

DOCUMENT CHANGE RECORD

Version	Date	Description of Change
1.0	04/2012	First release
2.0	10/2013	2013 Annual Revision
3.0	11/2014	2014 Annual Revision
4.0	02/2016	2015 Annual Revision
4.5	09/2017	2017 Annual Revision; Updated changes related to immediate responses to GAO audit, SITAR, PEB, IT IRB and critical priorities.
4.6	05/2018	Updated to reflect acquisition plan and requisition approval processes changes.
5.0	09/20/2018	Created new SSA IT Guide to Capital Planning and Investment Control that incorporates related CPIC issuances.
6.0	8/9/2021	Updated to reflect CBO, Chief Product Manager, IT Workforce Strategy, Value Realization, and PIR Lite
7.0	5/29/2023	Section 2 Added language to Product definition Section 4 Removed Information Resource Management (IRM) Strategic Plan Added 4.1.5 Office of Budget and Management Renamed 4.2.4 IT Workforce Strategy to Digital Modernization Strategy. Updated language to align with DMS. Section 5 Renamed Design Review Board to Solution Architecture and Advisory Remove reference to Instructure Review Board Renamed Office of the Chief Business Officer for IT Mod and Digital Services (CBO) to Office of the Chief Business Officer (OCBO) Updated information referencing the Benefits of TBM diagram New section: Product Management Updated language for SSA Implementation Moved role of OITFMS to 5.2 Internal Governance Structure Updated language for 5.3.2 Benefits Updated language for Value Realization in Section 8 Updated Section 10 Control to better align with how we currently conduct this phase

		Renamed 10.2.7 Inflight Investment Reviews to Inflight Programmatic Area Reviews. Updated language to reflect involvement of Programmatic Areas. Updated Appendix A to include Value Realization process flow Section 11.5 Post Implementation Review (PIR): Updated language and added reference to review sections of the SSA PIR Framework. Remove reference to PIR Lite.

769