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**Summary of Changes**

The following revises references to background information and updates citations to reflect current guidance, including OMB Budget Guidance for FY 2020.

Large structural changes:

- Added [Submission Confirmation](#) to verify that the submission is complete at the end of the [Agency IT Investment Portfolio submission](#) and [Major IT Business Case](#) and [Standard Investment Report](#) submissions and to allow for portfolio validation (Page 12)
- Updated [Systems Inventory](#) to apply to all Investments that fund at least one IT system (Page 33)
- Added [Contracts Report](#) section to streamline Major IT Business Case and Standard Investment Report Contracts and Acquisition Strategy tables by removing 15 existing data fields with two contract-related fields by leveraging FPDS data (Page 35)
- Updated [IT Security and Compliance Standard Investment Report](#) to replace capabilities reporting with Security and Operations Center (SOC) reporting (Page 59)
- Prior Year (PY), Current Year (CY), and Budget Year (BY) are defined in [Appendix C](#) as Budgetary Resources (Page 81)
- Updated Cost Pool and IT Tower fields and definitions to align with reporting to taxonomy v2.1
- Removed Agency Data Center Spending Summary data reporting from the Agency Portfolio Summary

Updates to [Agency Budget Account Summary](#) Requirements (Page 17):

- Added “Total Agency Funding BY (Budget Authority) 2020” field

Updates to Agency IT Investment Portfolio Summary Requirements:

- Added “[Mission Support Investment Category](#)” to the Standard Components in the IT Portfolio table (Page 21)
- Updated [IT Tower](#) fields to indicate that they are all required for the Initial Submission in September, consistent with the TBM roadmap (Page 28)
- Added [Platform](#) as an IT Tower (Page 30)

Updates to [CIO Evaluation Report](#) Requirements (Page 31):

- No Changes

Updates to [Systems Inventory List](#) Requirements (Page 33):

- Added the following fields:
  - [Anticipated Major Tech Refresh Date](#) (Page 33)
  - [Product Name](#) (Page 33)
  - [Vendor Name](#) (Page 33)
  - [Version Number](#) (Page 33)
  - [Expected End of Life](#) (Page 34)

Updates to [Contracts Report](#) Requirements (Page 35):

- Updated contract and acquisition fields (Page 35)

Significant Updates to [Major IT Business Case Requirements](#) (Page 36):

- Updated [Return on Investment \(ROI\)](#) field to include both quantitative and qualitative analysis requirements for the Investment’s Alternative Analysis (Page 41)
- Removed the following sections:
  - Section D: Acquisition/Contract Strategy
  - Section E: Systems Inventory (Administrative Services and Mission Support Systems only)

Significant Updates to [Major IT Business Case Details Requirements](#) (Page 44):

- Clarified that maintenance-related projects within O&M spending should be reported by agencies (Page 44)

- Updated the Risk Probability and Impact fields in [Section B: Investment Risk](#) to standardize risk reporting government-wide (Page 45)
- Added the following fields to [Section C: Project Plan and Execution Data](#) (Page 47):
  - [Field 11](#) to require agencies to distinguish which of their IT projects is funded through the Technology Modernization Fund (TMF) or their Agency’s IT Working Capital Fund (IT WCF) (Page 48)
  - [Field 12](#) to describe the extent to which the project is using commercial products and services (Page 48)
  - [Field 13](#) to describe, if applicable, the project’s reasoning for not using commercial services and products
  - [Field 14](#) to provide the estimated development and customization costs associated with the project’s custom developed solution(s)
- Removed the following fields from the Project Activity Table C.2.1
  - Field 5: Type of Activity
  - Field 6: Critical Path

Significant Updates to [IT Infrastructure, IT Security, and IT Management Standard Investments Requirements](#) (Page 56):

- Updated the following standard investments
  - [IT Security and Compliance Investment Report](#) (Page 59)
    - Removed Section B: IT Security Costs and Capabilities
    - Added [Section B: Security Operations Center Reporting](#) (Page 59)
  - [Network Standard Investment Report](#) (Page 63)
    - Removed Section C: Contracts/Acquisition Strategy
    - Added [Section C: Project Plan and Execution Data](#) (Page 64)
  - [Data Center and Cloud Standard Investment Report](#) (Page 66)
    - Revised the requirement from requiring reporting all tiered data centers to reporting at the finest granularity possible for each agency
    - Removed the Federal Real Property Profile ID field from Section A: General Information
    - Removed Section C: Contracts/Acquisition Strategy
  - [End User Standard Investment Report](#) (Page 69)
    - Removed Section C: Contracts/Acquisition Strategy
    - Added the following Activity Tables:
      - [Project Activity Table C.2.1](#) (Page 70)
      - [Project Activity Table C.2.2](#) (Page 70)
- Added the following standard investments
  - [Output Standard Investment](#) (No Standard Investment Report) (Page 71)
  - [Application Standard Investment](#) (Standard Investment Report Optional) (Page 72)
  - [Delivery Standard Investment](#) (Standard Investment Report Optional) (Page 74)
  - [Platform Standard Investment](#) (No Standard Investment Report) (Page 76)

Other:

- Removed FY 2019 Appendix D IT Security Capability Definitions
- Renamed FY 2019 Appendix E Technology Business Management IT Cost Pools and IT Towers as new [Appendix D](#) (Page 111)

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**POST-95% SOLUTION CHANGE LOG**

*This change log represents revisions made between the 95% solution released on May 11, 2018 and this final version.*

Page	Edit
5	Added Change Log to Guidance
12	Updated dates that were previously “Tentative” or “TBD”
12	Clarified that the June submission only applies to applicable accounts
20	Removed “Investments should only report IT Towers and Cost Pool spend data at the point of execution”
23	Clarified the explanation of Type 04 Funding Transfer Investments in field 10
26	Clarified Data Center ID to only require relevant data centers to be reported
28	Clarified that only Type 04 Funding Transfer Investments should report amounts within the Internal Services Cost Pool for Agency IT Investment Portfolio Summary fields 63, 64, and 65
33	Revised “As a single system may include multiple products, Investments may report multiple entries for a single system, if applicable.” to read as “An information system may be reported for more than one investment, if applicable.”
34	Corrected typo in Product Table B.2 Product Function(s) field to specify that each entry should be 7 digit codes rather than 6 digit codes.
35	Revised Contracts Report to indicate that it applies to all Type 01 Major IT and Part 3 Investments for IT Infrastructure, IT Security, and IT Management
35	Removed “N/A” as reporting option for Contracts/Acquisitions Table field 2
41	Hyperlinked “spreadsheet” to a download link for Performance.gov reports in field 2
41	Updated Agency Strategic Objective (ASO) and Agency Priority Goal (APG) Investment alignment in the Major IT Business Case by clarifying “alphanumeric identifier provided by <a href="http://performance.gov">performance.gov</a> . [11 char]”
46	Fixed typo to reflect that “Risk Impact” should be reported on a five-point scale
48	Fixed typo to say Projects Table C.1 field 10 is not required for “SDLC Methodology #3”
48	Renamed Projects Table C.1 field 12 from “Commercial Solutions Explanation” to “Commercial Solution(s) Adoption”
48	Renamed Projects Table C.1 field 13 from “Commercial Solutions Justification” to “Commercial Solution(s) Reasoning”
48	Renamed Projects Table C.1 field 14 from “Commercial Solutions Costs” to “Commercial Solution(s) Costs”
48	Clarified that fields 12, 13, and 14 only apply to projects that respond “TMF” or “IT WCF” to “Funded by TMF or IT WCF Funding?”
54	Updated Agency Strategic Objective (ASO) and Agency Priority Goal (APG) reporting in performance metrics by clarifying “alphanumeric identifier provided by <a href="http://performance.gov">performance.gov</a> . [11 char]” in field 10
74	Fixed typo to confirm that CRM stands for “Customer Relationship Management” rather than “Customer Resource Management”
Throughout	Updated hyperlinks for the FY 2020 IT Budget – Capital Planning Guidance formal URL

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## INTRODUCTION

77 This document provides technical guidance and specific requirements outlined in A-11 Section 55. This  
78 introduction is designed to provide context and the overarching strategy behind the changes outlined in  
79 this document. In this FY 2020 IT Budget – Capital Planning Guidance, OMB is implementing additional  
80 changes that build upon what was done in FY 2019 and chart a course that will continue through the FY  
81 2021 budget cycle and the life cycle of these investments. The cornerstone of this data and Investment  
82 management strategy is the Technology Business Management (TBM) Framework.

83 *Technology Business Management (TBM) is a value-management framework instituted*  
84 *by CIOs, CTOs, and other technology leaders. Founded on transparency of costs,*  
85 *consumption, and performance, TBM gives technology leaders and their business*  
86 *partners the facts they need to collaborate on business aligned decisions. Those decisions*  
87 *span supply and demand to enable the financial and performance tradeoffs that are*  
88 *necessary to optimize run-the-business spending and accelerate business change. The*  
89 *framework is backed by a community of CIOs, CTOs, and other business leaders on the*  
90 *Technology Business Management Council.*<sup>1</sup>

91 - From TBM Taxonomy Version 2.1, from the Technology Business Management  
92 Council.

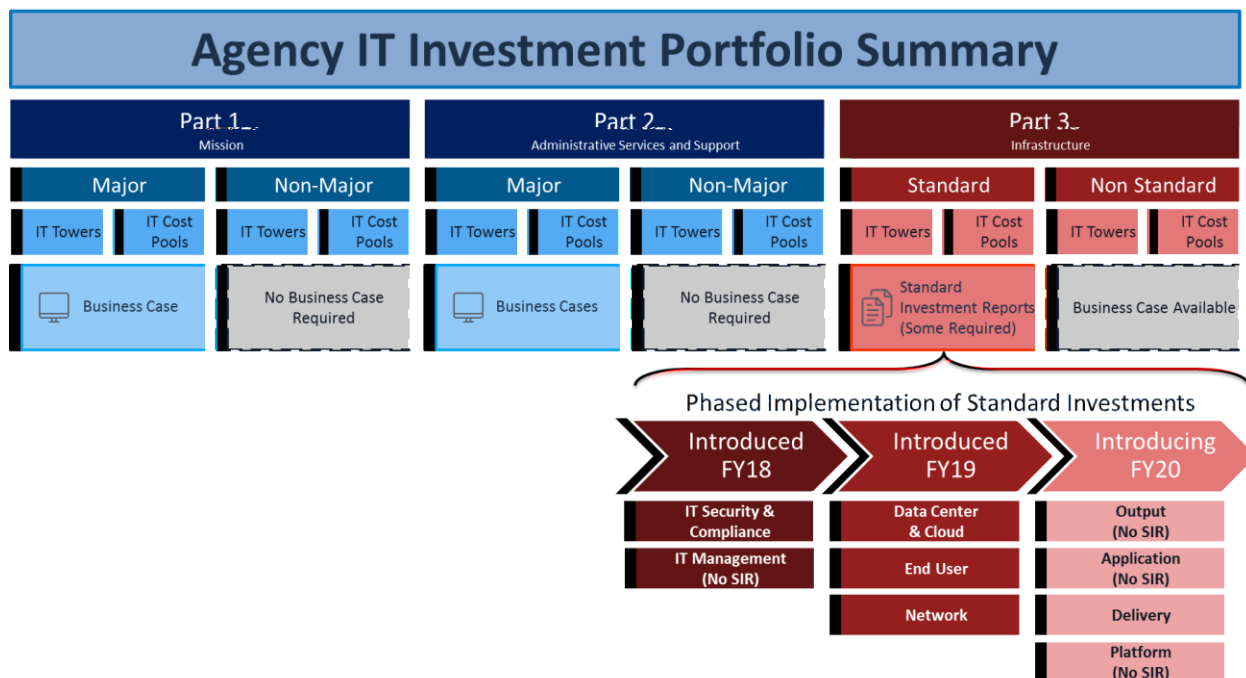
93 OMB is leveraging this widely adopted open source taxonomy, which is used within private,  
94 public and academic sectors and generating significant value. Leveraging a taxonomy that  
95 provides a standard business model for IT and is proactively managed by a non-profit  
96 organization also alleviates some of the burden for the government to identify, define, and  
97 achieve consensus on the standards and terms used.

98 OMB is following an incremental process to roll out these changes. There will not be a sudden,  
99 wholesale transformation in any given year, in which the lights are turned off on the legacy  
100 process and turned on the next day with a new TBM-based process. Instead, beginning with the  
101 FY 2018 Guidance, elements of the new TBM-based approach are being phased-in. Consistent  
102 with the Federal IT Acquisition Reform Act (FITARA) OMB Common Baseline Implementation  
103 (M-15-14), OMB recognizes that each Agency has a different level of maturity and capability to  
104 absorb these changes and produce the right data. This is why OMB is emphasizing a multi-year  
105 strategy and approach in implementing changes to the Capital Planning and Investment Control  
106 (CPIC) process. The intent is that by sharing agencies can understand the proposed changes,  
107 internalize them, and establish a program to advance IT budgeting into the 21<sup>st</sup> century.

108 The below graphic contextualizes the types of structural changes introduced in this Guidance that will be  
109 phased in a multi-year approach that corresponds with President’s Management Agenda (PMA) Cross  
110 Agency Priority (CAP) Goal #10, “Improving Outcomes Through IT Cost Transparency.” Four additional  
111 Standard Investments, including two new Standard Investment Reports are being introduced as optional  
112 in FY 2020 for Part 3 IT Infrastructure, IT Security, and IT Management.

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<sup>1</sup> Technology Business Management Council, TBM Taxonomy Version 2.1, March 1, 2018



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114 **Equipping Chief Information Officers (CIOs)**

115 OMB’s intent is to strongly support CIOs in implementing the authorities within FITARA. Aligning  
 116 common investments like data centers, end user devices (e.g., laptops, desktops and mobile devices),  
 117 software, and networks and linking budget and performance is critical to make informed decisions about  
 118 the performance of these investments. Standard IT Investments and associated Investment Reports will  
 119 capture relevant information to inform decisions and management oversight.

120 Fully implementing FITARA requires a strong partnership among CIOs, CFOs, budget offices, CAOs,  
 121 and CHCOs. Aligning budget and financial management with TBM will create a strategic framework that  
 122 supports A-123, IT modernization, and alignment with Agency budgeting process through the A-11.

123 While the opportunity to leverage the IT Cost Pools is promising, OMB recognizes that each agency has a  
 124 different level of maturity, capability and resources to meet this change. Some agencies have already been  
 125 working to achieve this level of reporting or a closely related capability. Those agencies should endeavor  
 126 to report the IT Cost Pool data to the greatest extent practical. Agencies that lack the capabilities or  
 127 resources to deliver this data should consider what changes are necessary to achieve it and take steps to  
 128 align reporting with the IT Cost Pools.

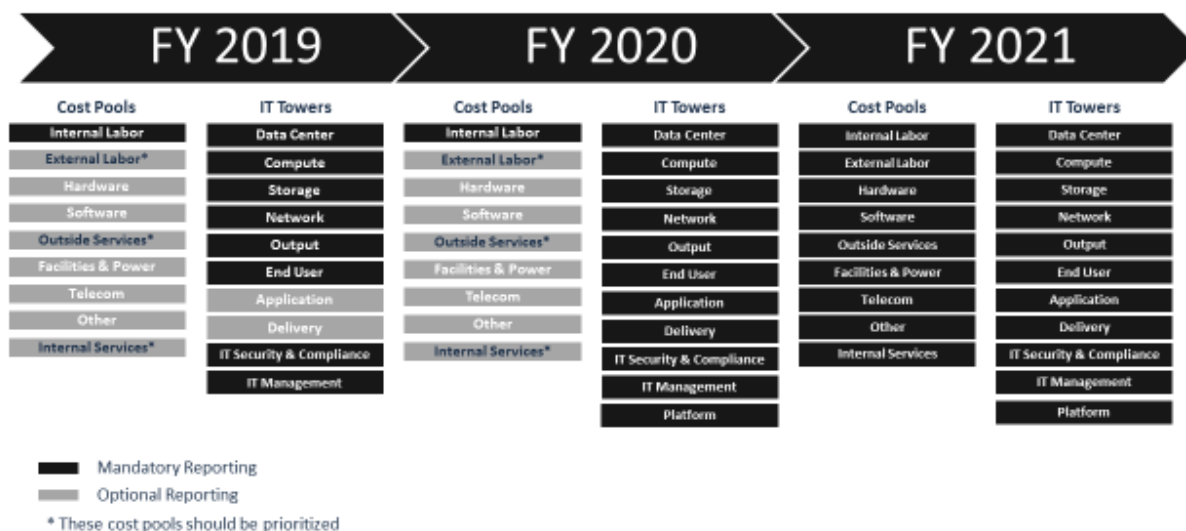
129 Consistent with the phased rollout, many of the fields introduced are optional; agencies are strongly  
 130 encouraged to begin reporting while the fields are optional. This timeframe will afford agencies the  
 131 opportunity to understand implementation challenges and work directly with OMB to address challenges  
 132 before all IT Cost Pools, IT Towers and Part 3: IT Infrastructure, IT Security, and IT Management  
 133 Standard Investments and associated IT Investment Reports are required. While fields/requirements are  
 134 optional, the data will not be made public on the IT Dashboard. The phased approach is depicted in the  
 135 two illustrations below.

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**TBM IT Cost Pools and IT Towers Phased Implementation**

TBM IT Cost Pools and IT Towers Phased Implementation



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All Investments should work to disaggregate the total investment costs to both IT Cost Pools (financial view) and IT Towers (IT view). Investments may not have costs associated with all IT Cost Pools and IT Towers. The applicable fields should be populated.

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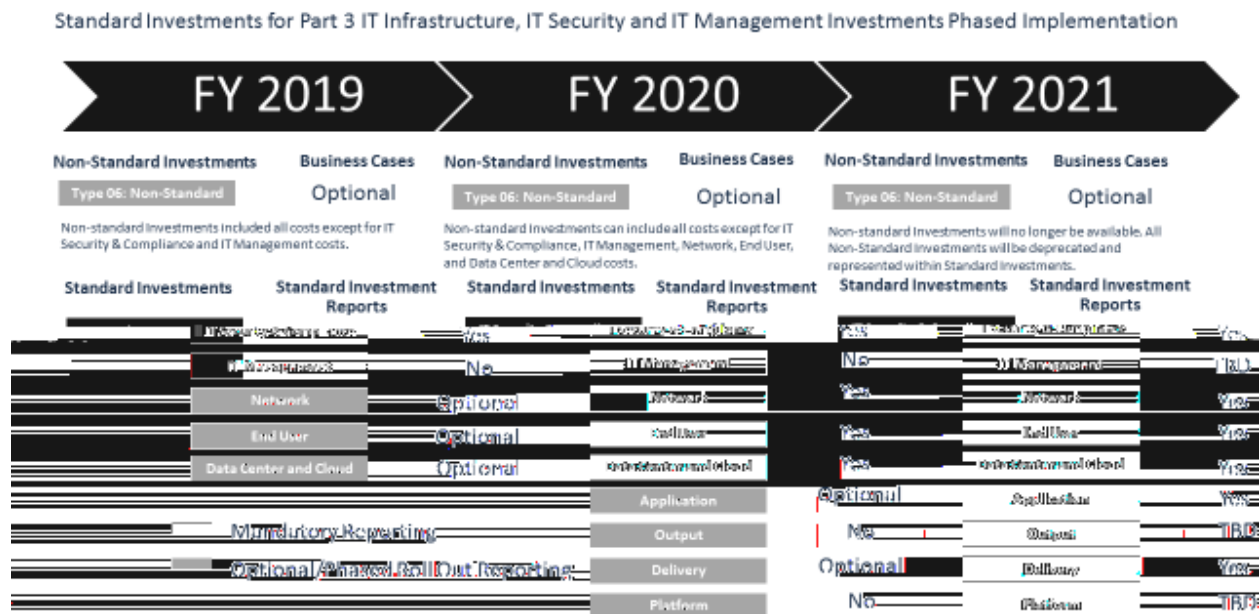
**FY 2020 Requirements for IT Cost Pools:** Throughout the FY 2020 cycle, Internal Labor is the only cost pool that will be required. Internal Labor relates to Government FTE costs, which has been reported for years and removed to report as Internal Labor. External Labor, Outside Services and Internal Services should be prioritized as they relate to M-17-22 efforts. Optional and mandatory requirements will change during FY 2021 cycle to include mandatory submission of all cost pools.

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**FY 2020 Requirements for IT Towers:** Beginning in the FY 2020 cycle, all applicable IT Tower costs will be mandatory for reporting.



149 **Standard Investments for Part 3 IT Infrastructure, IT Security and IT Management Investments**  
 150 **Phased Implementation**



151  
 152 **FY 2020 Requirements for Standard IT Investments:** Throughout the FY 2019 cycle, the IT Security  
 153 and Compliance and IT Management Standard Investments were mandatory while the Network, Data  
 154 Center and Cloud, and End User Standard Investments were optional. For the FY 2020 cycle, the three  
 155 previously optional Standard IT Investments and associated Standard Investment Reports will now be  
 156 mandatory beginning with the Draft Agency IT Investment Portfolio Summary submission. In addition,  
 157 four new Standard Investments for Output, Application, Delivery, and Platform are being introduced as  
 158 optional for the FY 2020 cycle. If Agencies elect not to report the optional Standard Investments, they  
 159 will continue reporting what costs and functions remain in non-standard Investments.

160 OMB does not expect that all of the changes identified in this guidance will be made immediately. OMB  
 161 realizes that changes of this magnitude take time to effectively and properly implement across the Federal  
 162 government. Rather, this guidance outlines changes that will be implemented over time with the  
 163 overarching mission of creating a more efficient and collaborative government.

164

**GENERAL**

165 **1. Under what authority is this IT Budget - Capital Planning Guidance issued, and how does it**  
 166 **relate to A-11 Section 55?**

167 44 U.S.C. § 3602 directs the Administrator to set strategic direction and oversee implementation of  
 168 Agency IT governance activities. As such, [Circular A-11 Section 55](#) provides general policy and  
 169 requirements for Agency IT budget, Investment, and portfolio management, whereas this Guidance  
 170 includes more detailed information on technical requirements and submissions. This detailed information  
 171 allows OMB both to review and evaluate each Agency's IT spending and to compare IT spending across  
 172 the Federal government.

173 **2. How do I submit annual, quarterly, and other regular updates of IT budget and management**  
 174 **information, and when is it due?**

175 The Agency’s IT budget and management submissions are executed in three distinct components. First,  
 176 the Agency IT Portfolio Summary (formerly Exhibit 53) collects information for all Investments aligned  
 177 to Part 1: Mission Delivery; Part 2: Mission Support Systems; and Part 3: IT Infrastructure, IT Security,  
 178 and IT Management. Second, the Major IT Business Case (formerly Exhibit 300) is used to track the  
 179 planning, budgeting, acquisition, and management of all major Investments aligned to Part 1 and Part 2 of  
 180 the Agency IT Portfolio Summary. Third, Standard Investment Reports for Investments corresponding to  
 181 Part 3 of the Agency IT Portfolio Summary and that require or make available such reports. The  
 182 following table displays the composite budget organization:

Agency IT Portfolio Summary	
Agency IT Investment Portfolio Summary	Part 1: IT Investments for Mission Delivery
	Part 2: IT Investments for Mission Support
	Part 3: IT Investments for IT Infrastructure, IT Security, and IT Management
Agency Budget Accounts Summary	

183 **2.1 Annual Reporting**

184 The IT budget and management requirements have varying reporting frequencies. The following table  
 185 depicts the frequencies of each:

Budget and Management Requirement	Requirement	Reporting Mechanism	Frequency
<b>Agency-Level Reporting</b>			
Budget	IT Resource Statements	<a href="#">MAX</a> , President’s Budget and Congressional Justifications	September – Request – and February – within Congressional Justification materials
Budget	eGov/LoB Contributions Verification	<a href="#">MAX</a> <a href="#">Community</a> <a href="#">(Instructions)</a> ; <a href="#">MAX Collect</a> <a href="#">Exercise</a>	August

<b>Budget and Management Requirement</b>	<b>Requirement</b>	<b>Reporting Mechanism</b>	<b>Frequency</b>
Budget	Budget Accounts Summary	IT Dashboard	September – Request – and January – President’s Budget – and February – Congressional Justification
Budget & Management	Submission Confirmation	IT Dashboard	September, January, February Submitted at the end of submission windows
<b>Investment-Level Reporting</b>			
Budget	FY 2020 Draft Agency IT Investment Portfolio Summary	Details forthcoming	August
Budget	FY 2020 Agency IT Portfolio Summary	IT Dashboard	September – Request – and January – President’s Budget – and February – Congressional Justification
Budget & Management	CIO Evaluation Report	IT Dashboard	September, January, February Regular Updates Data should be kept updated
Budget & Management	Systems Inventory	IT Dashboard	September, January, February
Budget & Management	Contracts Report	IT Dashboard	September, January, February Regular Updates Data should be kept updated
Budget & Management	Major Investment Business Case	IT Dashboard	September – Request – and January – President’s Budget – and February – Congressional Justification
Management	Major Investment Business Case Details	IT Dashboard	September, January, February Regular Updates Data should be kept updated
Budget & Management	IT Security & Compliance Standard Investment Reports	IT Dashboard	September, January, February Regular Updates Data should be kept updated
Budget & Management	Network Standard Investment Reports	IT Dashboard	September, January, February Regular Updates Data should be kept updated
Budget & Management	Data Center and Cloud Standard Investment Reports	IT Dashboard	September, January, February Regular Updates Data should be kept updated
Budget & Management	End User Standard Investment Reports	IT Dashboard	September, January, February Regular Updates Data should be kept updated
Budget & Management	<i>Optional:</i> Application Standard Investment Reports	IT Dashboard	September, January, February Regular Updates Data should be kept updated

Budget and Management Requirement	Requirement	Reporting Mechanism	Frequency
Budget & Management	<i>Optional:</i> Delivery Standard Investment Reports	IT Dashboard	September, January, February Regular Updates Data should be kept updated

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187 The following dates satisfy the FY 2020 Capital Planning and Investment Control (CPIC) Requirements:

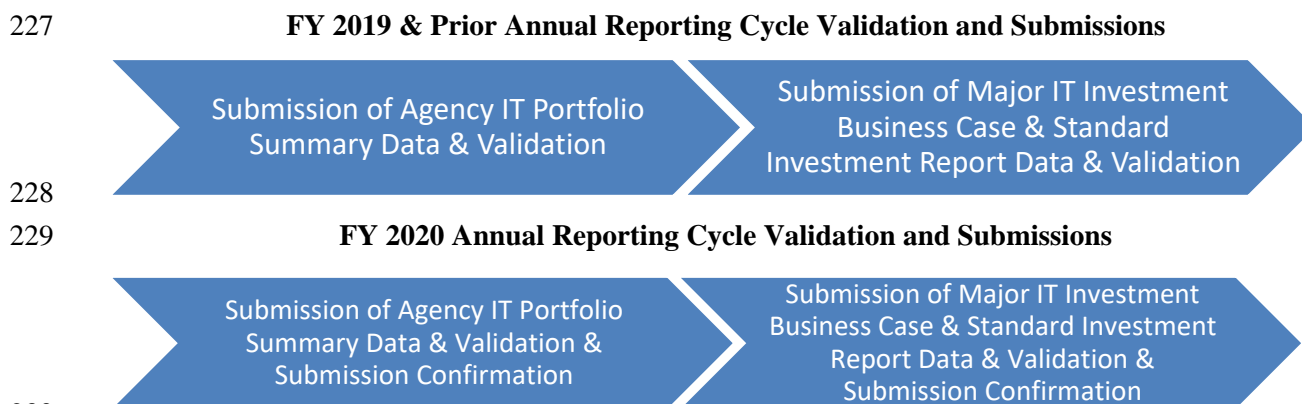
- 188
- 189 • **August 20, 2018**
    - 190 ○ FY 2020 Draft Agency IT Investment Portfolio Summary submission **DUE**;
    - 191 ○ Verification that the required E-Gov/LoB contribution levels are being included in the Agency’s budget plans.
  - 192 • **September 10, 2018 – September 14, 2018**
    - 193 ○ FY 2020 Agency IT Portfolio Summary submission (including the Agency IT Investment Portfolio Summary and Agency Budget Accounts Summary);
  - 194 • **September 11, 2018 - September 21, 2018**
    - 195 ○ FY 2020 Systems Inventory, Contracts Report, Major IT Investment Business Case and Standard Investment Reports, IT Resource Statements submissions;
  - 196 • **January 8, 2019 – January 25, 2019 (Tentative)**
    - 197 ○ FY 2020 President’s Budget submissions;
  - 198 • **February 2019 (TBD)**
    - 199 ○ The Recertification of “IT Resource Statements” should be included in the Agency’s Congressional Justification.
    - 200 ○ Final FY 2020 Congressional Justification submissions (applicable if there are changes to IT Investments between President’s Budget & Agency’s development of Congressional Justification materials).
  - 201 • **June 2019 (TBD)**
    - 202 ○ If applicable, update budget data in line with mid-season MAX lock for enacted budget.
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209 The Draft Agency IT Investment Portfolio Summary shall be completed by the Agency and submitted to OMB. This draft will constitute the Agency’s proposal to OMB, providing a comprehensive list of all IT Investments that will be reported as part of the Agency’s FY 2020 IT submission. The initial Draft Agency IT Investment Portfolio Summary shall be posted online to the Draft Agency IT Investment Portfolio Summary OMB MAX submission page. At a minimum, the Draft Agency IT Investment Portfolio Summary should include the Previous Unique Investment Identifier (UII), Current UII, Investment Category, Shared Services Identifier, Part of Agency IT Portfolio Summary, Type of Investment, Investment Title, Investment Description, and FEA BRM Services – Primary service area.

210 Details and instructions for submitting the verification of eGov/LoB are provided online on [MAX](#).

211 For the FY 2020 cycle and prior year, annual reporting required a two-step procedure for submissions to the IT Dashboard. Beginning in the FY 2020 cycle, the submission procedure will now include Submission Confirmation for both the Agency IT Portfolio Summary and the Major IT Business Cases and Standard Investment Reports to ensure better consistency across Agency data in submissions. Submission of the confirmation for the Agency IT Portfolio Summary will automatically close the window for that submission and open the window for Business Case and Standard Investment Report submissions. Submission Confirmation for the Business Case and Standard Investment Report submissions will also include validation of the data submitted to ensure that all required Business Cases

226 and Standard Investment Reports have been submitted. The change is illustrated in the figure below:



231 All subsequent updates to the Agency IT Investment Portfolio Summary will be submitted to the Federal  
 232 IT Dashboard (ITDB), or as otherwise directed. The Agency IT capital planning office should coordinate  
 233 and review all versions/revisions of any section/part of the Agency IT Portfolio and Major IT Business  
 234 Case with the Agency CIO and CFO prior to submitting the approved version to OMB.

235 Additional updates to the Agency IT Portfolio Summary, Major IT Investment Business Cases, and  
 236 Standard Investment Reports may be required after final budget decisions or if the Agency requests  
 237 supplemental funds that require changes to improve reporting accuracy. While data is submitted to the  
 238 ITDB, public release of FY 2020 IT budget requests will be consistent with the release of President’s  
 239 Budget and an opportunity to update to ensure alignment with Congressional Justification materials.  
 240 Specific instructions and deadlines for submitting updates, corrections, and final submissions will be  
 241 published outside of this Guidance. If an Agency requests supplemental funds, approves additional  
 242 funding, or reallocates funding within its authority and these funding changes result in changes to any part  
 243 of the Agency IT Portfolio Summary, then the Agency should submit a new or revised Agency IT  
 244 Portfolio Summary as part of their supplemental request.

245 With reference to the requirements in Circular A-11, Sec. 51.3, CIOs should, in conjunction with their  
 246 Agency’s budget submissions, provide the common baseline rating demonstrating the level of CFO/CIO  
 247 collaboration required to fully implement the Federal IT Acquisitions Reform Act (FITARA) as  
 248 applicable under existing public law. For more information on the reporting requirements for IT Resource  
 249 Statements, see IT Resource Statements section.

250 **2.2 Regular Updates Reporting**

251 • Updates to the IT Dashboard should be maintained to reflect the most current information  
 252 available for performance metrics, risks, projects, and/or activities (see Appendix C for a  
 253 description of major IT Investments and Standard Investments). Frequency of reporting is based  
 254 on the contents of a given Investment. For example, an Investment with the required monthly  
 255 performance metric for O&M spending should have monthly performance actuals to report while  
 256 investments with only Development, Modernization, and Enhancement (DME) spending  
 257 may be less regular in the updates they have available to submit.

258 • CIO Evaluation (per [40 U.S.C. § 11315 \(c\)\(2\)](#)) should be updated as soon as CIOs have  
 259 completed their evaluations using the CIO Evaluation Report. There is no mandated reporting  
 260 frequency; however, at a minimum, OMB expects that CIO evaluations will occur each time a  
 261 TechStat occurs, a rebaseline is approved by the Agency head (See [M-10-27](#)), when the Business  
 262 Cases are submitted to OMB in the Agency budget request, and when the Business Cases are  
 263 prepared for the President’s Budget release. These ratings are optional for all investments that are  
 264 not Type 01: Major Investments.

- 265 • Contracts Report should be maintained to reflect the most current information available.
- 266 • Agencies should make every effort to maintain current data on the IT Dashboard. When
- 267 providing updates to the ITDB, OMB expects that updates are provided within 30 days from the
- 268 corresponding event (e.g., TechStat sessions, baseline changes, CIO evaluations, status change in
- 269 projects/activities, status change to the risk information, etc.).

270 **3. How is IT spending categorized?**

271 Agencies are required to submit all of their IT budget-related costs to OMB annually. The Agency's  
 272 complete IT Portfolio must be reported for all Investments, regardless of type, including Type 03  
 273 Migration (transition-related activities and planned fee-for-service) or Type 04 Funding Transfer  
 274 Investments (contributions to shared or centralized IT solutions). Any Federal agency providing the  
 275 shared or centralized IT service or solutions shall report migration-related costs separately from the  
 276 spending allocated to maintain operations for current customers. For the FY 2020 President’s Budget  
 277 submission, IT funding levels reported in the Agency IT Portfolio Summary should be consistent with the  
 278 Agency's budget materials and should be categorized based upon the following three parts:

279

Category	Description
Part 1. IT Investments for Mission Delivery	Report IT Investments that directly support the delivery of the Agency’s mission. This information should map directly to the Agency's strategic and annual performance plan. IT Investments may cover more than one Agency mission area reported in the mission area with oversight over the IT Investment.
Part 2. IT Investments for Mission Support Systems	Mission support services are comprised of activities that are common across all Agencies and include functional areas such as financial management, human resources transactions, contracting, travel, and grants management. Report all Investments for Mission Support Systems specific to an Agency, and IT Investments officially designated as shared or centralized services or solutions, such as E-Gov/ Line of Business (LoB). Appendix B provides a list of existing shared service providers, investments, and E-gov LOBs.
Part 3. IT Investments for IT Infrastructure, IT Security, and IT Management	Report IT Investments for IT goods and services common to all Agencies, such as IT Infrastructure, IT Security, and IT Management. For the FY 2019 submission, Agencies were required to report the two Standard Investments: IT Security and Compliance and IT Management while the Network, Data Center and Cloud, and End User Standard Investments were optional. For the FY 2020 submission, these Standard Investments are now mandatory, and four additional Standard Investments are being rolled out for optional reporting this cycle and mandatory reporting next cycle: Output, Application, Delivery, and Platform. These Investments should be reported at the point of management and thus may be defined at the bureau level and/or by functional components, or at the Agency level if the Investments are managed for the enterprise. Consequently, more than one of the same type of Standard Investment submitted by Agencies may exist, particularly by federated Agencies, that are managing Standard Investments at lower than the enterprise level.

280

281 **4. If I submitted an Agency IT Portfolio Summary last year, how do I revise it this year?**

282 If the Agency submitted an Agency IT Portfolio Summary for the FY 2019 Budget, the revised FY 2020  
283 Agency IT Investment Portfolio Summary data must be compliant with the FY 2020 specified formats or  
284 it will be rejected. The Agency must note “change in status” for each Investment, as compared to the final  
285 FY 2019 President’s Budget (January 2018 or most recent update). Changes must be identified and  
286 described in columns twelve (12) and thirteen (13) of the Agency IT Investment Portfolio Summary.

287 It is important that the Agency updates its Agency IT Investment Portfolio Summary to reflect current IT  
288 Investment data. Note that the PY funding should be updated to reflect the FY 2018 budgetary resources  
289 for the final FY 2020 President’s Budget. An OMB Budget Account code for all “Funding Sources” line  
290 items is required for every Investment.

291

## AGENCY-LEVEL REPORTING

292 In an effort to clarify the reporting requirements set forth in this Guidance, OMB is separating the  
 293 sections based on reporting. The Agency-level reporting sections include the requirements to be submitted  
 294 only at the Agency’s portfolio level and not for individual IT Investments.

### IT RESOURCE STATEMENTS

#### 5. How do I report IT Resource Statements?

297 Per the requirements in Circular A-11, Sec. 51.3, CIOs should, in conjunction with their Agency’s budget  
 298 submissions, provide the common baseline rating demonstrating the level of CFO/CIO collaboration  
 299 required to fully implement the Federal IT Acquisitions Reform Act (FITARA) as applicable under  
 300 existing public law.

- 301 • **For the Agency IT Portfolio Summary**, Agencies are also required to post a copy of these  
 302 certifications, hereby termed their “OMB Budget Justification - IT Resource Statement”, to the [IT](#)  
 303 [Resource Statements \(BY 2020\) MAX submission page](#). OMB expects that this copy will be  
 304 posted on the same date the final Business Case or Standard Investment Report is submitted.
- 305 • **For the Final FY 2020 President’s Budget**, Agencies must update and include a copy of the  
 306 final “IT Resource Statement” in the Agency’s public Congressional Justification materials.

307 The IT Resource Statements should include:

- 308 a. A statement that the CIO collaborated with all component CIOs and the Chief Financial  
 309 Officer (CFO) on the IT Budget submissions, and that IT includes appropriate estimates of  
 310 all IT resources included in the budget request/President’s Budget.
- 311 b. A statement from the CIO indicating the extent to which the CIO has reviewed and had  
 312 significant input in approving IT Investments included in this budget request. For example,  
 313 if the CIO has reviewed and approved all the Investments from  
 314 Bureau/Component/Operating Division/Mode A, B, and C, but not D, then the statement  
 315 must identify that the CIO reviewed and approved Investments from  
 316 Bureau/Component/Operating Division/Mode A, B, and C.
- 317 c. A joint statement from the CFO and CIO identifying the extent to which the CIO had a  
 318 significant role in reviewing planned IT support for major programs and significant  
 319 increases and decreases in IT resources reflected in this budget.
- 320 d. An update of the CIO’s common baseline rating for Element D (“D1. CIO reviews and  
 321 approves major IT Investment portion of budget request”) to show whether the desired  
 322 development outcome is:
  - 323 1) Incomplete – Agency has not started development of a plan describing the  
 324 changes it will make to ensure that all baseline FITARA responsibilities  
 325 are in place.
  - 326 2) Partially Addressed – Agency is working to develop a plan describing the  
 327 changes it will make to ensure that all baseline FITARA responsibilities  
 328 are in place.
  - 329 3) Fully Implemented – Agency has developed and implemented its plan to  
 330 ensure that all common baseline FITARA responsibilities are in place.
- 331 e. The extent to which the CIO can certify the use of incremental development. For example, if the  
 332 CIO can certify that all the Investments from bureau/component/Operating Division/Mode A, B,  
 333 and C, but not D, are using incremental development practices then the statement must identify  
 334 that the CIO certifies that Investments from bureaus/components/Operating Divisions/Modes A, B,  
 335 and C are using incremental development practices.



336 **AGENCY BUDGET ACCOUNTS SUMMARY**

337 **6. How do I report the Agency Budget Accounts Summary?**

338 The Agency Budget Accounts Summary provides an orientation of IT funding levels associated with  
 339 Budget Accounts/Funding Sources listed for each IT Investment in the Agency IT Investment Portfolio  
 340 Summary. This summary focusing on the Budget Accounts orientation serves as a tool for Agency CIOs  
 341 and CFOs to collaborate and jointly certify the Agency’s IT submissions. To support FITARA  
 342 implementation and drive increased CIO authorities, the goal is to increase the IT funding dollar amount  
 343 that the CIO has direct oversight authority over each Budget Account.

344 The Agency Budget Accounts Summary is to be completed at the Agency level (NOT at a component  
 345 organization level or at an individual Investment level) for the PY, CY and the BY. It should include all  
 346 budget accounts that fund IT across the entire Agency, comprehensive of all component level  
 347 organizations, for Agency funding only, not the amounts included in contribution funding columns in the  
 348 Agency IT Investment Portfolio Summary. While budget account codes are listed within each IT  
 349 Investment, this table summarizes the total IT funding levels within each account and the CIO’s authority  
 350 for each. For the CIO Oversight Authority column, a dollar amount should be entered depicting the  
 351 amount within the budget year that the Agency CIO (not a component-level CIO) has direct oversight  
 352 authority over and decision-making authority over, within the total IT funding level listed for each budget  
 353 account. The amounts should include all funding sources (see the definition of Funding Sources in  
 354 Appendix C) that are spent on IT. The combined Agency total funding for each year in this table should  
 355 be the same as the Agency total funding in the Agency IT Investment Portfolio Summary for the same  
 356 years.

<b>Budget Account Code</b>	<b>CIO Oversight Authority [BY \$M]</b>	<b>Total Agency Funding PY 2018</b>	<b>Total Agency Funding CY 2019</b>	<b>Total Agency Funding BY 2020</b>	<b>Total Agency Funding BY (Budget Authority) 2020</b>

357

358

**INVESTMENT-LEVEL REPORTING**

359 In an effort to clarify the reporting requirements set forth in this Guidance, OMB is separating the  
 360 sections based on reporting scale. The reports included in this section are required to be submitted  
 361 connected to an individual Investment.

362 Investment reporting requirements vary based on two main factors: Part of Agency IT Portfolio Summary  
 363 (Column 7 of the Agency IT Portfolio Summary) and Type of Investment (Column 9 of the Agency IT  
 364 Portfolio Summary). Investment reporting requirements by Part and Type of Investment are detailed in  
 365 the tables below.

366 **Part 1: IT Investments for Mission Delivery**

Guidance Section	Type of Investment			
	1: Major	2: Non-Major	3: Migration	4: Funding Transfer
<a href="#">Agency IT Investment Portfolio Summary</a>	Required	Required	Required	Required
<a href="#">CIO Evaluation Report</a>	Required	Optional	Optional	Optional
<a href="#">Systems Inventory List</a>	Required	Required	Required	Required
<a href="#">Contracts Report</a>	Required	Optional	Optional	Optional
<a href="#">Major IT Business Case</a>	Required	N/A	N/A	N/A
<a href="#">Major IT Business Case Detail</a>	Required	N/A	N/A	N/A

367 **Part 2: IT Investments for Mission Support Systems**

Guidance Section	Type of Investment			
	1: Major	2: Non-Major	3: Migration	4: Funding Transfer
<a href="#">Agency IT Investment Portfolio Summary</a>	Required	Required	Required	Required
<a href="#">CIO Evaluation Report</a>	Required	Optional	Optional	Optional
<a href="#">Systems Inventory List</a>	Required	Required	Required	Required
<a href="#">Contracts Report</a>	Required	Optional	Optional	Optional
<a href="#">Major IT Business Case</a>	Required	N/A	N/A	N/A
<a href="#">Major IT Business Case Detail</a>	Required	N/A	N/A	N/A

368 **Part 3: IT Investments for IT Infrastructure, IT Security, and IT Management**

Guidance Section	Type of Investment	
	5: Standard	6: Non-Standard
<a href="#">Agency IT Investment Portfolio Summary</a>	Required	Required
<a href="#">CIO Evaluation Report</a>	Optional	Optional
<a href="#">Systems Inventory List</a>	Required	Required
<a href="#">Contracts Report</a>	Required	Required
<a href="#">Major IT Business Case</a>	N/A	Optional
<a href="#">Major IT Business Case Detail</a>	N/A	Optional
<a href="#">Part 3 Standard Investment Report</a>	Required/Optional	N/A

369

370 **AGENCY IT INVESTMENT PORTFOLIO SUMMARY**

371 The President's Budget Agency IT Portfolio Summary is a complete report of all IT resources within the  
 372 Agency. Investment costs are to be provided in millions of dollars (\$M). Reporting to three (3) decimal  
 373 places (precision to thousands of dollars) is recommended, although Agencies may report up to six (6)  
 374 decimal places (whole dollars). For example, \$4,651,123.756 would be represented as \$4.651123.

375 **7. What is the Agency IT Portfolio Summary?**

376 The Agency IT Portfolio Summary includes all IT resources for the IT Investments from all funding  
 377 sources. This means that for each Investment, the Agency must identify the funding source and budgetary  
 378 resources, including the OMB Budget Account codes, used for the Investment. Agencies should add as  
 379 many funding source line items as are appropriate for the Investment.

380 To avoid double counting or under-counting for E-Gov/LoB, Multi-Agency and/or Intra-Agency  
 381 collaboration Investments, or Standard IT Infrastructure, IT Security, and IT Management Investments,  
 382 the total funding source amounts for an Investment must match the Investment line item. To that end, the  
 383 Agency Lead Investment’s Agency IT Investment Portfolio Summary should only include funding from  
 384 its own Agency in the “Agency Funding” columns and include funds received from partner Agencies in  
 385 the “Contributions” columns. Likewise, the partner Agency’s Agency IT Investment Portfolio Summary  
 386 should include funding that is being transferred to the Agency Lead’s Service Management Office (SMO)  
 387 in its own “Agency Funding” columns (using the Investment type: “04-Funding transfer Investments”).  
 388 The Major IT Business Case will include all funding (both from the managing partner’s “Agency  
 389 Funding” as well as the partner Agency’s contributions). As applicable, all investments should report  
 390 Agency funding as well as partner inter/intra-Agency contributions. All budgetary data reported should  
 391 reflect budgetary resources.

392 **7.1 Budget Account Codes**

393 IT Investments are funded by specific budget accounts assigned to each Agency. Agencies should use the  
 394 following 10-digit number coding system to update or complete their OMB Budget Account identification  
 395 code information for IT Investment funding sources:

Entry	Description
XXX-xx-xxxx-x	The first three digits are your Agency code (See: <a href="#">Appendix C of OMB Circular No. A-11</a> ).
xxx-XX-xxxx-x	The next two digits are your bureau code (See: <a href="#">Appendix C of OMB Circular No. A-11</a> ). <i>Note:</i> The “bureau” code embedded in the OMB account number for a funding source might not always refer to a “bureau” as the term is used elsewhere.
xxx-xx-XXXX-x	This is a four-digit account code for the OMB budget account, as used by the MAX A-11 application where Agency budget offices provide budget information for the Budget Appendix. (See: <a href="#">Section 79.2 of OMB Circular No. A-11</a> ).
xxx-xx-xxxx-X	This is a single-digit Transmittal Code (See: <a href="#">Section 79.2 of OMB Circular No. A-11</a> ).

396 **7.2 TBM IT Portfolio Reporting**

397 In order to increase utility of the data reported in the IT Portfolio Summary and other submissions, OMB  
 398 is continuing to integrate the TBM IT Cost Pools and IT Towers into this year’s Guidance. Where  
 399 Investment spending can be parsed into the IT Cost Pools and Towers, this will provide more granularity  
 400 and ease the eventual transition to the full TBM model. Agencies will begin unwinding total Investment  
 401 amounts into TBM IT Cost Pools and IT Towers in order to begin getting more granular data and driving

402 TBM taxonomy adoption. OMB does not expect perfection during FY 2020 submissions. Introducing  
 403 TBM reporting over a phased implementation will start the process to transition to leveraging TBM data  
 404 for the CPIC data in the future.

405 All Investments (Part 1, Part 2, and Part 3) shall report IT Cost Pools and IT Tower costs in a phased  
 406 approach. For most Investments, as they begin reporting across all Cost Pools and IT Towers, the sum of  
 407 the IT Towers should match the sum of the Cost Pools and are both expected to match the sum of the  
 408 Investment FY spend total by budgetary resources. This will not be the case in funding transfer and other  
 409 Investments where FY Investment spend total includes spending not at the point of execution.

410 For Part 1 and Part 2 Investments, the IT Tower fields are available to indicate the applicable costs  
 411 associated with the IT Towers. OMB is not requiring that IT Tower-related costs be removed from these  
 412 Part 1 and 2 Investments.

413 For Part 3 Investments, Agencies have a mixture of Non-Standard and Standard Infrastructure  
 414 Investments.

- 415 • For Non-Standard Infrastructure Investments, the IT Tower fields are available to indicate the  
 416 applicable costs associated with the IT Towers.
- 417 • For Standard Infrastructure Investments, the corresponding IT Tower fields within the investment  
 418 should constitute the majority of the total standard Investment costs. Other IT Tower fields are  
 419 available to indicate other applicable costs needed to establish and maintain the IT Tower-defined  
 420 capability.

421 Each Investment identified in the Agency IT Investment Portfolio Summary must have a Unique  
 422 Investment Identifier (UII). The UII is the primary key for understanding the different Investments.

423 **7.3 Standard Components in the IT Portfolio**

Column/Field	Description
1	<p><b>Previous UII</b> [12 digits, required for all legacy Investments]</p> <p>This is the identifier depicting Agency code and unique Investment number used to report the Investment in the previous FY 2019 Agency IT Portfolio Summary submission to OMB. Indicating the UII used for a previous submission allows cross-walk and historical analysis spanning FYs. Previous UII is mandatory, with the exception of new Investments. To indicate consolidations/splits/reorganizations, Agencies should provide more than one entry.</p>
2	<p><b>Current UII</b> [12-digit primary key for all Investments]</p> <p>The Current UII includes an Agency code and a nine-digit unique identifier. Variable information formerly included in the UII of previous years is not part of the UII primary key.</p> <p>XXX- xxxxxxxxxx: The first three digits represent your Agency code (see <a href="#">Appendix C of OMB Circular No. A-11</a>).</p> <p>xxx- XXXXXXXXXXXX: The last nine digits serve as the Investment’s unique identifier. This identifier should be system-generated and applied at the Agency level. It will allow Agencies up to one billion unique identifiers to associate with IT Investments. Once used, the unique identifier must be retired from use for any future new Investment and should remain unchanged for any continuing Investment that is not split, consolidated, reorganized. If an IT Investment is retired, discontinued, or merged with another IT Investment, the UII persists with that IT Investment.</p>

Column/Field	Description
3	<p><b>Shared Services Category [2-digit code] (variable element)</b>                      00: Code for all Investments other than those coded “24”, “36” or “48.”                      24: E-Gov initiatives or an individual Agency's participation in one of the E-Gov/LoB initiatives listed in Appendix B.                      36: Shared Service Providers (SSPs) (and their customers) those previously designated by Treasury’s FIT and OPM’s HRLoB as well as any providers designated by the USSM. Agency contributions to a shared or centralized solution provider or a Multi-Agency (Inter- or Intra-Agency) collaboration should use code 24, not code 36.                      48: Any Multi-Agency (Inter- or Intra-Agency) IT collaboration or an individual Agency’s participation in one of these initiatives, such as use of a centralized FOIA portal. This includes shared services not officially designated by USSM and excludes E-Gov/LoB initiatives and USSM designated shared services.</p>
4	<p><b>Shared Services Identifier [4-digit code]</b>                      These four digits are applicable for all Investments with a Shared Services Category of 24, 36 or 48. A code will be specifically assigned for all E-Gov/LoB and USSM designated shared services in Appendix B, while Agencies should assign their own four-digit unique codes for Multi-Agency initiatives using the “48” shared services category. This code represents the same 4-digit identifier previously provided in the last nine digits of the UII for Investments starting with xxx-99999XXXX.</p>
5	<p><b>Mission Support Investment Category [2-digit code]</b>                      Mission Support Investment Category [2-digit code]. These two digits indicate the category of common Mission Support Investments by <a href="#">Federal Integrated Business Framework (FIBF)</a> Service Area(s). All non-mission support Investments should use Category 01. Mission Support Investments may select more than one code where applicable.                      01: Not Applicable                      02: Financial Management                      03: Human Resources                      04: Procurement                      05: Travel / Transportation                      06: Grants Management                      07: Other</p>
6	<p><b>Bureau Code [2-digit code] (variable element)</b>                      The two digits indicate the bureau code of the Investment (see <a href="#">Appendix C of OMB Circular No. A-11</a>). If this is a department-level or an Agency-wide activity, use “00” as your bureau code.  <i>Note:</i> This field refers to the bureau with management responsibility for the IT Investment, which may differ from the “bureau” code embedded in OMB budget accounts used when providing funding sources.</p>
7	<p><b>Part of Agency IT Portfolio Summary [2-digit code] (variable element)</b>                      These two digits indicate one of the three parts of the Agency IT Portfolio Summary, to which the Investment belongs:                      01: Part 1. IT Investments for Mission Delivery                      02: Part 2. IT Investments for Mission Support Systems                      03: Part 3. IT Investments for IT Infrastructure, IT Security, and IT Management</p>

Column/Field	Description
8	<p><b>Standard IT Infrastructure and Management Category [2-digit code]</b>                      These two digits indicate the sub-category of Investments identified as Part 3: IT Investments for IT Infrastructure, IT Security, and IT Management. For FY 2020, the three previous optional Standard Investments Network, End User, and Data Center and Cloud will now be required. Four additional standard Investments are being introduced as optional for FY 2020, including Output, Application, Delivery, and Platform. Agencies are encouraged to begin re-aligning Part 3 costs based upon these standard Investments. All other Part 3 Investments should use Category 01, which will represent Non-Standard Infrastructure Investments.</p> <p>01: Not Applicable                      02: IT Security and Compliance                      03: IT Management                      04: Network                      05: Data Center and Cloud                      06: End User                      07: Output                      08: Application                      09: Delivery                      10: Platform</p>
9	<p><b>Mission Delivery and Management Support Area [2-digit code] (variable element)</b>                      These two digits indicate the mission delivery and management support areas. Agencies should assign a unique code for each mission delivery and management support area reported. Agencies shall provide a reference table for mission areas via email to include:</p> <ul style="list-style-type: none"> <li>○ Agency Code [3-digits]</li> <li>○ Mission Delivery and Management Support Area [2-digit code]</li> <li>○ Description [500 characters]</li> </ul>

Column/Field	Description
10	<p><b>Type of Investment</b> [2-digit code] (variable element)            These two digits indicate the type of Investment being reported as follows:            01: Major IT Investments            02: Non-major IT Investments            03: IT Migration Investment: The portion of a larger asset and for which there is an existing Business Case for the overall asset. The description of the IT Investment should indicate the UII of the major asset Investment of the managing partner.            04: Funding Transfer Investments: These are 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 UII of the Lead Agency’s Investment.            05: Standard IT Infrastructure Investments in Part 3: IT Infrastructure, IT Security, IT Management Investments (IT Security and Compliance, IT Management, Network, Data Center and Cloud, End User, Output, Application, Delivery, and Platform).            06: Non-Standard Infrastructure Investments in Part 3: IT Infrastructure, IT Security, IT Management Investments: These investments should report as 01: Not Applicable under the Standard IT Infrastructure and Management Category (Field 8). Agencies may downgrade a “Major” Part 3 Investment to “06: Non-Standard Infrastructure Investment” provided that they have disaggregated to the greatest extent practical through the use of the other “Standard Investments”. Additionally, agencies may not have the capacity or the maturity to deliver all of the available Standard Investment reporting identified in the prior sections of this guidance. For those instances in which there is an organization that isn’t prepared to report the standard Investments, Agencies should consider leveraging the Non-Standard Infrastructure Investment to build up the competence and maturity.</p>
11	<p><b>National Security Systems Identifier</b> [2-digit code]            These two digits indicate whether the Investment is a National Security System per the Federal Information Security Management Act of 2002 (FISMA), 44 U.S.C. 3542(b)(2) as follows:            01: Non-National Security System Investment            02: National Security System Investment (these investments will not be publicly viewable on the IT Dashboard)</p>
12	<p><b>Line Item Descriptor</b> [2-digit code] (variable element)            These two digits identify the nature of the “line item” in the Agency IT Portfolio Summary structure. The digits represent the line number in both the XML format used for Agencies on the ITDB and the line number in an equivalent spreadsheet file (CSV or XLS file), for Agencies not on the ITDB, as follows:            00: Total Investment title line, structurally the first line for reporting this particular Investment            04: Funding source or appropriation            09: Any subtotal</p>

Column/Field	Description
13	<p><b>Change in Investment Status Identifier</b> [2-digit code]</p> <p>This is used when an Investment has a change in status (e.g., downgraded to non-major IT Investment, eliminated, retired, consolidated, split) for the current budget submission relative to the previous budget cycle. The change of status should be indicated with one of the following reasons:</p> <ul style="list-style-type: none"> <li>01: Upgraded from non-major to major IT Investment</li> <li>02: Downgraded from major to non-major IT Investment</li> <li>03: Split into multiple Investments</li> <li>04: Consolidation of Investments</li> <li>05: Reorganization</li> <li>06: Eliminated by funding</li> <li>07: Eliminated by split</li> <li>08: Eliminated by consolidation</li> <li>09: Eliminated by reorganization</li> <li>10: New</li> <li>11: No Change in Status</li> </ul> <p><i>Note:</i> For any new Standard IT Infrastructure, Security, and Management Investment, use Change in Investment Status Identifier 05 (Reorganization). Investments that have been split (Change in Investment Status Identifier 3) must be included in the Agency IT Portfolio Summary, with new UIIs in the Current UII field. Investments that have been consolidated (Change in Investment Status Identifier 4) must include their Previous UII in column 1.</p>
14	<p><b>Agency Description of Change in Investment Status</b> [255 char max]</p> <p>This is used when an indicator has been chosen for “Change in Investment Status Identifier” in order to provide a description of the rationale for the change, which may include impacted UIIs, specific references to legislative requirements, or governance board decisions and effective dates.</p>
15	<p><b>Investment Title</b></p> <p>This is a text field to provide the Investment title. To the extent that they are not part of the name used by the Agency, other identifiers such as bureaus or other numeric codes should not be included as part of an Investment title.</p>
16	<p><b>Investment Description</b> [500 char max]</p> <p>This is a short public-facing description for each Investment. This description should explain the purpose of the Investment and what program(s) it supports, including the value to the public. The description should be understandable to someone who is not an expert of the Agency. If the Investment is part of a Multi-Agency initiative or another Business Case, the Agency should describe where that Business Case is located in the appropriate Agency budget submission (e.g., Agency Lead Investment’s UII). For example, if the Investment represents the Agency's participation in an E-Gov or Shared Service initiative, the description should state this information and refer to the Current UII of the managing partner's Business Case.</p>
17	<p><b>FEA BRM Services – Primary service area</b> [3-digit code]</p> <p>This is the three (3) -digit code that indicates the predominant business function served by the Investment (not necessarily the Agency’s mission/business). <a href="#">BRM version 3.1</a> contains the current mapping codes.</p>
18	<p><b>DME PY Agency Funding</b> (PY/2018) [\$M]</p> <p>This should indicate FY 2018 amount. See definition of DME in Appendix C.</p>



Column/Field	Description
19	<b>DME PY Contributions (PY/2018) [\$M]</b> This should indicate the FY 2018 amount contributed from other Agencies. See definition of DME in Appendix C. For Funding Transfer Investments (Investment Type “04”), this field should be 0.
20	<b>DME CY Agency Funding (CY/2019) [\$M]</b> This should indicate FY 2018 amount. See definition of DME in Appendix C.
21	<b>DME CY Contributions (CY/2019) [\$M]</b> This should indicate the FY 2019 amount contributed from other Agencies. See definition of DME in Appendix C. For Funding Transfer Investments (Investment Type “04”), this field should be 0.
22	<b>DME BY Agency Funding (BY/2020) [\$M]</b> This should indicate FY 2020 amount. See definition of DME in Appendix C.
23	<b>DME BY Contributions (BY/2020) [\$M]</b> This should indicate the FY 2020 amount contributed from other Agencies. See definition of DME in Appendix C. For Funding Transfer Investments (Investment Type “04”), this field should be 0.
24	<b>DME BY (Budget Authority) Agency Funding (BY/2020) [\$M]</b> This should indicate FY 2020 amount. See definition of DME in Appendix C.
25	<b>O&amp;M PY Agency Funding (PY/2018) [\$M]</b> This should indicate FY 2018 amount. See definition of O&M in Appendix C.
26	<b>O&amp;M PY Contributions (PY/2018) [\$M]</b> This should indicate the FY 2018 amount contributed from other Agencies. See definition of O&M in Appendix C. For Funding Transfer Investments (Investment Type “04”), this field should be 0.
27	<b>O&amp;M CY Agency Funding (CY/2019) [\$M]</b> This should indicate FY 2019 amount. See definition of O&M in Appendix C.
28	<b>O&amp;M CY Contributions (CY/2019) [\$M]</b> This should indicate the FY 2019 amount contributed from other Agencies. See definition of O&M in Appendix C. For Funding Transfer Investments (Investment Type “04”), this field should be 0.
29	<b>O&amp;M BY Agency Funding (BY/2020) [\$M]</b> This should indicate FY 2020 amount. See definition of O&M in Appendix C.
30	<b>O&amp;M BY Contributions (BY/2020) [\$M]</b> This should indicate the FY 2020 amount contributed from other Agencies. See definition of O&M in Appendix C. For Funding Transfer Investments (Investment Type “04”), this field should be 0.
31	<b>O&amp;M BY (Budget Authority) Agency Funding (BY/2020) [\$M]</b> This should indicate FY 2020 amount. See definition of DME in Appendix C.
32	<b>Functional/Business Sponsor Name</b> The Functional/Business Sponsor is defined in Appendix C, and provides visibility for Agencies and OMB as to who the sponsor is for each Investment within the IT portfolio.
33	<b>Functional/Business Sponsor Title</b> Indicate the title of the Functional/Business Sponsor.
34	<b>Cloud Computing Alternatives Evaluation [one-digit code]</b> This specifies whether, as of the date of the submission, the Investment, or a component of the Investment, is leveraging, considering, migrating or posing as a candidate for cloud computing. All Investments should answer this question regardless of the overall life cycle stage of the Investment, as operational

Column/Field	Description
	<p>Investments should consider cloud computing alternatives during or as a result of an operational analysis. Select one of the following answers:</p> <ol style="list-style-type: none"> <li>1. This Investment or a portion of this Investment is leveraging cloud computing.</li> <li>2. This Investment is migrating to the cloud.</li> <li>3. This Investment is considering cloud computing.</li> <li>4. Cloud computing has NOT been considered.</li> <li>5. Cloud computing is NOT applicable for any portion of this Investment.</li> <li>6. Cloud computing has been considered but was not selected.</li> </ol> <p><i>Note:</i> For Funding Transfer Investments (Investment Type “04”), this field does not need to be completed.</p>
35	<p><b>Data Center Inventory ID</b>                      The unique identifier (or list of the identifiers) for relevant data centers from your agency’s data center inventory, which is submitted to OMB on a quarterly basis in conjunction with the Integrated Data Collection (IDC). To be put in contact with your agency's IDC submitters and obtain a list of your agency's correct “Data Center IDs”, email <a href="mailto:DataPointSupport@omb.eop.gov">DataPointSupport@omb.eop.gov</a>.</p>
36	<p><b>Total Cloud (PaaS/IaaS) Amount (CY/2019) [\$M]</b>                      This should indicate the CY amounts associated with Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) cloud service offerings for this Investment. Previously this was asked for in the Agency Provisioned IT Services Spending Summary, which has been eliminated.</p>
37	<p><b>Total Cloud (SaaS) Amount (CY/2019) [\$M]</b>                      This should indicate the CY amounts associated with Software as a Service (SaaS) cloud service offerings for this Investment. Previously this was asked for in the Agency Provisioned IT Services Spending Summary, which has been eliminated.</p>
38	<p><b>Total Other Managed Services (non-cloud) Amount (CY/2019) [\$M]</b>                      This should indicate the CY amounts associated with non-cloud managed services service offerings. Previously this was asked for in the Agency Provisioned IT Services Spending Summary, which has been eliminated.</p>

424 **7.4 IT Cost Pools**

425 Columns 39-65 include the IT Cost Pools from the TBM Taxonomy. Definitions are provided in  
 426 Appendix D. The only cost pool data that is required in the FY 2020 submission year is Total Internal  
 427 Labor, as that data is related to the FTE amounts that have been captured in the CPIC budget submissions  
 428 for many years. While the TBM definition of Internal Labor includes more than just Government FTE  
 429 costs, Agencies can simply include these Government FTE costs. Reporting all applicable IT Cost Pools  
 430 is encouraged for Agencies that can, and OMB acknowledges that Investments will likely not have  
 431 amounts associated with all IT Cost Pools. This applies to all Investments, Major, Non-Major, and IT  
 432 Infrastructure, IT Security, and IT Management. Definitions are included in Appendix D: TBM Cost Pool  
 433 and IT Tower definitions.

Column/Field	Description
39	<p>Cost Pool: <b>Total Internal Labor</b> (formerly Government FTE) <b>Amount (PY/2018) [\$M] [Required for FY 2020 reporting, if applicable]</b>                      This is the total PY amount for Internal Labor as defined by Appendix D.</p>
40	<p>Cost Pool: <b>Total Internal Labor</b> (Government FTE) <b>Amount (CY/2019) [\$M] [Required for FY 2020 reporting, if applicable]</b>                      This is the total CY amount for Internal Labor as defined by Appendix D.</p>

<b>Column/Field</b>	<b>Description</b>
41	Cost Pool: <b>Total Internal Labor (Government FTE) Amount (BY/2020) [\$M]</b> <i>[Required for FY 2020 reporting, if applicable]</i> This is the total BY amount for Internal Labor as defined by Appendix D.
42	Cost Pool: <b>Total External Labor Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for External Labor as defined by Appendix D.
43	Cost Pool: <b>Total External Labor Amount (CY/2019) [\$M] [Optional]</b> This is the total CY amount for External Labor as defined by Appendix D.
44	Cost Pool: <b>Total External Labor Amount (BY/2020) [\$M] [Optional]</b> This is the total BY amount for External Labor as defined by Appendix D.
45	Cost Pool: <b>Total Outside Services Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for Outside Services as defined by Appendix D.
46	Cost Pool: <b>Total Outside Services Amount (CY/2019) [\$M] [Optional]</b> This is the total CY amount for Outside Services as defined by Appendix D.
47	Cost Pool: <b>Total Outside Services Amount (BY/2020) [\$M] [Optional]</b> This is the total BY amount for Outside Services as defined by Appendix D.
48	Cost Pool: <b>Total Hardware Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for Hardware as defined by Appendix D.
49	Cost Pool: <b>Total Hardware Amount (CY/2019) [\$M] [Optional]</b> This is the total CY amount for Hardware as defined by Appendix D.
50	Cost Pool: <b>Total Hardware Amount (BY/2020) [\$M] [Optional]</b> This is the total BY amount for Hardware as defined by Appendix D.
51	Cost Pool: <b>Total Software Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for Software as defined by Appendix D.
52	Cost Pool: <b>Total Software Amount (CY/2019) [\$M] [Optional]</b> This is the total CY amount for Software as defined by Appendix D.
53	Cost Pool: <b>Total Software Amount (BY/2020) [\$M] [Optional]</b> This is the total BY amount for Software as defined by Appendix D.
54	Cost Pool: <b>Total Facilities and Power Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for Facilities and Power as defined by Appendix D.
55	Cost Pool: <b>Total Facilities and Power Amount (CY/2019) [\$M] [Optional]</b> This is the total CY amount for Facilities and Power as defined by Appendix D.
56	Cost Pool: <b>Total Facilities and Power Amount (BY/2020) [\$M] [Optional]</b> This is the total BY amount for Facilities and Power as defined by Appendix D.
57	Cost Pool: <b>Total Telecom Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for Telecom as defined by Appendix D.
58	Cost Pool: <b>Total Telecom Amount (CY/2019) [\$M] [Optional]</b> This is the total CY amount for Telecom as defined by Appendix D.
59	Cost Pool: <b>Total Telecom Amount (BY/2020) [\$M] [Optional]</b> This is the total BY amount for Telecom as defined by Appendix D.
60	Cost Pool: <b>Total Other Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for Other as defined by Appendix D.
61	Cost Pool: <b>Total Other Amount (CY/2019) [\$M] [Optional]</b> This is the total CY amount for Other as defined by Appendix D.
62	Cost Pool: <b>Total Other Amount (BY/2020) [\$M] [Optional]</b> This is the total BY amount for Other as defined by Appendix D.

Column/Field	Description
63	Cost Pool: <b>Total Internal Services Amount (PY/2018) [\$M] [Optional]</b> This is the total PY amount for Internal Services as defined by Appendix D. Only Type 04 Funding Transfer Investments should report amounts within the Internal Services Cost Pool.
64	Cost Pool: <b>Total Internal Services Amount (CY/2019) [\$M] [Optional]</b> This is the total PY amount for Internal Services as defined by Appendix D. Only Type 04 Funding Transfer Investments should report amounts within the Internal Services Cost Pool.
65	Cost Pool: <b>Total Internal Services Amount (BY/2020) [\$M] [Optional]</b> This is the total PY amount for Internal Services as defined by Appendix D. Only Type 04 Funding Transfer Investments should report amounts within the Internal Services Cost Pool.

434 **7.5 IT Towers**

435 Columns 66-98 represent the TBM IT Towers. “IT Towers and sub-Towers are the basic building blocks  
436 of services and applications. Examples include compute (e.g., servers, Unix, mainframe), network,  
437 application (e.g., app dev, app support and maintenance) and IT management. They are sometimes called  
438 domains or functions.”<sup>2</sup> Definitions are included in Appendix D: TBM Cost Pool and IT Tower  
439 definitions. This applies to all Investments; major, non-major, and standard IT Infrastructure, IT Security,  
440 and IT Management.

Column/Field	Description
66	IT Tower: <b>Total IT Security and Compliance Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for IT Security and Compliance as defined by Appendix D.
67	IT Tower: <b>Total IT Security and Compliance Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for IT Security and Compliance as defined by Appendix D.
68	IT Tower: <b>Total IT Security and Compliance Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for IT Security and Compliance as defined by Appendix D.
69	IT Tower: <b>Total IT Management Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for IT Management as defined by Appendix D.
70	IT Tower: <b>Total IT Management Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for IT Management as defined by Appendix D.
71	IT Tower: <b>Total IT Management Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for IT Management as defined by Appendix D.
72	IT Tower: <b>Total Network Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Network as defined by Appendix D.

<sup>2</sup> Technology Business Management Council, TBM Taxonomy Version 2.1, March 1, 2018

<b>Column/Field</b>	<b>Description</b>
73	IT Tower: <b>Total Network Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for Network as defined by Appendix D.
74	IT Tower: <b>Total Network Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Network as defined by Appendix D.
75	IT Tower: <b>Total Data Center Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Data Center as defined by Appendix D.
76	IT Tower: <b>Total Data Center Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for Data Center as defined by Appendix D.
77	IT Tower: <b>Total Data Center Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Data Center as defined by Appendix D.
78	IT Tower: <b>Total Compute Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Compute as defined by Appendix D.
79	IT Tower: <b>Total Compute Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for Compute as defined by Appendix D.
80	IT Tower: <b>Total Compute Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Compute as defined by Appendix D.
81	IT Tower: <b>Total Storage Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Storage as defined by Appendix D.
82	IT Tower: <b>Total Storage Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for Storage as defined by Appendix D.
83	IT Tower: <b>Total Storage Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Storage as defined by Appendix D.
84	IT Tower: <b>Total End User Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for End User as defined by Appendix D.
85	IT Tower: <b>Total End User Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for End User as defined by Appendix D.
86	IT Tower: <b>Total End User Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for End User as defined by Appendix D.
87	IT Tower: <b>Total Output Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Output as defined by Appendix D.
88	IT Tower: <b>Total Output Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for Output as defined by Appendix D.
89	IT Tower: <b>Total Output Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Output as defined by Appendix D.
90	IT Tower: <b>Total Application Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Application as defined by Appendix D.
91	IT Tower: <b>Total Application Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total PY amount for Application as defined by Appendix D.
92	IT Tower: <b>Total Application Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Application as defined by Appendix D.

<b>Column/Field</b>	<b>Description</b>
93	IT Tower: <b>Total Delivery Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Delivery as defined by Appendix D.
94	IT Tower: <b>Total Delivery Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for Delivery as defined by Appendix D.
95	IT Tower: <b>Total Delivery Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Delivery as defined by Appendix D.
96	IT Tower: <b>Total Platform Amount (PY/2018) [\$M] [Required, if applicable]</b> This is the total PY amount for Platform as defined by Appendix D.
97	IT Tower: <b>Total Platform Amount (CY/2019) [\$M] [Required, if applicable]</b> This is the total CY amount for Platform as defined by Appendix D.
98	IT Tower: <b>Total Platform Amount (BY/2020) [\$M] [Required, if applicable]</b> This is the total BY amount for Platform as defined by Appendix D.

441

442 **CIO EVALUATION REPORT**

443 **8. What is the CIO Evaluation?**

444 Provide CIO numeric evaluation (1-5) for all Part 1 and Part 2 major IT Investments that reflect the CIO’s  
 445 best judgment of the current level of risk for the Investment in terms of its ability to accomplish its goals  
 446 (per [40 U.S.C. § 11315 \(c\)\(2\)](#)). The evaluation could be informed by the following factors, including but  
 447 not limited to: risk management, requirements management, contractor oversight, historical performance,  
 448 human capital, and other factors that the CIO deems important to forecasting future success. CIOs should  
 449 consult with appropriate stakeholders (e.g., Chief Acquisition Officers, chief management officers,  
 450 program managers, customers, etc.) in making their evaluation. Each evaluation should include a  
 451 narrative explanation when the numerical rating has changed since the last evaluation; and a numeric  
 452 rating based on the aforementioned factors.

453 While CIOs have authority and responsibility over the entire IT portfolio, OMB is only requiring CIO  
 454 evaluations for major IT Investments that relate to Mission and Administrative Services and Mission  
 455 Support Systems Investments (Part 1 and Part 2 of the Agency IT Portfolio Summary). OMB is not  
 456 requiring CIO evaluations for Part 3: IT Infrastructure, IT Security, and IT Management Investments as  
 457 these reflect a new requirement and level of effort for Agencies to re-work their Investment portfolio.  
 458 Agencies may elect to provide CIO Evaluations for Part 3 Investments at their discretion.

459 The following factors and supporting examples can be used to inform the CIO Evaluation:

Evaluation Factor	Supporting Examples
Risk Management	<ul style="list-style-type: none"> <li>• Risks and associated impact are well understood by senior leadership.</li> <li>• Risk log is current and complete.</li> <li>• Risks are clearly prioritized.</li> <li>• Risk response plans are in place to manage risks.</li> <li>• Change control is established and communicated to all stakeholders (especially with system and process dependencies).</li> </ul> <p><i>Note:</i> Risk management implies that active risks are being managed and mitigated accordingly. Active risks include, but are not limited to funding cuts and staffing changes.</p>
Requirements/Outcomes Management	<ul style="list-style-type: none"> <li>• Product delivery horizons are small in duration and cost.</li> <li>• Investment objectives are clear and scope is controlled.</li> <li>• Outcomes and/or requirements are clear and validated.</li> <li>• Stakeholders are actively involved in the requirements process per appropriate methodology.</li> <li>• Product backlog is prioritized periodically based on recent release and stakeholder feedback.</li> </ul>
Contractor Oversight	<ul style="list-style-type: none"> <li>• Acquisition strategy is defined and managed via an Integrated Program/Project Team, which includes all the relevant disciplines.</li> <li>• Accountable oversight official (e.g., COR, PM, etc.) receives key deliverables and reports, such as current status and risk logs.</li> <li>• Designated officials are providing appropriate management of contractors such that the government is monitoring, controlling, and mitigating the impact of any adverse contract performance.</li> <li>• Product demos are conducted and reviewed to ensure stakeholder requirements are being met throughout the systems development process.</li> </ul>
Performance	<ul style="list-style-type: none"> <li>• No significant projected deviations from planned cost, schedule, scope, cost savings/return on Investment, and value of the Investment metrics.</li> </ul>

<b>Evaluation Factor</b>	<b>Supporting Examples</b>
	<ul style="list-style-type: none"> <li>Lessons learned and best practices are incorporated and adopted.</li> </ul>
Human Capital	<ul style="list-style-type: none"> <li>Qualified management and execution team for the IT Investments and/or contracts supporting the Investment.</li> <li>Low turnover rate and hiring contingency in place.</li> </ul>
Other	<ul style="list-style-type: none"> <li>Other factors that the CIO deems important to forecasting future success.</li> </ul>

460  
 461 The Agency CIO rates each investment based on his or her best judgment, using a set of pre-established  
 462 criteria. As a rule, the Evaluation should reflect the CIO's assessment of the risk and the Investment's  
 463 ability to accomplish its goals. CIOs should consult with appropriate stakeholders in making their  
 464 evaluation, such as Chief Acquisition Officers, program managers, etc. Evaluation ratings are scored on a  
 465 five-point risk scale, as follows:  
 466

<b>Evaluation (By Agency CIO)</b>	<b>Color</b>
5 – Low Risk	<b>Green</b>
4 – Moderately Low Risk	<b>Green</b>
3 – Medium Risk	<b>Yellow</b>
2 – Moderately High Risk	<b>Red</b>
1 – High Risk	<b>Red</b>

467 The following fields will comprise the CIO Evaluation Report:

<b>Column /Field</b>	<b>Description</b>
1	<b>UII</b> [ <i>12-digit primary key for all Investments</i> ]
2	<b>CIO Rating</b>
3	<b>CIO Comments</b>

468



469 **SYSTEMS INVENTORY LIST**

470 **9. What is the Systems Inventory?**

471 Agencies should report all Information Systems (see: [Appendix C](#)) funded by this Investment in the  
 472 following tables. For shared services, only the Lead Agency Investment should report the relevant  
 473 system(s). For purposes of reporting in this table, only include systems currently in operation (i.e., post-  
 474 deployment). An information system may include multiple products. An information system may be  
 475 reported for more than one investment, if applicable.

Section A: General Information	
Column /Field	Description
1	UII [12-digit primary key for all Investments]

476

Section B: Systems Inventory
------------------------------

477 *Note:* Responses to this field are per FISMA definitions. For Systems Table B.1 below, report each  
 478 System or Sub-System funded by the Investment.

Systems Table B.1	
Field	Data Description
<b>System Name</b>	[250 char max] Agency internal name (e.g., Delphi, HUDCaps, AGMAX, etc.)
<b>Average # of users per month</b>	[10-digit integer]
<b>Initial Operating Year</b>	[YYYY]

479 For Product Table B.2 below, report the following data for every product of each system reported in  
 480 Systems Inventory Table B.1. Systems may have one or more products.

Product Table B.2	
Field	Data Description
<b>System Name</b>	[250 char max] Agency internal name (e.g., Delphi, HUDCaps, AGMAX, etc.)
<b>Product Name</b>	[250 char max] Indicate the official vendor name (e.g., Enterprise Business Suite, Momentum, HCM) or enter "N/A" if the system was custom developed internally within the Agency
<b>Vendor Name</b>	[250 char max] Indicate the official vendor name (e.g., Oracle, SAP, CGI, GSA) for the specific product (i.e., non-integrated services) or enter "N/A" if the system was custom developed internally within the Agency
<b>Version Number</b>	[10 char max] Indicate the Product Name version number to at least the first minor version digit (e.g., 12.1, 9.2, etc.) or enter "N/A" if the system was custom developed internally within the Agency
<b>Last Major Tech Refresh Date</b>	[MM-YYYY] Provide the date that the product last had a major refreshment, replacement, or addition of hardware or software (not patching).
<b>Anticipated Major Tech Refresh Date</b>	[MM-YYYY] Provide, if applicable, the anticipated date that the product will have its next major refreshment, replacement or addition of hardware or software (not patching).
<b>End of Contracted Support</b>	[MM-YYYY] Final day of the period of performance for

<b>Product Table B.2</b>	
	<i>product operations support, may enter “N/A” if no contracted support is maintained for this system.</i>
<b>Product Expected End of Life</b>	<i>[MM-YYYY or N/A] If there is no planned end of life, enter “N/A”. End of Life represents the date on which the vendor is no longer providing regular support (extended support for a software version for example is outside of the expected end of life) for a solution, or the original manufacturer is no longer manufacturing parts.</i>
<b>Product Function(s)</b>	<i>[7 digit code for each function] Provide all relevant service area functions associated with this product as defined by the <a href="#">Federal Integrated Business Framework (FIBF)</a>, e.g., “FFM.010”.</i>

481

482 **CONTRACTS REPORT**

483 **10. What is the Contracts Report?**

484 The Contracts Report contains all contracts for an Investment and is collected in accordance with OMB's  
 485 strategy to align Investment data with FPDS data in order to facilitate Agency and OMB engagement  
 486 around critical points in contract or acquisition management.

487 For all Type 01 Major and Part 3 IT Investments for IT Infrastructure, IT Security, and IT Management,  
 488 the Contracts Report is required, if applicable. Investments should update these fields regularly  
 489 throughout the reporting cycle.

Section A: General Information	
Column /Field	Description
1	UII [12-digit primary key for all Investments]

490

Section B: Contracts/Acquisitions	
Column/Field	Description
1	<p><b>Procurement Instrument Identifier (PIID) or Reference PIID</b>                      The unique identifier for each contract, agreement, or order associated with this Investment (Federal Procurement Data Systems (FPDS) data element 1A). Enter PIID numbers for contacts, agreements, or orders both that have already been awarded or are in the pre-award stage. Completed and/or expired contracts do not need to be included. Data definitions can be found at <a href="#">Federal Procurement Data System</a>.  <i>This field is required only for Major IT Investments and Part 3 Investments. Agencies should provide as many entries as applicable. [PIID/Reference PIID by number/character as submitted to FPDS]</i></p>
2	<p><b>Planned Acquisitions</b>                      Indicate whether the Investment is planning to award a new or renew an expiring contract in the next 12 months.  <i>This field is required only for Major IT Investments and Part 3 Investments.</i>                      [Yes, No]</p>

491

492 **MAJOR IT BUSINESS CASE**

493 **11. What is the Major IT Business Case?**

494 The Major IT Business Case is one component of the Agency’s total budget justification (see Section 51.2  
 495 of OMB Circular No. A-11). OMB uses data reported in the Major IT Business Case to make quantitative  
 496 decisions about budgetary resources consistent with the Administration’s program priorities as well as  
 497 qualitative assessments about whether the Agency’s programming processes are consistent with OMB  
 498 policies and guidance. OMB may request additional supporting information from Agencies as necessary.

499 OMB provides specific policy, procedural, and analytic guidelines for planning, budgeting, acquisition,  
 500 and management of major IT capital Investments in addition to general guidance issued in [OMB Circular](#)  
 501 [No. A-11](#) and [OMB Circular No. A-130](#).

502 The Agency IT Portfolio Summary and Major IT Business Cases (including Business Case and Business  
 503 Case Detail) describe the justification, planning, and implementation of an individual capital asset  
 504 included in the Agency IT Portfolio Summary and serve as key artifacts of the Agency’s Enterprise  
 505 Architecture (EA) and CPIC processes.

506 In keeping with the FY 2019 cycle, Business Cases are only required for Part 1 and Part 2 major IT  
 507 Investments. OMB will not be requiring Part 3 Investments to complete Business Cases due to the level  
 508 of effort required to transition to a new Standard Investment structure and Standard Investment Reports  
 509 intended to collect relevant information for specific types of commodity IT. Agencies may elect to submit  
 510 Business Cases for Part 3 Non-Standard Investments at their discretion.

511 Together, the Major IT Business Case and Major IT Business Case Details provide the budgetary and  
 512 management information necessary for sound planning, management, and governance of major IT  
 513 Investments. These documents help Agencies explicitly align IT Investments with strategic and  
 514 performance goals, and ultimately provide value to the public by making Investment and management  
 515 information more transparent. As architecture-driven IT Investments are funded in the "Select" CPIC  
 516 phase, the Investments move forward into the implementation phase. The system development life cycle  
 517 processes are then followed and actual outputs, schedule, and operational performance expenditures are  
 518 tracked against planned numbers using performance-based management processes as part of the CPIC  
 519 “Control” Phase.

520 **11.1 How will Agencies manage IT capital assets/Investments?**

521 There are three primary OMB Circulars that describe the complete set of requirements regarding the  
 522 management of IT resources.

- 523 1. The [Capital Programming Guide](#) of OMB Circular No. A-11 provides guidance on the principles  
 524 and techniques for effective capital programming.
- 525 2. [OMB Circular No. A-11, Appendix J](#) explains the principles of financing capital asset  
 526 acquisitions.
- 527 3. [OMB Circular No. A-130](#) establishes additional requirements for EAs, planning and control of  
 528 information systems and IT Investments, IT Governance, and performance management.

529 These requirements include, but are not limited to, the following objectives of the CPIC processes for  
 530 their portfolio of IT resources:

- 531 • Implement the strategies and requirements of and manage the full scope of decisions related to all  
 532 Agencies’ IT described in [FITARA](#), Title VIII Subtitle D of the National Defense Authorization  
 533 Act (NDAA) for Fiscal Year 2015, Pub. L. No. 113-291.
- 534 • Ensure that the planning and management of Agency IT resources fully implement the  
 535 requirements of [OMB Circular No. A-130](#), “Management of Federal Information Resources.”
- 536 • Ensure that covered Agencies shall continue to provide information to the ITDB, as detailed

537 within this Guidance, which is issued annually in conjunction with the release of [OMB Circular](#)  
 538 [A-11](#). As a part of that guidance, Agency engagements including PortfolioStat, Agency Strategic  
 539 Reviews, OMB and/or Agency-led TechStat reviews, and Desk Officer Reviews will be used to  
 540 meet FITARA requirements. Per OMB M-15-14:

541 ○ TechStat Sessions - A TechStat is a face-to-face, evidence-based accountability review of  
 542 an IT program with Agency leadership. TechStat sessions are a tool for getting ahead of  
 543 critical problems in an Investment, turning around underperforming Investments, or  
 544 terminating Investments if appropriate. For all Agency-led TechStat reviews of  
 545 Investments, the Agency shall contact [ofcio@omb.eop.gov](mailto:ofcio@omb.eop.gov) with the subject line,  
 546 “[Agency Acronym] TechStat Notification,” at least two weeks ahead of the TechStat  
 547 session. Agencies shall follow the Agency’s TechStat policy and procedures based on the  
 548 CIO.gov [TechStat Toolkit](#) when managing TechStat sessions. Agencies shall report the  
 549 outcomes and outputs of all TechStat sessions to the quarterly Integrated Data Collection  
 550 (IDC) process, per FITARA these should include:

- 551                   ▪ the root causes of the high level of risk of the investment;
- 552                   ▪ the extent to which these causes can be addressed; and
- 553                   ▪ the probability of future success

554

- 555 ● Evaluate and select capital assets that will support core mission functions performed by the  
 556 Federal Government and that demonstrate projected returns on Investment that are clearly equal  
 557 to or better than alternative uses of available public resources. The Investments should be  
 558 informed by and address performance gaps and goals identified in an Agency’s strategic plan,  
 559 annual performance plan, EA implementation Roadmap, and IT asset inventory.

- 560 ● Initiate improvement to existing assets or acquisition of new assets only after considering  
 561 alternative governmental source or private sector solutions. Agencies shall maintain an up-to-date  
 562 comprehensive inventory of all IT systems, IT hardware and software assets at the Agency,  
 563 bureau and program levels that includes details on the product, vendor, and version types.

- 564 ● Assign an Agency functional/business sponsor (separate from the PM) for each Investment who  
 565 is responsible for the program or function supported or implemented by the Investment. The  
 566 sponsor is responsible for expressing the value of, ensuring successful implementation of, and  
 567 providing accurate and timely data for the IT Investment to the Agency CIO and OMB. Each  
 568 major and non-major IT Investment listed in Agency IT Portfolio Summary must include the  
 569 name of the functional/business sponsor name and title.

- 570 ● Encourage iterative (e.g., agile) development whenever possible to ensure that solutions are  
 571 delivered using an iterative approach through close collaboration with product owners and  
 572 business sponsors who are embedded in iterative (e.g., agile) teams which allows for frequent  
 573 reassessment in an incremental manner by implementing IT reforms based upon current guidance  
 574 and best practices such as U.S. Digital Service Playbook, [TechFAR](#), modular development  
 575 guidance, and Investment guidance.

- 576 ● Encourage iterative (e.g., agile) development and digitalization where ever possible.  
 577 Digitalization is an alternative delivery method to automation. “Digitalization” is purposely and  
 578 deliberately differentiated from “automation,” a process which has been underway for decades.

- 579 ○ Automation can be characterized as the use of information technology to speed up existing  
 580 business processes and interactions, and often can bring significant computing power to assist  
 581 in performing tasks which would otherwise require excessive amounts of labor and resources.  
 582 Examples of automation include payroll processing, performing bookkeeping and financial  
 583 calculations, and even first- and second-generation web forms that largely mirror the paper  
 584 forms and business practices upon which they were originally based.

- 585 ○ Digitalization is fundamentally different from automation in that one of its core premises is to

586 prioritize customer experience. Another core premise of automation is that the power of  
 587 information technology and the use of user and ecosystem interaction data can, and should,  
 588 be harnessed to redefine, optimize, and personalize the experiences by which Agencies  
 589 interact both internally and externally. Quite often, digitalization harnesses newer forms of  
 590 technology (such as mobile, sensors, social media, metadata, shared services, etc.) to deliver a  
 591 differentiated and personalized end-user experience.

- 592 • Structure major planning and acquisition into useful segments with a narrow scope and brief  
 593 duration. These segments should make adequate use of competition and appropriately allocate  
 594 risk between the Federal Government and the contractor. The Agency CIO must approve or  
 595 define the cost, schedule, and performance goals for major acquisitions, and the Agency's CFO  
 596 must evaluate the proposed cost goals.
- 597 • Ensure a continuous linkage between Federal, Agency, and bureau EAs based on the Agency  
 598 Information Resources Management (IRM) Strategic Plan, demonstrating such consistency  
 599 through alignment with the Agency's Enterprise Roadmap and target architecture, compliance  
 600 with Agency business requirements and standards, as well as identification of milestones, as  
 601 defined in the Agency's EA transition strategy
- 602 • Institute performance measures and management processes to monitor and compare actual  
 603 performance to planned results. Each methodology should have a set of measures that are  
 604 consistent, appropriate, and tailored to that methodology.
- 605 • Achieve, on average, 90 percent of Agency cost, schedule, and performance goals for major  
 606 acquisitions, per requirements of [Federal Acquisition Streamlining Act of 1994 \(FASA, Title V\)](#).  
 607 Through the TechStat process and as part of the Clinger-Cohen Act responsibility, Agency Heads  
 608 should review major acquisitions that have not achieved 90 percent of the goals to determine  
 609 whether there is a continuing need and what corrective action, including termination, should be  
 610 taken.
- 611 • Ensure that Agencies' financial management systems conform to the requirements of [OMB](#)  
 612 [Circular No. A-123, Appendix D](#) (formerly OMB Circular A-127).
- 613 • Conduct post-implementation or post-occupancy reviews of capital programming and acquisition  
 614 processes and projects to validate estimated costs and benefits and to document effective  
 615 management practices (e.g., lessons learned) for broader use.
- 616 • Establish oversight mechanisms that require periodic review of operational capital assets to  
 617 determine how mission requirements might have changed and whether the asset continues to  
 618 fulfill ongoing and anticipated mission requirements, deliver intended benefits to the Agency and  
 619 customers, and meet user requirements.
- 620 • Develop, maintain, and submit within five business days (upon OMB request) the following  
 621 Investment artifacts for all major IT Investments, as applicable:
  - 622 ○ Risk management plan and risk register
  - 623 ○ Investment charter, including Integrated Project Team (IPT) and the associated project  
 624 charter (if applicable)
  - 625 ○ Acquisition Strategy
  - 626 ○ Investment-level alternative analysis and benefit-cost analysis
  - 627 ○ Release Plan with budget baseline\*
  - 628 ○ Product Backlog\*
  - 629 ○ Sprint Plan with backlog and burn down chart\*
  - 630 ○ Operational analyses (for operational and mixed life cycle systems)
  - 631 ○ Post implementation review results (Investment level or project-specific)
  - 632 ○ Documentation of Investment re-baseline management approval(s)
  - 633 ○ Documentation/justification of an Investment's elimination due to funding, consolidation,  
 634 reorganization, or split



635 \*Release plan, Product backlog and sprint plans are project level and not IT Investment level  
 636 specific. These are required only for software development projects listed under major IT  
 637 Investments and only for those being managed using iterative (e.g., agile) methodology.

638 *Note:* Specific artifacts standard Part 3: IT Infrastructure, IT Security and Management  
 639 Investments have not been specified.

640 **11.2 What must I report in the Major IT Business Case and Major IT Business Case Detail, and**  
 641 **when?**

642 The policy and budget justification principles in the Major IT Business Case and Major IT Business Case  
 643 Details apply to all Agencies of the Executive Branch of the Federal Government that are subject to  
 644 Executive Branch review (see Clinger-Cohen Act of 1996). [Section 25 of OMB Circular No. A-11](#) details  
 645 this authority to collect and review Business Cases for major IT Investments.

646 All information necessary to complete the Major IT Business Case and Major IT Business Case Detail  
 647 should already exist as part of the Agency's overall capital planning activities and within project- and  
 648 program-specific documentation. The materials used to populate Major IT Business Case and Major IT  
 649 Business Case Detail should be readily available to OMB upon request.

650 Additional information on the submission process will be posted on the [OMB MAX Community IDC](#)  
 651 [page](#). As always, pre-decisional, IT security-sensitive, and procurement-sensitive information will not be  
 652 displayed to the public.

653 All software development projects must produce usable functionality at intervals of no more than six  
 654 months. Projects that do not involve software development are not required to leverage iterative/agile  
 655 methodologies. All projects within Investments are required to use modular development principles. All  
 656 major software development projects within Investments are required to incorporate contract terms that  
 657 require the use of modular/iterative (e.g., agile) development principles.

658 Major IT Business Case Details on major IT Investments shall establish cost, schedule, and performance  
 659 targets for PY and CY. Furthermore, periodic performance metrics updates for ongoing operations will  
 660 vary according to the nature of the metric, as indicated in Table D.1.A.

661 **11.3 How will Multi-Agency Collaboration and Intra-Agency Shared Services Investments be**  
 662 **captured in the Major IT Business Case and Major IT Business Case Detail?**

663 For Multi-Agency Collaboration and Intra-Agency Shared Services Investments, the Agency Lead that  
 664 provides services or coordination services to other Agencies or other units within their Agency will be  
 665 primarily responsible for in completing and submitting the Multi-Agency collaboration or Intra-Agency  
 666 shared services Major IT Business Case and Major IT Business Case Detail, managing it through the  
 667 Agency Lead's capital programming and budget process. The Agency Lead or Service Management  
 668 Organization (SMO) for Multi-Agency or Intra-Agency collaboration Investments is also responsible for  
 669 ensuring that the Investment is included in their Agency IT Portfolio Summary. A SMO is a Federal  
 670 organization between the agencies and commercial service providers with subject matter experts who  
 671 drive standardization, integrate solutions, and respond to Agency concerns.

672 Specifically, the tracking of partner Agency funding, and related capital assets (e.g., migration  
 673 Investments, Service Management Organization, supporting components) for Government-wide E-Gov  
 674 and Line of Business Investments will be captured via the [OMB MAX Funding Tool for E-Gov-LoB](#)  
 675 [Initiatives](#). Agency Leads for Government-wide E-Gov/ LoB Investments listed in Appendix B are  
 676 required to submit Major IT Business Cases unless they obtain a waiver from OMB.

677 Agency Leads and SMOs are required to submit Major IT Business Cases using the UIs listed in  
 678 Appendix B. Agencies with significant Investments in financial management, human resources, grants, or  
 679 acquisitions systems, and/or services that would either provide new or modify existing capabilities to be  
 680 used government-wide or that would duplicate those already available are required to submit a Major IT

681 Business Case. The provider is responsible for coordinating with the customer to provide the total cost of  
682 migration. The customer Agency will still include this Investment in their Agency IT Portfolio Summary  
683 and reference the Current UII of the provider Agency in the “Investment Description” field.

684 During the development of the shared services Major IT Business Case and Major IT Business Case  
685 Detail, Agencies are encouraged to utilize the [USSM](#) M3 Playbook. High risk Investment as identified  
686 by the USSM in partnership with OMB will be required to receive approval from OMB prior to  
687 advancing to the next phase as identified in the M3 Playbook. OMB may require additional information  
688 related to these Investments and will work with the customer and provider Agencies to coordinate data  
689 requests.

690 Partner Agencies should reference the name and Current UII of the Multi-Agency/Intra-Agency shared  
691 services Investment in the “Investment Description” field of their own partner Agency IT Portfolio  
692 Summary. Partner agencies should also ensure their activities and participation are included in the  
693 appropriate sections of the Multi-Agency major IT Business Case. The entire Life Cycle Cost total for  
694 the Investment, including funds provided by partner Agencies, should be included in the Multi-Agency  
695 Collaboration or Intra-Agency Shared Services Investments Business Case.

696 Investments that provide a service to other agencies but do not receive contributions from partner  
697 Agencies should be reported as Multi-Agency Collaboration Investments. Investments for Multi-  
698 Agency collaboration, shared services, and/or LoBs will be reflected in the managing partner's  
699 annual Enterprise Roadmap submission to OMB.

700 OMB may require additional information from partner Agencies related to the Multi-Agency  
701 collaboration Major IT Investments. When necessary, OMB will work with the managing partners to  
702 coordinate data requests.

#### 703 **11.4 What fields are included and how do I complete the Major IT Business Case?**

704 Each Investment identified in the Major IT Business Case must have a UII. The Major IT Business Case  
705 captures data on the strategic relevance, planning, budgeting, and technical capability for Agency major  
706 IT Investments. Section A refers to the Investment UII’s 12-digit coding. Section B includes additional  
707 fields concerning how the Investment relates to and supports the Agency mission, its cost effectiveness,  
708 and a description of leadership. Section C includes fields relevant to Investment past, current, and out-  
709 year budgeting. Agencies should complete relevant sections based on the type of Major IT Investment as  
710 described in the tables in Investment-Level Reporting.

711 The following are the sections of the Major IT Business Case:



Section A: General Information	
Column /Field	Description
1	UII [12-digit primary key for all Investments]

712

Section B: Investment Detail	
Column /Field	Description
1	Briefly describe the Investment’s purpose, goals, and current and/or anticipated benefits (quantitative and/or qualitative). Include the Investment’s specific contribution to mission delivery or Agency management support functions and identify key customers, stakeholders, and other beneficiaries. [2500 char]
2	Provide at least one Agency Strategic objective code ( <a href="#">A-11 Section 230</a> ) and/or Agency Priority Goal code ( <a href="#">A-11 Section 250</a> ) that this Investment aligns to on <a href="#">performance.gov</a> . If this Investment aligns to more than one Agency strategic objective code and/or Agency Priority goal code, list all that apply. You may locate the full list of current Agency Strategic objective and/or Agency Priority Goal alphanumeric identifier codes by downloading the <a href="#">spreadsheet</a> available on <a href="#">performance.gov</a> . [11 char]
3	Briefly describe the Investment’s quantitative and qualitative return on Investment (ROI), including primary and secondary costs and benefits (internal and external to the government) and outcomes achieved or planned. The quantitative analysis should compare the investment’s planned life cycle cost with any projected or realized cost savings, cost avoidance, and relevant justifications. If no cost savings or avoidance are planned, compare the investment’s planned life cycle cost with a quantitative estimate of current or future benefits and their justification. Additionally, provide a qualitative analysis outlining any additional elements utilized in alternative selection. The response in this field should provide the justification for continued funding of this Investment. The planned performance measures in Table D.1.A should map to the Investment’s planned outcomes and benefits as described in this section. [3500 char]
4	Provide specific requirements for this Investment (i.e., legislative mandates, outstanding audit findings or material weakness, Presidential Directive) and how this Investment will meet the requirement. Additionally, provide any applicable URLs to associated requirements. [2500 char]
5	If this Investment eliminates or reduces another major or non-major IT Investment(s), please list the Investment(s) and their status as represented below. (Eliminated or reduced Investments should be listed until removed from the Agency’s IT Investment Portfolio Summary. Most eliminated Investments should remain in the Agency IT Investment Portfolio Summary for two years.) <ul style="list-style-type: none"> <li>• Investment UII(s) [12-digit UII]</li> <li>• To Be Status [to be eliminated/to be reduced]</li> </ul>
6	Does the Investment currently include an intra- or inter-Agency shared service (common, shared, or centralized solution)? [Yes/No]
7	Does the Investment plan to include an intra- or Inter-Agency shared service that it does not currently include (common, shared, or centralized solution)? [Yes/No]
8	Are all systems in this Investment PIV-enabled systems (per HSPD-12 and <a href="#">OMB Memorandum M-11-11</a> )? [Yes/No]
9	<b>Public URL(s):</b> Provide any public facing URLs associated with this Investment, including APIs (if applicable). List as many URLs as apply, https://...

Section B: Investment Detail	
Column /Field	Description
10	<b>Paperwork Reduction Act OMB Control Number(s):</b> If systems contained in this Investment collect data from the public, please identify the OMB Control Numbers which authorize that data collection as per the Paperwork Reduction Act. Use <a href="#">Reginfo</a> at the following link to identify information collection requests and OMB control numbers. Agencies can work with their Records Officers to determine the applicability. <i>[Optional]</i>
11	<b>PM Name:</b> Provide the name of the Investment-level project/program manager. <i>[250 char]</i>
12	<b>PM Email:</b> Provide the e-mail address of the Investment-level project/program manager. <i>[250 char]</i>
13	<p><b>PM Qualifications</b>                      The qualification/experience level of the PM (per OMB M-04-19).                      Select one of the following:</p> <ul style="list-style-type: none"> <li>• FAC-P/PM(DAWIA-3) – Senior</li> <li>• FAC-P/PM(DAWIA-2) – Mid-Level</li> <li>• FAC-P/PM(DAWIA-1) – Entry Level</li> <li>• Other certification with 4 or more years of PM experience (within the last five years)</li> <li>• Other certification with between 2 and 4 years of PM experience (within the last five years)</li> <li>• Other certification with less than two years of PM experience (within the last five years)</li> <li>• No certification, but with 4 or more years of PM experience (within the last five years)</li> <li>• No certification, but with between 2 and 4 years of PM experience (within the last five years)</li> <li>• No certification, but with less than two years of PM experience (within the last five years)</li> </ul>

713

**Section C: Life Cycle Costs**

714 Provide the total estimated life cycle cost for this Investment by completing the following table. All totals  
 715 represent all IT resources and budgetary sources of funding, consistent with the Agency IT Portfolio  
 716 Summary. Totals are to be reported in **millions of dollars**. Variations from planned expenditures will be  
 717 reflected in Tables C.2.1 and C.2.2 in the Major IT Business Case Detail. Federal personnel costs should  
 718 be included only in the rows designated as “... Govt. FTE costs” and should be excluded from other  
 719 costs.

720 For Multi-Agency Investments, this table should include all funding (both managing and partner Agency  
 721 contributions), and subsequently may not match figures provided in the Agency IT Portfolio Summary.

722 To the degree possible, the costs associated with the entire life cycle of the Investment should be included  
 723 in this table. Whether solutions being developed in an iterative (e.g., agile) fashion or other development  
 724 methodology, for years beyond the budget year, please provide your best estimates for planning purposes,  
 725 understanding that estimates for out-year costs will be less certain than estimates for the budget year or  
 726 earlier.

727 For lines in the table that ask for changes in your current submission compared to your most recent  
 728 previous submission, please use the FY 2019 President’s Budget as your previous submission. When  
 729 making comparisons, please ensure that you compare same-year-to-same-year (e.g., the FY 2018 level for

730 2018 versus the FY 2019 level for 2018). Significant changes from the previous submission should be  
 731 reflected in an updated Investment-level Alternatives Analysis, subject to OMB review.

732 *Note:* Do not enter information for the dark gray cells (these will be calculated).

	<b>PY-1 &amp; Prior</b>	<b>PY 2018</b>	<b>CY 2019</b>	<b>BY 2020</b>	<b>FY+1 2021</b>	<b>FY+2 2022</b>	<b>FY+3 2023</b>	<b>FY+4 &amp; Beyond</b>
<b>Planning Costs</b>								
<b>DME (Excluding Planning) Costs</b>								
<b>DME (Including Planning) Govt. FTE Costs</b>								
<b>Sub-Total DME (Including Internal Labor/Govt. FTE Costs)</b>								
<b>O&amp;M Costs</b>								
<b>O&amp;M Internal Labor (Govt. FTE) Costs</b>								
<b>Sub-Total O&amp;M Costs (Including Internal Labor/Govt. FTE Costs)</b>								
<b>Total Cost (Including Internal Labor/Govt. FTE Costs)</b>								
<b>Total Internal Labor (Govt. FTE) Costs</b>								
<b>Number of FTE rep by Cost</b>								
<b>Total change from PY final President’s Budget (\$)</b>								
<b>Total change from PY Final President’s Budget (%)</b>								

733

<b>Table/Field</b>	<b>Description</b>
<b>2.a.</b>	In which year did or will this Investment begin? [YYYY] <i>Specify a year, e.g., PY-1 = 2017</i>
<b>2.b.</b>	In which year will this Investment reach the end of its estimated useful life? [YYYY] <i>Specify a year, e.g., BY+5 = 2025</i>
<b>3</b>	Compare the funding levels for PY and CY to the final FY 2020 President’s Budget for those same years. Briefly explain any significant changes. [500 char] <i>When making comparisons, ensure that you compare same-year-to-same-year (e.g., the FY 2018 level for 2018 versus the FY 2019 level for 2018).</i>

734 **MAJOR IT BUSINESS CASE DETAIL**

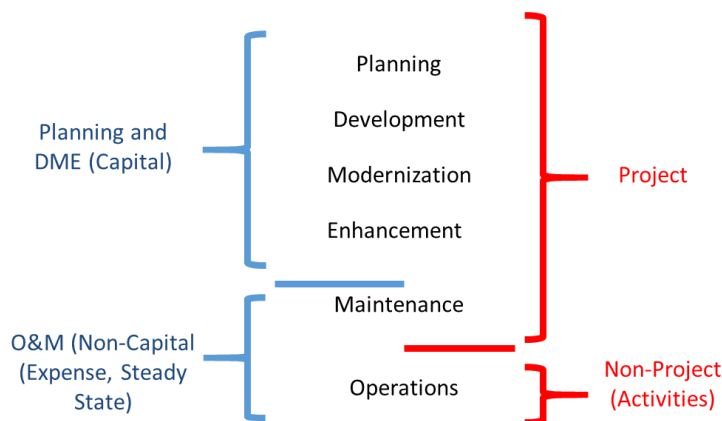
735 **12. What is the Major IT Business Case Detail?**

736 The Major IT Business Case Detail is designed to coordinate OMB’s collection of Agency information  
 737 for its reports to Congress, as required by the [Federal Acquisition Streamlining Act of 1994 \(FASA, Title](#)  
 738 [V\)](#) and [Clinger-Cohen Act of 1996](#). The Major IT Business Case should demonstrate support for the  
 739 mission statements, long-term goals and objectives, and annual performance plans developed pursuant to  
 740 the [Government Performance and Results Act – Modernization Act \(GPRA-MA\) of 2010](#). Major IT  
 741 Business Case Detail on Major IT Investments establishes reporting requirements through the ITDB to  
 742 ensure the proper execution of those Investments against the established performance plans.

743 Major IT Business Case Detail is used to provide OMB with Current Year (FY 2019) and Budget Year  
 744 (FY 2020) Investment plans and performance data. Include in this exhibit, at a minimum, all projects,  
 745 activities, and operations scheduled to commence or continue in the CY and/or BY. Information in the  
 746 Major IT Business Case Detail should reflect current status; therefore, the Federal ITDB should be  
 747 updated as soon as the data becomes available for continuous updates.

748 In Major IT Business Case Detail, Investments are described as:

- 749 • Investment
  - 750 ○ Projects
    - 751 ■ Activities
  - 752 ○ Operations



755  
 756  
 757 While project reporting is often focused on DME efforts, OMB has consistently maintained that  
 758 maintenance-related projects (e.g., fixing or replacing existing infrastructure resulting in no enhancement  
 759 or modernization) within O&M spending should also be reported. The graphic above displays the  
 760 breakdown of DME and O&M spending that relates to project and non-project reporting. Not every O&M  
 761 dollar spent should be incorporated within a project. However, large scale refreshes and other  
 762 maintenance projects with a defined start and end date should be reported moving forward. See Appendix  
 763 C for examples of maintenance projects that should be reported. OMB does not intend for Agencies to  
 764 retroactively report old maintenance projects.

765 Report information about these areas in the following Major IT Business Case Detail sections:

- 766 A: **General Information:** Enter basic information about the major IT Investment.
- 767 B: **Investment Risk:** Identify all open risks to the Investment.
- 768 C: **Project Plan and Execution Data:**
- 769 C.1: **Projects:** Identify all of the Investment’s projects with activities occurring in CY and BY.
- 770 C.2.1: **Project Activities Table:** Outline the activities that are performed to achieve the outcome
- 771 of each project.
- 772 C.2.2: **Project Activity Table (Agile):** Outline the activities that are performed to achieve the
- 773 outcome of each project.
- 774 D: **Operational Data:**
- 775 D.1: **Operational Performance Information:** Identify performance targets and results for
- 776 evaluating operations.
- 777 D.2: **Metrics Definitions:** Identify measures used for monitoring performance.
- 778 D.3: **Metrics Actuals:** Identify actual results for measures used for monitoring performance.
- 779

Section A: General Information	
Column /Field	Description
1	<b>UII</b> [12-digit primary key for all Investments] Agency-provided UII, consistent with Agency IT Portfolio Summary.

780

Section B: Investment Risk
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Risk assessments should include both project and operational risk information from all stakeholders and should be performed throughout the life cycle of the Investment. This section should follow the Regular Updates Reporting schedule (see Section 2.2).

In Table B, list active risks at the Investment level and provide risk assessment information. The risks listed should be consistent with what is included in management briefings or Agency status reviews on an ongoing basis. It is not necessary to address all 20 OMB Risk Areas. There are not a specified number of risks for Agencies to include for each Investment. Include the following data in Table B:

Column /Field	Description
1	<b>Risk Description</b> A short description that identifies the risk, the cause of the risk and the effect that the risk may have on the Investment. Agencies should use the “if, then” format to indicate each risk’s condition present and associated risk event. [500 char]
2	<b>Risk Area</b> The relevant OMB Risk Area for each risk. Risk Areas include: 1) Schedule 2) Initial costs 3) Life cycle costs 4) Technical obsolescence 5) Feasibility 6) Reliability of systems 7) Dependencies and interoperability between this Investment and others

<b>Section B: Investment Risk</b>	
	<p>8) Surety (asset protection) considerations            9) Risk of creating a monopoly for future procurements            10) Capability of Agency to manage the Investment            11) Overall risk of Investment failure            12) Organizational and change management            13) Business            14) Data/info            15) Technology            16) Strategic            17) Security            18) Privacy            19) Project resources            20) Records management</p>
3	<p><b>Risk Probability</b>            The likelihood that the risk will become realized as an issue. <i>For the purposes of standard reporting across Agencies, the following probability benchmarks have been provided for each response to indicate the estimated likelihood that a given risk will become realized as an issue [Very Low, Low, Medium, High, Very High]:</i></p> <ul style="list-style-type: none"> <li>• <i>Very Low – 0-20%,</i></li> <li>• <i>Low – 21-40%,</i></li> <li>• <i>Medium – 41-60%,</i></li> <li>• <i>High – 61-80%,</i></li> <li>• <i>Very High – 81-100%.</i></li> </ul>
4	<p><b>Risk Impact</b>            The level of a potential negative impact for the risk. <i>For the purposes of standard reporting across Agencies, the following impact benchmarks have been provided for each response to indicate the estimated detriment to Investment outcome objectives in the event that a given risk is realized as an issue [Very Low, Low, Medium, High, Very High]:</i></p> <ul style="list-style-type: none"> <li>• <i>Very Low – little or no impact on achieving outcome objectives,</i></li> <li>• <i>Low – minor impact on achieving desired results, to the extent that one or more stated outcome objectives will fall below goals but well above minimum acceptable levels,</i></li> <li>• <i>Medium – moderate impact on achieving desired results, to the extent that one or more stated outcome objectives will fall below goals but above minimum acceptable levels,</i></li> <li>• <i>High – significant impact on achieving desired results, to the extent that one or more stated outcome objectives will fall below acceptable levels,</i></li> <li>• <i>Very High – severe impact on achieving desired results, to the extent that one or more critical outcome objectives will not be achieved.</i></li> </ul>
5	<p><b>Mitigation/Contingency Plan</b>            A short description of the Investment’s mitigation strategy for preventing the risk from becoming realized as an issue and response strategy should the mitigation plan fail to prevent the risk from becoming realized as an issue. This plan should deal with methods for avoiding or pre-empting risks as well as addressing risks should they become realized as issues. <i>[1000 char]</i></p>

**Section C: Project Plan and Execution Data**

Tables C.1, C.2.1, and C.2.2 are used to report all projects with activities underway in any portion of CY or BY, regardless of where the project occurs in the Investment life cycle (projects may be conducted in Planning, DME, and/or Maintenance). At a minimum, Tables C.1, C.2.1 and C.2.2 should include:

- Projects and activities that started in a previous fiscal year (PY and earlier) that have not been completed by the beginning of the CY; and
- Projects and activities that start and finish in the CY and BY **or** start but do not finish in CY or BY.
- Projects and activities commencing beyond the BY may also be reported, as available.

Beginning with the FY 2020 reporting cycle, Agencies are required to distinguish which, if any, of their IT projects is funded either through the Technology Modernization Fund (TMF) or their Agency's IT Modernization Working Capital Fund (IT Mod WCF) established through the MGT Act. Agencies should report those projects that are TMF- or IT WCF-funded as distinct projects that match the sum of the relevant TMF or IT WCF funding sources for this Investment. Doing so will enable OMB and Agencies to monitor the individual performance of TMF and IT WCF-funded projects as well as meet the reporting requirements of the Modernizing Government Technology (MGT) Act.

Include the following data in Table C.1:

<b>Projects Table C.1</b>	
<b>Column /Field</b>	<b>Description</b>
1	<b>Unique Project ID</b> An Agency-specified number that uniquely identifies the project within the Investment.
2	<b>Project Name</b> Name used by the Agency to refer specifically to the project.
3	<b>Objectives/Expected Outcomes</b> Description of the project’s functionality, capability, or goal.
4	<b>Project Start Date</b> Actual start date of in-progress projects or planned start of projects that have not yet begun (may be before the current FY or activities listed in Table C.2.1). [MM-DD-YYYY]
5	<b>Project Completion Date</b> Planned date of completion of in-progress projects or actual completion date of projects that have been completed (may be after BY or completion date of activities listed in activities Table C.2.1). [MM-DD-YYYY]
6	<b>Project Life-Cycle Cost</b> Enter the total cost of all activities related to the project as described in OMB Circular A-131 (in \$ millions). This only includes costs for the project, and does not include operations costs.
7	<b>System Development Life Cycle (SDLC) Methodology</b> Which development methodology does this project use? 1) Waterfall 2) Iterative: Incremental, Spiral, Agile 3) Not Primarily a Software Development Project
8	<b>Production Release each 6 months or less?</b> Does this Project have a production release containing useable functionality at least every 6 months? [Yes, No, N/A]
9	<b>Comment</b>

<b>Section C: Project Plan and Execution Data</b>	
	If this Project does not provide a production release at least every 6 months, please provide a rationale as to why.
10	<b>When was the last date that a revised product was deployed to production?</b> This question collects information on how frequently changes to the system are deployed. A change can mean a new or removed feature, a patch, or a bug fix that was deployed via a change in the system’s application code. If a system is under version control, this date can be easily determined by looking at the date on which the most recent commit to the production version of the codebase was made. If there has not yet been a release to production, provide the projected first production deployment date. This field is not required for SDLC Methodology 3 “Not Primarily a Software Development Project.” [MM-DD-YYYY]
11	<b>Funded by TMF or IT WCF Funding?</b> Indicate whether the project is funded through either the Technology Modernization Fund (TMF) or their Agency's IT Modernization Working Capital Fund (IT Mod WCF) established through the MGT Act. Projects partially funded by IT WCF or TMF should be broken out and reported as separate projects altogether to the extent that all project activities are only funded by IT WCF or TMF funding. [TMF, IT WCF, N/A]
12	<b>Commercial Solution(s) Adoption</b> Describe the extent to which the project is using commercial products and services. Relates only to products and services purchased from industry rather than supplied/created by an Agency internally using only Federal labor/materials. [1000 char] Only projects that respond “TMF” or “IT WCF” to “Funded by TMF or IT WCF Funding?” are required to provide detailed responses in this field. All other projects should report “N/A.”
13	<b>Commercial Solution(s) Reasoning</b> Provide, if applicable, a justification of why commercial products and services were not used and the associated development and integration costs of custom development. Relates only to products and services purchased from industry rather than supplied/created by an Agency internally using only Federal labor/materials. [1000 char] Only projects that respond “TMF” or “IT WCF” to “Funded by TMF or IT WCF Funding?” are required to provide detailed responses in this field. All other projects should report “N/A.”
14	<b>Commercial Solution(s) Costs</b> Provide, if applicable, the associated development and integration costs of custom development. Only projects that respond “TMF” or “IT WCF” to “Funded by TMF or IT WCF Funding?” are required to provide detailed responses in this field. All other projects should report “N/A.”

782 Each project listed in Table C.1 should have at least one associated activity. Please include any relevant  
 783 non-iterative (e.g., agile) project activities in Table C.2.1 and include iterative project activities in Table  
 784 C.2.2.

785 In Table C.2.1, describe, at a minimum, all non-iterative (e.g., agile) project activities for projects in  
 786 Table C.1 that started in a previous FY (PY and earlier) and that have not been completed by the  
 787 beginning of the CY, as well as activities that are scheduled to start in the current FY and BY. In line with  
 788 modular development principles, each software development project must produce usable functionality at  
 789 intervals of no more than six months. "Actual Costs" should include all completed budgetary outlays for  
 790 that activity, and for the activity to be considered complete, none should remain. Include the following  
 791 data in Table C.2.1:



Project Activity Table C.2.1	
Column /Field	Description
1	<b>Unique Project ID</b> An Agency-specified number that uniquely identifies the project within this Investment.
2	<b>Activity Name</b> A short description consistent with the critical steps within the Agency project management methodology.
3	<b>Activity Description</b> Describe what work is accomplished by the activity.
4	<b>Structure ID</b> Agency-specified identifier that indicates the work breakdown structure (WBS) the Agency uses to associate the activity with other activities or a project. Provide this in the format of “x.x.x.x.x” where the first string is the Unique Project ID and each following string (separated by periods) matches the structure ID of a parent activity. See below for more guidance about parent and child activities expressed through this structure. <i>[x.x.x.x.x]</i>
5	<b>Start Date Planned</b> The planned start date for the activity. This is the baseline value.
6	<b>Start Date Projected</b> If the activity has not yet started, enter the current planned start date of the activity.
7	<b>Start Date Actual</b> When the activity starts, enter the actual start date here.
8	<b>Completion Date Planned</b> The planned completion date for the activity. This is the baseline value.
9	<b>Completion Date Projected</b> If the activity has not yet completed, enter the current planned completion date of the activity.
10	<b>Completion Date Actual</b> When the activity ends, enter the actual completion date here.
11	<b>Total Costs Planned</b> The planned total cost for the activity. This is the baseline value. <i>[\$M]</i> <i>Note:</i> For programs that are employing earned value management, Agencies should reflect “budget at completion” in the “Total Costs Planned” field and “estimated at completion” in the “Total Costs Projected” field.
12	<b>Total Costs Projected</b> When the activity is not yet completed, enter the current planned total cost of the activity. <i>[\$M]</i> <i>Note:</i> For programs that are employing earned value management, Agencies should reflect “budget at completion” in the “Total Costs Planned” field and “estimated at completion” in the “Total Costs Projected” field.
13	<b>Total Actual Costs</b> When the activity ends, enter the total actual costs for the activity here. <i>[\$M]</i>

792 **Reporting Parent and Child Activities (WBS Structure)**

793 “Child” activities may be grouped under “Parent” activities to reflect the WBS used by the Agency to  
 794 manage the Investment. If a WBS is not used by the Agency, report the relationship between parent  
 795 activities and child activities in “Structure ID” using this method. Agencies are encouraged to report a  
 796 transparent view of the Investment baseline on the Federal ITDB (at least Level 3 of the WBS). Levels 1  
 797 and 2 typically do not provide enough information to describe the work to be accomplished in short

798 enough duration that early warnings of Investment performance can be identified ([M-10-27](#)).  
 799 When reporting an activity, enter the “Structure ID” as a period-delimited string consisting of the “Unique  
 800 Project ID” and each nested parent activity between the project level and the child activity. The “Structure  
 801 ID” to enter will vary depending on the activity’s WBS level.

802 Example: For child activity 3 that is part of parent activity 10, which in turn is part of parent  
 803 activity 2, which in turn is part of Project A, enter: A.2.10.3

- 804                   ▪ Project A
  - 805                    ○ Parent Activity 2
    - 806                     ▪ Parent Activity 10
      - 807                      • Child Activity 3

808 There is no limit to the number of nested “child” and “parent” relationships allowed, and this depth may  
 809 vary from activity to activity and from project to project.

810 If any of a parent activity's child activities occurs in the current FY, then all child activities of the parent  
 811 activity must be reported, regardless of their timing. This is to ensure that a complete view of the parent  
 812 activity is available.

813 All activities with no child activities must have, at a minimum, *Unique Project ID, Activity Name, Activity*  
 814 *Description, Structure ID, Start Date Planned, Start Date Projected (or Actual), Completion Date*  
 815 *Planned, Completion Date Projected (or Actual), Total Costs Planned, and Total Costs Projected (or*  
 816 *Actual).*

817 Completed activities must also have *Start Date Actual, Completion Date Actual, and Total Actual Costs.*  
 818 Any parent activities with a child activity must be completely described by the aggregate attributes of its  
 819 child activities. In the ITDB, the cost and schedule information for parent activities will be based on the  
 820 cost and schedule information of the lowest level of child activities reported. Agency-submitted cost and  
 821 schedule information is not required for parent activities.

822

Unique Project ID	Activity Name	Structure ID	Start Date Planned	Completion Date Planned	Planned Total Costs
A	Design	A.2	2/1/2018	2/29/2018	\$2.5
A	Business Requirements	A.2.1	2/1/2018	2/10/2018	\$1.0
A	Technical Requirements	A.2.2	2/11/2018	2/20/2018	\$1.0
A	Architecture	A.2.3	2/21/2018	2/29/2018	\$0.5

823 Parent activities like the one highlighted above (Structure ID: A.2) are optional. Reported parent activities  
 824 values will be ignored, as calculated values will be determined by aggregating the cost and schedule  
 825 information reported in the child activities.

826 If iterative methodology (e.g., agile) is being used, the below table can be leveraged as an alternative to  
 827 Table C.2.1. This table is being added as an optional alternative to Table C.2.1 for iterative-based  
 828 development projects. This table comes at Agencies’ request for an iterative-friendly alternative to report  
 829 performance. Either Table C.2.1 or C.2.2 should be used to enter project activity data; the same project  
 830 can appear in both tables, if applicable. In Table C.2.2, describe, at a minimum, all iterative (e.g., agile)  
 831 project activities for projects in Table C.1 that started in a previous FY (PY and earlier) and that have not  
 832 been completed by the beginning of the CY, as well as activities that are scheduled to start in the current

833 FY and BY. The terms and concepts in Table C.2.2 are based on the Agile Scrum Methodology. If you  
 834 are using another iterative methodology, still complete the table in line with the Agile Scrum  
 835 Methodology.

836 "Actual Costs" should include all completed budgetary outlays for that activity, and for the activity to be  
 837 considered complete, none should remain.

<b>Project Activity Table (Agile) C.2.2</b>	
<b>Column /Field</b>	<b>Description</b>
1	<b>Unique Project ID</b> An Agency-specified number that uniquely identifies the project within this Investment.
2	<b>Release Name</b> (Activity Name) Feature as defined in Product Backlog.
3	<b>Release Number</b> Iteration/Feature as defined in Product Backlog.
4	<b>Release Description</b> (Activity Description)
5	<b>Start Date Planned</b> Release start date planned. [MM-DD-YYYY]
6	<b>Start Date Projected</b> If the activity has not yet started, enter the current planned start date of the activity.
7	<b>Start Date Actual</b> Release start date actual. [MM-DD-YYYY]
8	<b>Completion Date Planned</b> Release completion date planned. [MM-DD-YYYY]
9	<b>Completion Date Projected</b> If the activity has not yet completed, enter the current planned completion date of the activity.
10	<b>Completion Date Actual</b> Release completion date actual. [MM-DD-YYYY]
11	<b>Total Costs Planned</b> Total cost planned for the release. [\$M]
12	<b>Total Costs Projected</b> When the activity is not yet completed, enter the current planned total cost of the activity. [\$M]
13	<b>Total Actual Costs</b> Total actual cost for the release. [\$M]
14	<b>NPI</b> Number of planned iterations/sprints in the release.
15	<b>NPE</b> Number of planned Epics (fraction of an Epic is acceptable).
16	<b>NCE</b> Number of completed Epics in a release (fraction of an Epic is acceptable).
17	<b>NCI</b> Number of completed iterations/sprints in a release.
18	<b>DTC</b> How many direct technical contributors are on the project (inclusive of government or contractor engineers and designers that contribute directly to the code base; this number might not equate to the total FTE at the Investment level).
19	<b>DPC</b> How many other staff contribute directly to the project (inclusive of government or

**Project Activity Table (Agile) C.2.2**

contractor project managers, testers, agile coaches, and others; this number might not equate to the total FTE at the Investment level).

838

839

**Section D: Operational Data**

840 Section D applies to operational and mixed life-cycle Investments with operational components. It  
841 focuses on operational analysis results and performance metrics.

842 **Operational Analysis**

843 Provide the date and results of the last Operational Analysis (for operational and mixed life cycle  
844 systems/Investments).

**Operational Analysis Table D.1**

Date of Analysis	Analysis Results	Analysis Conclusion
<i>[MM-DD-YYYY]</i>	<i>[Limit: 2500 char] Include a summary of the results including identified actions.</i>	<i>[Drop Down menu: continue as-is, initiate remediation action, initiate innovation action, initiate modernization/replacement action, initiate disposal action]</i>

845 **Operational Performance**

846 Performance of operational Investments is continuously monitored to demonstrate the Investment is  
847 meeting the needs of the Agency, delivering expected value, and/or being modernized and replaced  
848 consistent with the Agency's Strategic Plan, Investment portfolio, enterprise architecture, risk  
849 management framework, acquisition strategy, and human capital plan. Measures used for monitoring  
850 performance should be as “outcome” based as possible rather than “output” based, and should help  
851 benchmark Investment performance and should trigger considerations of how the Investment's objectives  
852 could be better met, how costs could be reduced, and whether the organization should continue  
853 performing a particular function. The [OMB Capital Programming Guide](#) (page 44-46) directs that  
854 operational performance metrics should seek to answer more subjective questions in the specific areas of:

855 **Customer Satisfaction (Process Results)** – Analysis should focus on whether the Investment  
856 supports the Investment’s customer processes as designed. The focus is on how well the Investment is  
857 delivering goods or services it was designed to deliver. Metrics appropriate for monitoring  
858 performance in this area might address the following:

- 859 • Process execution (e.g., acquisition, efficiency, correctness, completeness, timing);
- 860 • Product or service delivery (e.g., quality, timeliness, coverage, availability, satisfaction);
- 861 • Technology functionality or usability (e.g., end-user satisfaction);
- 862 • Increased access to innovative contractors and providers; and
- 863 • Technology performance (e.g., service level agreements).

864 **Strategic and Business Results** – Analysis should focus on the effect the Investment has on the  
865 performing organization. The focus is on how well the Investment contributes to the organization’s  
866 achievement of strategic goals, fulfillment of its mission, and/or meeting service level agreements  
867 with its customers. Metrics appropriate for monitoring performance in this area would be specific to  
868 the strategic or business concern and would typically address effectiveness or the Investment  
869 contribution. Metrics appropriate for monitoring performance in this area might address the  
870 following:

- 871 • Business process improvements or advances that support Agency priority goals and measures;  
 872 and  
 873 • Actions, time, or burden reduction in activities for either Federal users or American taxpayers  
 874 using the tools.

875 **Financial Performance** – Analysis should focus on the comparison of current performance with a  
 876 pre-established cost baseline. The Investment should also be subjected to a periodic review for  
 877 reasonableness and cost efficiency. Metrics appropriate for monitoring performance in this area might  
 878 address the following:

- 879 • Cost control (e.g., costs remaining within the specified constraints);  
 880 • Cost reasonableness (e.g., with respect to the cost of similar Investments – benchmarks); and  
 881 • Cost efficiency (e.g., cost per unit – transaction, user, query – especially units of business  
 882 interest).

883 **Innovation** – Analysis should focus on identifying means of maintaining or improving Investment  
 884 performance in terms of Customer Satisfaction, Strategic and Business Results, and Financial  
 885 Performance. The focus is on how Investments might maintain with fewer resources or improve  
 886 current performance through innovative processes such as: generating net new learnings (research and  
 887 development), supporting buy/build marketplace health, promoting vendor independence and  
 888 strategic flexibility, employing modularization, rationalizing architecture, and incentivizing high  
 889 risk/low cost/high yield innovation projects within the Investment.

890 Of all the metrics in use to monitor Investment performance fully, report a minimum of five, drawing on  
 891 those that best reflect the value of the Investment based upon the following:

- 892 1. **Customer Satisfaction (Process Results):** Provide a minimum of one metric that reflects this  
 893 area.  
 894 2. **Strategic and Business Results:** Provide a minimum of three metrics that reflects this area.  
 895 a. *At least one of the metrics must have a monthly reporting frequency.*  
 896 b. *For Investments listed in Part 1 of the Agency IT Investment Portfolio Summary, at least*  
 897 *one of these metrics must contribute to a Strategic Objective or Agency Priority Goal.*  
 898 3. **Financial Performance:** *Reporting metrics that reflect this area is optional.*  
 899 4. **Innovation:** *Reporting metrics that reflect this area is optional.*

900 *Note:* The fifth metric, or more as Agencies may report more than five metrics, can come from any  
 901 category.

902 All data will be displayed to the public on the ITDB. Ensure that all metrics provided are publicly  
 903 releasable.

904 **Defining Metrics**

905 Use the following table to define the attributes of each individual metric:

Metrics Definitions Table D.2	
Column /Field	Description
1	<b>Metric ID</b> Unique ID provided by Agency for the metric. When reporting actual results (see below), use this ID to reference the correct metric. <i>[numeric]</i>
2	<b>Metric Description</b> Description to help the user understand what is being measured. In this field, describe

Metrics Definitions Table D.2	
Column /Field	Description
	the units used, any calculation algorithm used, and the definition or limits of the population or “universe” measured. <i>[500 char]</i>
3	<b>Unit of Measure</b> Brief indication of what quantity is measured (e.g., number, percentage, dollar value) for each metric. <i>[50 char]</i>
4	<b>Performance Measurement Category Mapping</b> Identify the measurement category, as shown above in this section’s instructions. <i>[Measurement Category]</i>
5	<b>Agency Baseline Capability</b> What was the quantitative value of your Agency’s capability per this metric prior to this Investment’s life cycle. If your Agency has not measured this capability before, you may leave this field blank; otherwise, provide the numeric value of the historic capability measurement.
6	<b>2018 Target</b> Metric target value from 2018, relative to the reporting frequency. <i>[numeric]</i>
7	<b>2019 Target</b> Metric target value for 2019, relative to the reporting frequency. <i>[numeric]</i>
8	<b>Measurement Condition</b> Indicates whether a desired result would be “over target,” indicating that the trend should maintain or increase, or “under target,” indicating that the trend should maintain or decrease. <i>[Over target/Under target]</i>
9	<b>Reporting Frequency</b> How often actual measurements will be reported (monthly, quarterly, semi-annually, or annually). Annual reporting frequencies are reserved for annual operating cost measures, performance measures associated with the Agency’s annual performance plan, or other measures that can only be appropriately measured on an annual basis. <i>[Monthly, Quarterly, Semi-Annual, Annual]</i>
10	<b>Agency Strategic Objective or Priority Goal</b> Each Investment must have at least one active metric in the Strategic and Business Results category (of any reporting frequency) tied to the foremost Agency strategic objective (SO), or Agency priority goal (APG) (as required by A-11 <a href="#">Section 230</a> and <a href="#">Section 250</a> respectively). Provide that code for the associated metric using the appropriate alphanumeric identifier provided by <a href="http://performance.gov">performance.gov</a> . <i>[11 char]</i>
11	<b>Is the Metric Retired?</b> Check this box when performance metrics are no longer useful for Investment management. <i>[Check Box]</i>

906 **Providing Actual Results**

907 As actual results are measured at the appropriate frequency, they should be reported as new entries in  
908 Table D.3:

Metric Actual Results Table D.3	
Column /Field	Description
1	<b>Metric ID</b> Unique ID provided by Agency for the metric. When reporting actual results (see below), use this ID to reference the correct metric. <i>[numeric]</i>

Metric Actual Results Table D.3	
Column /Field	Description
2	<b>Actual Result</b> Actual result measured. <i>[numeric]</i>
3	<b>Date of Actual Result</b> End date of the most recent reporting period. <i>[MM-DD-YYYY]</i>
4	<b>Comment</b> Comments for metrics that have not been met will be valuable for OMB and Agency Reviewers. <i>[500 char] (optional)</i>

909 When adding a new metric, include historical actual result information as available.

910 **IT INFRASTRUCTURE, IT SECURITY, AND IT MANAGEMENT STANDARD**  
 911 **INVESTMENTS**

912 **13. How do IT Infrastructure, IT Security, and IT Management Standard Investments differ from**  
 913 **Major Business Cases?**

914 Beginning with the FY 2018 Guidance, Standard IT Infrastructure Investments were introduced and  
 915 aligned to the IT Tower layer of the TBM taxonomy. This year’s Guidance finishes introducing the  
 916 separate Investment Reports with relevant reporting requirements for each Standard IT Infrastructure and  
 917 Management Investment. Agencies shall, in a multi-year phased approach, realign costs represented in  
 918 their IT Portfolio Summary Part 3: Infrastructure, Security and Management Non-Standard Investments  
 919 into Standard Investments that will be consistent throughout and across each Agency. This is intended to  
 920 provide more visibility to Agency CIOs. This approach is in contrast to aggregated and inconsistent  
 921 Investments at and within each Agency. The Standard Investments are related to costs associated with all  
 922 agencies, not mission-specific, rather commodity IT. Some Standard Investments will have reports  
 923 tailored to the commodity IT data that it comprises. Each Standard Investment Report will have its own  
 924 reporting requirements and frequency. Please refer to table in Section 2.1 Annual Reporting for more  
 925 detail on this.

926 The required Standard Investment Reports include the following, for which definitions are included in  
 927 Appendix C: IT Security and Compliance, Network, Data Center and Cloud, and End User. The Optional  
 928 Standard Investment Reports include the following: Application and Delivery.

<b>Standard Investment</b>	<b>Reporting Level</b>	<b>Relationship to other reporting</b>	<b>Frequency</b>
IT Security and Compliance	Every cyber security program should be represented as a separate Investment	Budget Data Request on Government-wide Tracking of Resources for Cyber Activities (Cyber BDR): The data required within this investment report enables alignment of Security Operations Center (SOC) data as a subset within overall Agency cybersecurity data.	September (Request), January (President’s Budget), February (Updates if needed to align with Congressional Justification materials); Regular updates Data should be kept updated
Network	Each WAN Network should be represented as a separate Investment; LAN and MAN Networks may be reported at the Agency’s point of management	Cyber BDR: Network security capability costs EIS/Contract data: Network & Telecommunication costs FISMA Metrics: Identify, Detect, Protect (related to security performance and inventory collected through DHS’s CyberScope	September (Request), January (President’s Budget), February (Updates if needed to align with Congressional Justification materials); Regular updates Data should be kept updated



Standard Investment	Reporting Level	Relationship to other reporting	Frequency
Data Center and Cloud	Agency's should report at most granular level possible (i.e., tiered data center or cloud procurement level), but may report at the bureau or Agency level if further granularity cannot be obtained	IDC: The data required within this Investment Report enables alignment of budget to Data Center inventory and performance metrics.	September (Request), January (President's Budget), February (Updates if needed to align with Congressional Justification materials); Regular updates Data should be kept updated
End User	Agency's discretion whether to report at an Agency level, component level, or more granular. Recommend at the point in which End User Services are managed	IDC: The IT category management performance metrics reporting requirements for workstations, software, and mobile services are captured through the IDC process.	September (Request), January (President's Budget), February (Updates if needed to align with Congressional Justification materials); Regular updates Data should be kept updated
Output	NONE	N/A	September (Request), January (President's Budget), February (Updates if needed to align with Congressional Justification materials)
Application	Agency's discretion whether to report at an Agency level, component level, or more granular. Recommend at the point in which Application Services are managed	N/A	September (Request), January (President's Budget), February (Updates if needed to align with Congressional Justification materials); Regular updates Data should be kept updated
Delivery	Agency's discretion whether to report at an Agency level, component level, or more granular. Recommend at the point in which Delivery Services are managed	N/A	September (Request), January (President's Budget), February (Updates if needed to align with Congressional Justification materials); Regular updates Data should be kept updated

Standard Investment	Reporting Level	Relationship to other reporting	Frequency
Platform	NONE	N/A	September (Request), January (President’s Budget), February (Updates if needed to align with Congressional Justification materials);
Part 3 Non-Standard Infrastructure Investments	Existing major or non-major investments that have not been realigned with Standard Investments (note: Non-Standard Investments will be deprecated by FY 2021 cycle)	As Standard Investments are created the reliance upon non-categorized investments decreases.	September (Request), January (President’s Budget), February (Updates if needed to align with Congressional Justification materials); Regular updates Data should be kept updated

930 **14. IT Security and Compliance Standard Investment**

931 **Standard Investment Definition:** An IT investment for the provisioning of Security Operations Centers  
 932 (SOCs) and associated costs in alignment with the TBM IT Security and Compliance tower.

933 **Investment Usage:** In the spirit and support of FISMA and FITARA, every organization managing a  
 934 security program must report an IT Security and Compliance Standard Investment to provide visibility  
 935 into costs and outcomes of its cybersecurity activities. These Investments should include bureau or  
 936 Agency-wide IT security and compliance spending, such as Agency or component SOCs, not contained  
 937 within specific program budgets.

938 **Standard Investment Report: Yes.**

939 Cybersecurity is a top priority for the Administration, and Agencies are required to report on their  
 940 Standard Investments for IT Security and Compliance at the level at which they are managed and  
 941 executed. For any Investment designated as an IT Security and Compliance Standard Investment (code  
 942 “02” in Column 7 of the IT Investment Portfolio Summary), complete the following Investment report.

943 This IT Security and Compliance Standard Investment Report is required for the FY 2020 cycle. The  
 944 following are the sections of the IT Security and Compliance Investment Report:

Section A: General Information	
Column /Field	Description
1	UII [12-digit primary key for all Investments]

945

Section B: Security Operations Center Reporting
-------------------------------------------------

946 Each dollar spent should maintain or enhance security posture and reduce risks. In line with previous  
 947 years, the security-related information collected through the CPIC process will be used in conjunction  
 948 with information collected through multiple collections to gain a more complete understanding of  
 949 agencies’ capabilities and resourcing. In a change from previous years, the information collected in the  
 950 previously used Cybersecurity Costs and Capability table will be removed and replaced. Though the  
 951 information was valuable in understanding how agencies budget for cybersecurity, the data collected was  
 952 largely duplicative of information collected through the annual Cyber BDR, where they will remain due  
 953 to additional reporting requirements that would be impractical to collect through the CPIC process for  
 954 Agencies.

955 For this collection, agencies are asked to report budget information related to their SOCs. These vital  
 956 security hubs are at the epicenter of Federal cybersecurity, and gaining greater detail regarding their costs  
 957 and operations is necessary to continue driving improvements in the protection of Federal systems and  
 958 information. In Table B.1 Agency SOC, Agencies should report the following data in separate rows for  
 959 each Agency-operated SOCs included within this Standard Investment. As Section B now focuses  
 960 exclusively on Agency SOC spending and management as a subset of Agency and bureau-level security  
 961 and compliance spending, there is no expectation that the total spend reported in Section B should match  
 962 the Investment’s total IT spend. Total costs reported in Table B.1 or B.2 are not required to equate to the  
 963 total IT Security and Compliance Standard Investment or IT Security and Compliance IT Tower spend  
 964 across the IT Portfolio. Costs associated with these tables may equal or be a subset of Investment or IT  
 965 Tower spending.

Table B.1 Agency SOC	
Column/Field	Description
1	<b>SOC Identifier</b> Provide the individual SOC name or numerical designation used by the Agency
2	<b>Covered Entities</b> [5 digit code]

<b>Table B.1 Agency SOC</b>	
	List of Federal organizations (e.g., Agencies, bureaus, components) for which the SOC provides security services <i>[Agency/Bureau code(s) from OMB Circular A-11 Appendix C. Please append Agency code before Bureau code, if applicable, e.g., USDA, Office of the Secretary is coded 005(Agency) 03 (Bureau) as “00503”]</i>
3	<b>PY 2018 Amount</b> <i>[\$M]</i>
4	<b>PY 2018 Total Federal FTEs</b> <i>[Count]</i>
5	<b>PY 2018 Total Contractor FTEs</b> <i>[Count]</i>
6	<b>CY 2019 Amount</b> <i>[\$M]</i>
7	<b>CY 2019 Total Federal FTEs</b> <i>[Count]</i>
8	<b>CY 2019 Total Contractor FTEs</b> <i>[Count]</i>
9	<b>BY 2020 Amount</b> <i>[\$M]</i>
10	<b>BY 2020 Total Federal FTEs</b> <i>[Count]</i>
11	<b>BY 2020 Total Contractor FTEs</b> <i>[Count]</i>
12	<b>Performance Hours</b> The number operating hours per day during which the SOC executes upon core capabilities of a SOC, including detection, monitoring, analysis and investigation, and responding to potential incidents <i>[Number]</i>
13	<b>Continuous Operations?</b> Does the SOC operate continuously during weekends, holidays, and Agency closures? <i>[Yes, No]</i>

966 In Table B.2 Contracted SOCs, Agencies should report the following data in separate rows for each  
 967 instance in which this investment contracts from a SOC service provider. Costs included in this table  
 968 should be reflected in this Standard Investment’s Outside Services Cost Pool.

<b>Table B.2 SOC as a Service</b>	
<b>Column/Field</b>	<b>Description</b>
1	<b>SOC Identifier</b> Provide the individual SOC name or numerical designation used by the Agency
2	<b>Service Provider Type</b> Select whether the service provider is “Government” or “Private”
3	<b>Provider Entity</b> <i>[3 digit code]</i> The top-level Department or Agency which provides SOC services to the reporting Agency <i>(Note: Required only if Service Provider Type is “Government”)</i> <i>[Agency Code from OMB Circular A-11 Appendix C]</i>
4	<b>Covered Entities</b> <i>[5 digit code]</i> List of Federal organizations (e.g., Agencies, bureaus, components) for which the SOC provides security services <i>[Agency/Bureau code(s) from OMB Circular A-11 Appendix C. Please append Agency code before Bureau code, if applicable, e.g., USDA, Office of the Secretary is coded 005(Agency) 03 (Bureau) as “00503”]</i>
5	<b>PY 2018 Amount</b> <i>[\$M]</i>
6	<b>CY 2019 Amount</b> <i>[\$M]</i>
7	<b>BY 2020 Amount</b> <i>[\$M]</i>
8	<b>Performance Hours</b> The number operating hours per day during which the SOC executes upon core capabilities of a SOC, including detection, monitoring, analysis and investigation, and responding to potential incidents <i>[Number]</i>
9	<b>Continuous Operations?</b>

<b>Table B.2 SOC as a Service</b>
-----------------------------------

Does the SOC operate continuously during weekends, holidays, and Agency closures? <i>[Yes, No]</i>
----------------------------------------------------------------------------------------------------

969

970 **15. IT Management Standard Investment**

971 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide IT  
972 management capability as defined by the TBM IT Management tower.

973 **Investment Usage:** An IT Management Standard Investment is created for each independently managed  
974 enterprise-wide IT Management capability within an Agency. For example, enterprise-wide IT  
975 Management capabilities may be independently managed based on sub-agencies or capability.

976 **Standard Investment Report: No.**

977 There is no Standard Investment Report for IT Management Standard Investments included in the FY  
978 2020 cycle. However, the need for a Standard Investment Report will continue to be evaluated to  
979 determine whether additional information relating to this type of Standard Investment would provide  
980 useful and actionable data for OMB and agencies.

981 **16. Network Standard Investment**

982 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide wide-area  
 983 network (WAN), local-area network (LAN), and metropolitan-area network (MAN) capabilities as  
 984 defined by the TBM Network tower.

985 **Investment Usage:** Agencies should report Network Standard Investments at the WAN level. Agencies  
 986 should report one Network Standard Investment for each WAN they manage but, may report LANs and  
 987 MANs together in one investment if they are managed at the same level. Agencies should determine how  
 988 best to include their LANs and MANs in their investment reporting based on how they are managed (e.g.,  
 989 by region).

990 **Standard Investment Report: Yes.**

991 Agencies are required to create budget plans for their network and telecommunications capabilities using  
 992 the Network Standard Investment type. Agencies should report their Enterprise Infrastructure Solution  
 993 (EIS) transition costs within one or more Network Standard Investments. EIS is a government-wide  
 994 acquisition that replaced Networx contract and is mandated to use when purchasing Agency infrastructure.  
 995 The scope of budget and performance data for this type of IT Investment is different from the  
 996 mission/business Investment and the other specialty types of Investments. The data collected in the  
 997 Network Standard Investment is tailored to capture data relevant only to that type of Investment.

998 Each Network Standard Investment shall request budget resource requests with the following categories  
 999 of data:

Service Area	Service Description
Transition Services	Transition services related to the migration from Networx/local network and telecommunications capabilities to EIS capabilities
Data Services	VPN, Ethernet, Optical Wavelength Services, SONET, Private Line, Dark Fiber, IP services
Voice Services	VoIP
Legacy Voice Services	Traditional Voice services, Circuit Switched Data Service, Toll Free
Satellite Service	Satellite (mobile and fixed) primary communication and disaster communications
Managed Services	Managed Network Services, web conferencing services, Unified Communications, Integrated Performance Monitoring, Managed Mobility, Audio Conferencing, Video Conferencing
Service Related Equipment	Equipment to include cable and wiring
Service Related Labor	Sum of both internal and external labor to deliver network or voice services not collected in other categories
Access Arrangements	Connects an Agency’s location with dedicated, relatable bandwidth to the service provider’s network. This service is a necessity for most EIS services.

1000 The following are the fields in a Network Investment:

Section A: General Information	
Column/Field	Description
1	<b>UII</b> [12-digit primary key for all Investments]
2	<b>Brief Description</b> – Brief description of the organizational/geographic area or areas supported by the network that can clarify costs and metrics
3	<b>Network Primary POC</b> – The name of the managerial primary point of contact for this network’s operations

Section A: General Information	
4	<b>Primary POC Email</b> – The email address of the primary POC
5	<b>Anticipated EIS Transition Date</b> – The date by which it is expected to disconnect services from Network. If this network is not intending to transition to EIS, please indicate such by identifying that it is not applicable, “N/A”.

1001

Section B: Investment Cost Details
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1002 Complete a table for each Investment component (Transition Services, Data Services, VoIP Voice  
 1003 Services, Legacy Voice Services, Toll Free Voice Services, Managed Network Services, Satellite  
 1004 Services, Equipment & Cable and Wiring, Labor, and Access Arrangements). Not all Network  
 1005 Components may have applicable annual spending data; therefore, only complete those Network  
 1006 Component tables that are applicable for this Investment.

1007 *Note:* This will be reviewed with proposed cost tables in other Standard Investments and normalized  
 1008 where applicable.

Column/Field	Description
1	<b>Network Component</b> <i>Note:</i> Accepted responses in this field will be limited to the areas described above, specifically: <ul style="list-style-type: none"> <li>• Transition Services</li> <li>• Data Services</li> <li>• VoIP Voice Services</li> <li>• Legacy Voice Services</li> <li>• Toll Free Voice Services</li> <li>• Managed Network Services</li> <li>• Satellite Services</li> <li>• Equipment &amp; Cable and Wiring</li> <li>• Labor</li> <li>• Access Arrangements</li> </ul> Definitions for these types can be found above.
2	<b>PY 2018 Amounts</b> [\$M]
3	<b>CY 2019 Amounts</b> [\$M]
4	<b>BY 2020 Amounts</b> [\$M]

1009

Section C: Project Plan and Execution Data
--------------------------------------------

1010 Please see [Section C of the Major IT Business Case Detail](#) section (Project Plan and Execution Data) for  
 1011 instructions on submissions for Projects under the Project Plan and Execution Data for Network Standard  
 1012 Investment Reports. Network Standard Investments should only report those project and activity fields  
 1013 that are applicable to the Investment.

Project Table C.1
-------------------

1014 Please see [Table C.1 of the Major IT Business Case Detail](#) section (Projects Table) for fields and  
 1015 instructions on submissions for Projects under the Project Plan and Execution Data for Network Standard  
 1016 Investment Reports. Examples of Projects that may be included in this table include:

- 1017 • EIS transition
- 1018 • Network consolidation initiatives



- 1019 • Network cable replacement

**Project Activity Table C.2.1**

1020 Please see [Table C.2.1 of the Major IT Business Case Details](#) section (Project Activity Table) for fields  
 1021 and instructions on submissions for Activities (Non-iterative) under the Project Plan and Execution Data  
 1022 section of Network Standard Investment Reports as well as information on the reporting structure of  
 1023 Parent and Child Activities.

**Project Activity Table C.2.2**

1024 Please see [Table C.2.2 of the Major IT Business Case Details](#) section (Project Activity Table Agile) for  
 1025 fields and instructions on submissions for Activities (iterative) under the Project Plan and Execution Data  
 1026 section of Network Standard Investment Reports.

**Section D: Performance Metrics**

1027 Please see [Section D of the Major IT Business Case Details](#) section (Performance Metrics) for  
 1028 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
 1029 section of Network Standard Investment Reports. Network Standard Investments should only report those  
 1030 metrics that are applicable to the Investment; Investments should report at least one metric.

**Operational Analysis Table D.1**

1031 Please see [Table D.1 of the Major IT Business Case Details](#) section (Operational Analysis) for fields and  
 1032 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
 1033 section of Network Standard Investment Reports.

**Metrics Definition Table D.2**

1034 Please see [Table D.2 of the Major IT Business Case Details](#) section (Metrics Definition) for fields and  
 1035 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
 1036 section of Network Standard Investment Reports.

**Metric Actual Results Table D.3**

1037 Please see [Table D.3 of the Major IT Business Case Details](#) section (Metric Actual Results) for fields and  
 1038 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
 1039 section of Network Standard Investment Reports.

1040

1041 **17. Data Center and Cloud Standard Investment**

1042 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide data  
 1043 center and/or cloud capability as defined by the TBM Data Center, Storage, and Compute IT Towers in  
 1044 Appendix C.

1045 **Investment Usage:** Agencies should report Data Center and Cloud Standard Investments at the most  
 1046 granular level available, such as by data center or cloud procurement. If this level of granularity is not  
 1047 available, Agencies should report at the bureau or Agency level and include all relevant data centers  
 1048 and/or cloud procurements at this level of management. Non-tiered data centers should be reported as part  
 1049 of other investments by including costs within the Data Center IT Tower within the Agency IT Portfolio  
 1050 Summary.

1051 **Standard Investment Report: Yes.**

1052 This Data Center and Cloud Standard Investment Report is required for the FY 2020 cycle.

1053 Data centers should be broken down to separate investments at the finest granularity possible by the  
 1054 Agency. For federated agencies, at a minimum, this should be separated into individual investments for  
 1055 each component level organization. Data Center ID may include a list of Data Center IDs if this  
 1056 information is available for broken-out investments.<sup>3</sup> This investment may include multiple data centers if  
 1057 the Agency is unable to break costs out separately and these data centers are managed together.

1058 For the 2020 budget year submissions, performance metrics and measures for Data Center and Cloud  
 1059 Investments shall continue to be calculated by OMB from Agencies' quarterly IDC data center inventory  
 1060 submissions, in order to reduce Agency burden and ensure consistency and fidelity of those metrics.  
 1061 OMB will leverage the "Data Center ID" to combine performance and spending data for each individual  
 1062 data center or cloud instance.

1063 *17.1 Tower Mapping*

1064 The Data Center and Cloud Standard Investment Report type combines three TBM Framework IT  
 1065 Towers: Data Center, Compute, and Storage.

- 1066 • **Data Center:** Purpose-built data center facilities that house and protect critical IT equipment  
 1067 including the space, power, environment controls, racks, and cabling, and that require data center  
 1068 specific upkeep (commonly known as "smart hand" support).
- 1069 • **Compute:** Physical servers running a version of Microsoft's Windows Server or the Linux  
 1070 operating system; IBM AS/400 platform; servers running vendor-specific, proprietary Unix  
 1071 operating systems (e.g., IBM AIX, Sun Solaris, HP UX); and traditional mainframe computers  
 1072 and operations running legacy operating systems.
- 1073 • **Storage:** Offline storage resources used for archival, backup, and recovery efforts to prevent data  
 1074 loss or data corruption, support disaster recovery and compliance requirements of the distributed  
 1075 storage; includes mainframe offline storage (i.e., any storage resources used for archive, backup  
 1076 and recovery to support data loss, data corruption, disaster recovery, and compliance  
 1077 requirements of the mainframe storage).

1078 **Cloud:** spending may be included in these towers. In order to separate Cloud spending from these towers,

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<sup>3</sup> These categorizations of data centers map to Agencies' quarterly IDC submissions, in which each record is identified as a tiered data center, a non-tiered data center, or a private-sector cloud instance, as per the definitions established in OMB M-16-19, "Data Center Optimization Initiative (DCOI)", August 1, 2016, [https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2016/m\\_16\\_19\\_1.pdf](https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2016/m_16_19_1.pdf), and in OMB's Quarterly IDC Instructions.

1079 the Investment Cost Details section of this report asks for the disaggregation of cloud spending from the  
 1080 other towers included in this Standard investment Report. Cloud spending includes, but is not limited to:  
 1081 Virtual servers running a version of Microsoft's Windows Server or the Linux operating system; includes  
 1082 hardware, software, labor, and support services and central storage such as SAN, NAS, and similar  
 1083 technologies for the distributed compute infrastructure; also includes the equipment, software, and labor  
 1084 to run and operate; includes mainframe online storage (i.e., attached storage arrays and the associated  
 1085 equipment, software, and labor) to run and operate.

1086 *17.2 Scenario Mapping*

1087 Data Center and Cloud Standard Investment Reports shall be captured at the physical location where the  
 1088 data center is located or, for cloud environments, at the management unit operating the cloud  
 1089 infrastructure. If this level of granularity in reporting is not available, Standard Investment Reports should  
 1090 be captured at the bureau or Agency level. This shall include relevant tiered data centers, including those  
 1091 housing high-performance computing (HPC)<sup>4</sup> capabilities. This standard Investment type will  
 1092 accommodate Agencies' different data center infrastructure configurations as follows:

- 1093 • **A Single Tiered Data Center:** In this scenario, the Agency is reporting this data center through  
 1094 the quarterly IDC with a Tier Classification equal to “Tiered”. This data center requires a Data  
 1095 Center and Cloud Standard Investment Report. In addition, the Agency shall provide the Federal  
 1096 Real Property Profile ID (for physical data centers in owned or leased property) associated with  
 1097 their data center. Agencies with multiple tiered data centers shall submit spending on each data  
 1098 center data center *separately*.
- 1099 • **A Tiered Data Center with High Performance Computing (HPC) Capabilities:** In this  
 1100 scenario the Agency is reporting this data center through the quarterly IDC with a Tier  
 1101 Classification equal to “Tiered” and with a non-zero number of HPC nodes. This data center  
 1102 requires a Data Center and Cloud Standard Investment Report. In addition, the Agency shall  
 1103 provide the Federal Real Property Profile ID (for physical data centers in owned or leased  
 1104 property) associated with their data center with HPC capabilities.
- 1105 • **Tiered Data Center with a Physical Location Connected to One or More Cloud**  
 1106 **Capabilities:** In this scenario the Agency is reporting this data center through the quarterly IDC  
 1107 with a Tier Classification equal to “Tiered” and the facility is connected to one or more cloud  
 1108 capabilities. For example, an Agency might manage some resources in-house, while hosting other  
 1109 key parts of their IT infrastructure as a public or managed service (also known as a hybrid cloud).  
 1110 This data center requires a Data Center and Cloud Standard Investment Report.
- 1111 • **A Data Center that Consumes Data Center Shared Services from another Agency:** In this  
 1112 scenario the Agency is reporting this data center through the quarterly IDC with a Tier  
 1113 Classification equal to “Tiered” and the facility is connected to one or more cloud capabilities. As  
 1114 a result, the Agency would report spending associated with the Internal Services (i.e., federal  
 1115 managed service provider) cost pool.
- 1116 • **A Data Center that Provides Data Center Shared Services to another Agency:** Federal  
 1117 government data centers that are providing data center shared services to another federal  
 1118 government Agency shall incorporate their costs for each cost pool associated with the data center  
 1119 for each applicable sub-Tower.
- 1120 • **A Cloud Data Center (also known as private-sector cloud or “the public cloud”):** This  
 1121 scenario includes IaaS and PaaS as well as HPC-equivalent cloud implementations not located on  
 1122 Federal facilities. SaaS costs will be captured under the End User Investment. The Agency shall

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<sup>4</sup> Computing capabilities that are measured in floating point operations per second (FLOPS) typically either gigaFLOPS (10<sup>9</sup>) or teraFLOPS (10<sup>12</sup>).

1123 incorporate their cost for each cost pool associated with their cloud data center for each sub-  
 1124 Tower. Agencies with multiple cloud data centers shall report spending on each instance  
 1125 *separately*.

- 1126 • **A Non-Tiered Data Center with a Physical Location:** This scenario does not require  
 1127 submission of a Data Center and Cloud Standard Investment Report.

1128 The “Data Center ID” identifier in OMB’s Integrated Data Collection (IDC) will be used to connect  
 1129 Agencies’ data centers inventory and performance data. This will be combined with budget and spending  
 1130 data that will be captured in their Data Center and Cloud Standard Investment and associated Investment  
 1131 Reports to inform oversight and Investment decision-making by both the Agencies and OMB.

Section A: General Information	
Column /Field	Description
1	<b>UII</b> [12-digit primary key for all Investments]
2	<b>Data Center ID</b> – The unique identifier from your Agency’s data center inventory, which is submitted to OMB on a quarterly basis in conjunction with the Integrated Data Collection (IDC). Your Agency's Data Center and Cloud Standard Investment Report must map to its corresponding IDC record by way of this identifier. To be put in contact with your Agency's IDC submitters and obtain a list of your Agency's correct "Data Center ID"s, email <a href="mailto:DataPointSupport@omb.eop.gov">DataPointSupport@omb.eop.gov</a> . Agencies should provide as many entries as applicable.

1132

Section B: Investment Cost Details
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1133 The table below shall be reported for each of the tiered and cloud data centers in each Agency’s  
 1134 inventory.

Column/Field	Description
1	<b>Component</b> <i>Note:</i> Accepted responses in this field will be limited to the areas described above, specifically: <ul style="list-style-type: none"> <li>• Data Center</li> <li>• Cloud</li> <li>• Storage</li> <li>• Compute</li> </ul>
2	<b>PY 2018 Amounts</b> [\$M]
3	<b>CY 2019 Amounts</b> [\$M]
4	<b>BY 2020 Amounts</b> [\$M]

1135

1136 **18. End User Standard Investment**

1137 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide end user  
 1138 capability as defined by the TBM End User tower.

1139 **Investment Usage:** Agencies should report End User Standard Investments at the point of management.

1140 **Standard Investment Report: Yes.**

1141 Agencies have the ability to determine the most appropriate level/approach in reporting Investments in  
 1142 this section. The crucial requirement is that the Investments are reported where they are managed. If, for  
 1143 example, software is acquired and deployed at the enterprise level, then a single Investment identifying  
 1144 the software that is managed in that manner makes sense. If there is a bureau, component, mode or sub-  
 1145 Agency that acquires and manages other off the shelf software to meet a local requirement, those  
 1146 acquisitions and their budget should be reported separately.

1147  
 1148 The End User Investment Report should include costs and relevant information necessary for decision-  
 1149 making and management oversight of the Agency’s End User portfolio which includes:

- 1150 • **Workspace**
- 1151 • **Mobile Devices**
- 1152 • **End User Software**
- 1153 • **Network Printers**
- 1154 • **Conferencing & AV**
- 1155 • **IT Helpdesk**
- 1156 • **Deskside Support**

1157  
 1158 For more information on these Sub-IT Towers, please reference the End User definition within Appendix  
 1159 D of the Guidance.

1160  
 1161 OMB memos on Category Management are listed in Appendix A. The desire is to capture End User  
 1162 performance data within the Category Management sections of the Integrated Data Collection (IDC)  
 1163 quarterly reporting process.

1164  
 1165 The following are the sections of the End User Investment Report:

<b>Section A: General Information</b>	
<b>Column /Field</b>	<b>Description</b>
1	<b>UII</b> <i>[12-digit primary key for all Investments]</i>

1166

<b>Section B: Investment Cost Details</b>
-------------------------------------------

1167 The below table includes Investment components/sub-Towers (workspace, mobile devices, end user  
 1168 software, network printers, conferencing & AV, IT Helpdesk, Deskside Support). This Investment may  
 1169 not have all components/sub-Towers, please complete the table based upon what is applicable for the  
 1170 scope of this Investment. The budget definition helps with Agencies in portfolio reviews, and will allow  
 1171 for alignment to appropriate strategic sourcing solutions.

1172

Column /Field	Description
1	<p><b>End User Component</b></p> <p><i>Note:</i> Accepted responses in this field will be limited to the areas described above, specifically:</p> <ul style="list-style-type: none"> <li>• Workspace</li> <li>• Mobile Devices</li> <li>• End User Software</li> <li>• Network Printers</li> <li>• Conferencing &amp; AV</li> <li>• IT Helpdesk</li> <li>• Deskside Support</li> </ul>
2	<b>Total PY 2018 Amounts [\$M]</b>
3	<b>Total CY 2019 Amounts [\$M]</b>
4	<b>Total BY 2020 Amounts [\$M]</b>

1173

**Section C: Project Plan and Execution Data**

1174 Please see [Section C of the Major IT Business Case Detail](#) section (Project Plan and Execution Data) for  
 1175 instructions on submissions for Projects under the Project Plan and Execution Data for End User Standard  
 1176 Investment Reports. End User Standard Investments should only report those project and activity fields  
 1177 that are applicable to the Investment.

**Project Table C.1**

1178 Please see [Table C.1 of the Major IT Business Case Detail](#) section (Projects Table) for fields and  
 1179 instructions on submissions for Projects under the Project Plan and Execution Data for End User Standard  
 1180 Investment Reports.

**Project Activity Table C.2.1**

1181 Please see [Table C.2.1 of the Major IT Business Case Details](#) section (Project Activity Table) for fields  
 1182 and instructions on submissions for Activities (Non- iterative) under the Project Plan and Execution Data  
 1183 section of End User Standard Investment Reports as well as information on the reporting structure of  
 1184 Parent and Child Activities.

**Project Activity Table C.2.2**

1185 Please see [Table C.2.2 of the Major IT Business Case Details](#) section (Project Activity Table Agile) for  
 1186 fields and instructions on submissions for Activities (iterative) under the Project Plan and Execution Data  
 1187 section of End User Standard Investment Reports.

1188

1189 **19. Output Standard Investment**

1190 **Standard Investment Definition:** An Output Standard Investment is an IT investment for the  
1191 provisioning of an enterprise-wide independently-managed output capability as defined by the TBM  
1192 Output tower.

1193 **Investment Usage:** An Output Standard Investment is created for each independently managed  
1194 enterprise-wide output capability within an Agency. For example, several centrally-managed Agency  
1195 print shops would call for one Output standard investment; several independently-managed Agency print  
1196 shops would call for several Output standard investments.

1197 **Standard Investment Report: No.**

1198 There is no Standard Investment Report for Output Standard Investments included in the FY 2020 cycle.  
1199 However, the need for a Standard Investment Report will continue to be evaluated to determine whether  
1200 additional information relating to this type of Standard Investment would provide useful and actionable  
1201 data for OMB and agencies.

1202 **20. Application Standard Investment**

1203 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide shared  
 1204 application capability based on the definition of the TBM Application tower to include sub-towers:  
 1205 Application Development, Application Support & Operations, and Business Software. Application  
 1206 resources shared across the enterprise (e.g., testing personnel, integrated development environments,  
 1207 testing software) are included. Application resources specific to program IT investments (e.g., dedicated  
 1208 analysts and programmers) are not included. Application resources, tools, and services associated with  
 1209 development projects for the enterprise application capability itself are included.

1210 **Investment Usage:** An Application Standard Investment is created for each independently managed  
 1211 enterprise-wide application capability within an Agency. For example, enterprise-wide application  
 1212 capabilities may be independently managed based on sub-agencies or technologies (e.g., mobile vs. web  
 1213 vs. mainframe). An Application Standard Investment is not created for an application capability that is  
 1214 provisioned as part of a program-specific IT investment. The expenditure of IT resources for such an  
 1215 Application capability is included with the program-specific IT investment. Application Part 3  
 1216 Investments may exist for some Agencies in instances where Agency-level software development work is  
 1217 provided as an intra- and/or inter-Agency service.

1218 **Standard Investment Report: Optional.**

1219 The Standard Investment Report for Application Standard Investments is available in the FY 2020 cycle.

Section A: General Information	
Column /Field	Description
1	UII [12-digit primary key for all Investments]

1220

Section B: Investment Cost Details	
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1221 The below table includes Investment components/sub-Towers (Application Development, Application  
 1222 Support & Operations, and Business Software). This Investment may not have all components/sub-  
 1223 Towers, please complete the table based upon what is applicable for the scope of this Investment. The  
 1224 budget definition helps with Agencies in portfolio reviews, and will allow for alignment to appropriate  
 1225 strategic sourcing solutions.

Column /Field	Description
1	<b>Application Component</b> <i>Note:</i> Accepted responses in this field will be limited to the areas described above, specifically: <ul style="list-style-type: none"> <li>• Application Development</li> <li>• Application Support &amp; Operations</li> <li>• Business Software</li> </ul>
2	<b>Total PY 2018 Amounts [\$M]</b>
3	<b>Total CY 2019 Amounts [\$M]</b>
4	<b>Total BY 2020 Amounts [\$M]</b>

1226

Section C: Project Plan and Execution Data	
--------------------------------------------	--

1227 Please see [Section C of the Major IT Business Case Detail](#) section (Project Plan and Execution Data) for  
 1228 instructions on submissions for Projects under the Project Plan and Execution Data for Application  
 1229 Standard Investment Reports. Application Standard Investments should only report those project and  
 1230 activity fields that are applicable to the Investment.



1231

**Project Table C.1**

1232 Please see [Table C.1 of the Major IT Business Case Detail](#) section (Projects Table) for fields and  
1233 instructions on submissions for Projects under the Project Plan and Execution Data for Application  
1234 Standard Investment Reports.

**Project Activity Table C.2.1**

1235 Please see [Table C.2.1 of the Major IT Business Case Details](#) section (Project Activity Table) for fields  
1236 and instructions on submissions for Activities (Non-iterative) under the Project Plan and Execution Data  
1237 section of Application Standard Investment Reports as well as information on the reporting structure of  
1238 Parent and Child Activities.

**Project Activity Table C.2.2**

1239 Please see [Table C.2.2 of the Major IT Business Case Details](#) section (Project Activity Table Agile) for  
1240 fields and instructions on submissions for Activities (iterative) under the Project Plan and Execution Data  
1241 section of Application Standard Investment Reports.

1242 **21. Delivery Standard Investment**

1243 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide shared  
 1244 delivery capability based on the definition of the TBM Delivery tower that includes enabling capabilities  
 1245 (e.g., Business Software). Delivery resources, products, and services shared across the enterprise (e.g.,  
 1246 PMO personnel, account managers) are included. Delivery resources, products, and services specific to a  
 1247 particular program IT investment (e.g., dedicated project managers and business analysts) or other  
 1248 Standard Investments are not included, as the focus of this Standard Investment is on multi-program and  
 1249 multi-operation centers.

1250 **Investment Usage:** A Delivery Standard Investment is created for each independently managed  
 1251 enterprise-wide delivery capability within an Agency (e.g., PMOs, Customer Relationship Management  
 1252 (CRM) operation centers). For example, enterprise-wide delivery capabilities may be independently  
 1253 managed based on sub-agencies or capability (e.g., IT service management vs. client management).

1254 **Standard Investment Report: Optional.**

1255 The Standard Investment Report for Delivery Standard Investments is available in the FY 2020 cycle.

Section A: General Information	
Column /Field	Description
1	UII [12-digit primary key for all Investments]

1256

Section B: Investment Cost Details
------------------------------------

1257 The below table includes Investment components/sub-Towers (IT Service Management, Program,  
 1258 Product, & Project Management, Client Management, and Operations Center). This Investment may not  
 1259 have all components/sub-Towers, please complete the table based upon what is applicable for the scope of  
 1260 this Investment. The budget definition helps with Agencies in portfolio reviews, and will allow for  
 1261 alignment to appropriate strategic sourcing solutions.

Column /Field	Description
1	<b>Delivery Component</b> <i>Note:</i> Accepted responses in this field will be limited to the areas described above, specifically: <ul style="list-style-type: none"> <li>• IT Service Management</li> <li>• Program, Product, &amp; Project Management</li> <li>• Client Management</li> <li>• Operations Center</li> </ul>
2	<b>PY 2018 Amounts [\$M]</b>
3	<b>PY 2018 Total Federal FTEs [Count]</b>
4	<b>PY 2018 Total Contractor FTEs [Count]</b>
5	<b>CY 2019 Amounts [\$M]</b>
6	<b>CY 2019 Total Federal FTEs [Count]</b>
7	<b>CY 2019 Total Contractor FTEs [Count]</b>
8	<b>BY 2020 Amounts [\$M]</b>
9	<b>BY 2020 Total Federal FTEs [Count]</b>
10	<b>BY 2020 Total Contractor FTEs [Count]</b>

1262

1263

Section C: Performance Metrics
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1264 Please see [Section D of the Major IT Business Case Details](#) section (Performance Metrics) for  
1265 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
1266 section of Delivery Standard Investment Reports. Delivery Standard Investments should only report those  
1267 metrics that are applicable to the Investment; Investments should report at least one metric. Examples of  
1268 Delivery performance metrics may include:

- 1269 • Customer satisfaction
- 1270 • Cost benchmarks
- 1271 • Network Operations Center monitoring
- 1272 • Tier 2 and 3 Help Desk support efficacy
- 1273

**Operational Analysis Table C.1**

1274 Please see [Table D.1 of the Major IT Business Case Details](#) section (Operational Analysis) for fields and  
1275 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
1276 section of Delivery Standard Investment Reports.

**Metrics Definition Table C.2**

1277 Please see [Table D.2 of the Major IT Business Case Details](#) section (Metrics Definition) for fields and  
1278 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
1279 section of Delivery Standard Investment Reports.

**Metric Actual Results Table C.3**

1280 Please see [Table D.3 of the Major IT Business Case Details](#) section (Metric Actual Results) for fields and  
1281 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics  
1282 section of Delivery Standard Investment Reports.

1283

1284

1285 **22. Platform Standard Investment**

1286 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide platform  
1287 capability as defined by the Platform tower to include sub-towers: database, middleware, mainframe  
1288 database, and mainframe middleware, which were all previously under the Application Tower.

1289 **Investment Usage:** Agencies should report Platform Standard Investments at the point of management.

1290 **Standard Investment Report: No.**

1291 There is no Standard Investment Report for Platform Standard Investments included in the FY 2020  
1292 cycle. However, the need for a Standard Investment Report will continue to be evaluated to determine  
1293 whether additional information relating to this type of Standard Investment would provide useful and  
1294 actionable data for OMB and agencies.

1295

**APPENDIX A. LEGAL REGULATORY AUTHORITIES**

1296 The Federal Government must effectively manage its portfolio of capital assets to ensure scarce public  
 1297 resources are wisely invested. Capital programming integrates the planning, acquisition, and management  
 1298 of capital assets into the Budget decision-making process. It is intended to assist Agencies in improving  
 1299 asset management and in complying with the results-oriented requirements of:

- 1300 • The Federal Information Technology Acquisition Reform (FITARA) is Title VIII Subtitle D  
 1301 Sections 831-837 of [H.R.3979 - Carl Levin and Howard P. "Buck" McKeon National Defense](#)  
 1302 [Authorization Act for Fiscal Year 2015](#).
- 1303 • The Clinger-Cohen Act of 1996, which requires Agencies to use a disciplined CPIC process to  
 1304 acquire, use, maintain, and dispose of IT in alignment with the Agency’s EA planning processes.  
 1305 OMB policy for the management of Federal information resources is detailed in [Circular No. A-](#)  
 1306 [130 \(P.L. 104-106\)](#), Management of Federal Information Resources.
- 1307 • The Government Performance and Results Act (GPRA) of 1993, which establishes the foundation  
 1308 for Budget decision making to achieve strategic objectives in order to meet Agency mission  
 1309 objectives. Instructions for preparing strategic plans, annual performance plans, and annual  
 1310 program performance reports are provided in Part 6 of [OMB Circular No. A-11, Section 220](#)  
 1311 [\(P.L. 103-62\)](#).
- 1312 • The [GPRA Modernization Act of 2010 \(P.L. 111-352\)](#), which requires quarterly performance  
 1313 assessments of Federal Government priorities and establishes Agency Performance Improvement  
 1314 Officers and the Performance Improvement Council.
- 1315 • [The Federal Managers Financial Integrity Act of 1982 \(P.L. 97-255\)](#), [Chief Financial Officers Act](#)  
 1316 [of 1990 \(CFO Act\) \(P.L. 101-576\)](#), and [Federal Financial Management Improvement Act of 1996](#)  
 1317 [\(P.L. 104-208\)](#), which require accountability of financial and program managers for financial  
 1318 results of actions taken, control over the Federal Government’s financial resources, and protection  
 1319 of Federal assets. OMB policies and standards for developing, operating, evaluating, and  
 1320 reporting on financial management systems are contained in [Circular No. A-127, Financial](#)  
 1321 [Management Systems](#) and [OMB Circular No. A-136](#).
- 1322 • [The Paperwork Reduction Act of 1995 \(P.L. 96-511\)](#), which requires Agencies to perform their  
 1323 information resources management activities in an efficient, effective, and economical manner.
- 1324 • The [Federal Information Security Management Act \(FISMA\) of 2014 \(P.L. 113-283\)](#), which  
 1325 requires Agencies to integrate IT security into their capital planning and EA processes, conduct  
 1326 annual IT security reviews of all programs and systems, and report the results of those reviews to  
 1327 OMB.
- 1328 • The [E-Government Act of 2002 \(P.L. 107-347\)](#), which requires Agencies to support  
 1329 Government-wide E-Government (E-Gov) initiatives and to leverage cross-Agency opportunities  
 1330 to further E-Gov. The Act also requires Agencies to establish a process for determining which  
 1331 government information the Agency intends to make available and accessible to the public on the  
 1332 Internet and by other means. In addition, the Act requires Agencies to conduct and make publicly  
 1333 available privacy impact assessments (PIAs) for all new IT Investments, administering  
 1334 information in an identifiable form collected from or about members of the public.
- 1335 • [The National Technology Transfer and Advancement Act of 1995 \(P.L. 104-113\)](#) and [OMB](#)  
 1336 [Circular No. A-119](#), which state that voluntary consensus standards are the preferred type of  
 1337 standards for Federal Government use. When it would be inconsistent with law or otherwise  
 1338 impractical to use a voluntary consensus standard, Agencies must submit a report to OMB  
 1339 through NIST describing the reason(s) for the Agency’s use of government-unique standards in  
 1340 lieu of voluntary consensus standards.
- 1341 • The Federal Records Act (44 U.S.C. Chapters 21, 29, 31, and 33), which requires Agencies to  
 1342 establish standards and procedures to ensure efficient and effective records management. The  
 1343 National Archives and Records Administration (NARA) issues policies and guidance for

- 1344 Agencies to meet their records management goals and requirements. NARA also provides  
 1345 policies and guidance for planning and evaluating Investments in electronic records management.  
 1346 • [The Privacy Act of 1974 \(5 U.S.C. § 552a\)](#), which is an omnibus "code of fair information  
 1347 practices" that attempts to regulate the collection, maintenance, use, and dissemination of  
 1348 personal information by Federal executive branch Agencies.  
 1349 • [NIST Special Publication 800-146](#) concepts and definitions regarding cloud computing.  
 1350 • Recent OMB IT policies and guidance, including:  
 1351 • [Federal Information Technology Shared Services Strategy](#)  
 1352 • [The Common Approach to Federal Enterprise Architecture](#)  
 1353 • [The Federal Enterprise Architecture, Version 2.0](#)  
 1354 • [Contracting Guidance to Support Modular Development](#)  
 1355 • [The Federal Cloud Computing Strategy](#)  
 1356 • [Digital Government Strategy: Building a 21st Century Platform to Better Serve the American](#)  
 1357 [People](#)  
 1358 • [Security Authorization of Information Systems in Cloud Computing Environments \(FedRAMP\)](#)  
 1359 • [National Strategy for Information Sharing and Safeguarding](#)  
 1360 • [OMB memo M-13-08 – Improving Financial Systems Through Shared Services](#)  
 1361 • [OMB memo M-13-09 – Fiscal Year 2013 PortfolioStat Guidance: Strengthening Federal IT](#)  
 1362 [Portfolio Management](#)  
 1363 • [OMB memo M-13-13 – Open Data Policy-Managing Information as an Asset](#)  
 1364 • [OMB memo M-13-14 – Fiscal Year 2016 Budget Guidance](#)  
 1365 • [OMB memo M-14-03 – Enhancing the Security of Federal Information and Information Systems](#)  
 1366 • [OMB memo M-14-08 – Fiscal Year 2015 PortfolioStat](#)  
 1367 • [OMB memo M-15-14 – Management and Oversight of Federal Information Technology](#)  
 1368 • [OMB memo M-16-11 – Improving Administrative Functions Through Shared Services](#)  
 1369 • [Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic](#)  
 1370 [Performance](#)  
 1371 • [Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation](#)  
 1372 [Management](#)  
 1373 • [Executive Order 13642, Making Open and Machine Readable the New Default for Government](#)  
 1374 [Information, May 9, 2013](#)  
 1375 • [Executive Order 13587, Structural Reforms to Improve the Security of Classified Networks and](#)  
 1376 [the Responsible Sharing and Safeguarding of Classified Information](#)  
 1377 • [Federal Acquisition Regulation, including subchapter B, parts 5 through 12 and part 23](#)  
 1378 • [Federal Management Regulation, including subchapters B and C](#)  
 1379 • [Energy Independence and Security Act of 2007 \(P.L. 110-140\)](#), including sections 431 through  
 1380 435 and 523 through 525  
 1381 • [Energy and Policy Act of 2005 \(P.L. 109-58\)](#), including sections 103, 104, 109, and 203  
 1382 • The [Modernizing Government Technology Act \(P.L. No. 115-91, National Defense Authorization](#)  
 1383 [Act for Fiscal Year 2018, Title X, Subtitle G, §§ 1076 through 1078\)](#) establishes the centralized  
 1384 Technology Modernization Fund for technology-related activities to improve information  
 1385 technology and enhance cybersecurity across the Federal Government, and further authorizes  
 1386 Agency IT Working Capital Funds for similar purposes.  
 1387

1388 **APPENDIX B. CODING INSTRUCTIONS FOR ADMINISTRATIVE AND MISSION SUPPORT**  
 1389 **SHARED OR CENTRALIZED SOLUTIONS**

1390 For Agencies’ shared services Investments which are not included in the two tables below should be  
 1391 coded “48” for the “Shared Services Category” field in the IT Portfolio Summary.

<b>E-Gov and LoB Initiative Investments (Category Code “24”)</b>				
<b>E-Gov or LoB Initiative</b>	<b>Acronym</b>	<b>Responsible Agency</b>	<b>Includes</b>	<b>Identifier</b>
Benefits.Gov	BG	Labor		0020
Budget Formulation and Execution LoB	BFELoB	Education		3200
Disaster Assistance Improvement Plan	DAIP	DHS/ FEMA		4100
E-Rulemaking		EPA		0060
Federal Health Architecture LoB*	FHALoB	HHS		1400
Financial Management LoB	FMLoB	Treasury	Former GMLoB	1100
FOIA Portal		Justice		0099
Geospatial LoB	GeoLoB	Interior		3100
Grants.Gov		HHS		0160
Human Resources LoB	HRLoB	OPM		1200
Integrated Award Environment	IAE	GSA	Former IAE-Loans & Grants	0230
Performance Management LoB	PMLoB	GSA		0900
Federal PKI Bridge	FPKI	GSA		0090
Recreation.Gov		USDA		0010
Security, Suitability, and Credentialing LoB	SSCLoB	OPM	New UII ending assigned for FY 2017 process.	1250
USAJOBS	USAJOBS	OPM	Former RecruitOnestop	1218

1392 \*The Federal Health Architecture LoB will be sunset at the end of FY 2018.

1393 OMB M-16-11 defined shared service providers as providers designated by Treasury FIT or OPM  
 1394 HRLOB previously and USSM going forward. The below table reflects existing USSM designated shared  
 1395 services as of 2018.

1396 A Partner Agency should list its Investment as Type 04 Funding Transfer and report funding in the  
 1397 Agency Funding fields. The Agency Lead should report their Investment as a Type 01 Major Investment  
 1398 and reports funding from customers in the Agency Contribution fields.

<b>Existing Designated Shared Services Investments/Providers (Shared Services Category Code “36”)</b>					
<b>Investment</b>	<b>Designate Provider</b>	<b>Shared Service</b>	<b>Acronym</b>	<b>Includes</b>	<b>Shared Services Identifier</b>
Agency Accounting Services (AAS)	Treasury	Administrative Resource Center	ARC	Financial Management	1101
HR LoB - HR Connect	Treasury	Treasury Shared Service Center	TSSC	Core HR	1201
Defense Civilian Personnel Data System	DoD	Defense Civilian Personnel Advisory Service	DCPAS	Core HR	1202
Defense Civilian Pay System	DoD	Defense Finance and Accounting Service	DFAS	Payroll	1203
IBC FMLoB Shared Service Provider	DOI	Interior Business Center	IBC	Financial Management	1102
IBC Shared Service Center (HRLoB)	DOI	Interior Business Center	IBC	Core HR, Payroll	1204
DOTXX129: Delphi Version Two	DOT	Enterprise Services Center	ESC	Financial Management	1103
HHS Integrated Personnel Management Service	HHS	Program Support Center	PSC	Core HR	1205
Human Capital Information Technology Services	GSA	HRLoB Shared Service Center	HRLoB SSC	Core HR	1206
PAR (e-Payroll)	GSA	HRLoB Shared Service Center	HRLoB SSC	Payroll	1207
OCFO FSSP	USDA	National Finance Center	NFC	Financial Management	1104
OCFO-NFC Shared Services	USDA	National Finance Center	NFC	Core HR, Payroll	1208



1400

**APPENDIX C. DEFINITIONS**

1401

The list of common IT Budget – Capital Planning definitions is provided below:

<b>Term</b>	<b>Source Document</b>	<b>Definition</b>
Adequate Incremental Development	<a href="#">OMB Memo M-15-14</a>	For development of software or services, planned and actual delivery of new or modified technical functionality to users occurs at least every six (6) months.
Agency Chief Information Officer (CIO), as defined in statute	<a href="#">OMB Memo M-15-14</a>	The CIO at the headquarters level of a department or establishment of the government as defined in Section 20 of OMB Circular A-11 (contrasts with “Bureau CIO”).
Agency IT Modernization Working Capital Fund (IT Mod WCF)	<a href="#">OMB Memo M-18-12</a>	Agency IT Mod WCFs are authorized to be established at CFO Act agencies to assist in improving, retiring, or replacing existing IT systems, or transitioning legacy systems to commercial solutions (and for other purposes).
Agency Lead (formerly Managing Partner)	2018 President’s Management Agenda (PMA)	This term refers to the Agency Lead that is responsible for coordinating the implementation of the E-Gov or LoB initiative. The Agency Lead (formerly managing partner) maintains an IT shared or centralized service with approval by Agency leadership for Intra-Agency services and OMB for Inter-Agency services. The Agency Lead organization, often referred to as the Program Management Office (PMO), develops, implements, and maintains financial and service models as well as contracts with Customers and Suppliers using strategically sourced or best in class contracts whenever available. The Agency Lead PMO is responsible for the success of the IT shared service, and reports using metrics developed by the Federal Agency for its own Intra-Agency IT shared services as well as the governance and or interagency stakeholders. Agency Leads are accountable for delivering quality services as defined by stakeholders and/or OMB.
Agile Development	Agile Methodology	Software development that emphasizes interacting with people over rigorous process, working software instead of documentation, a focus on customer needs and learning from the experience of development.
Alternatives Analysis	<a href="#">Capital Programming Guide</a>	This term refers to a method for addressing the various options for meeting the performance objectives of an Investment, including the return on Investment of the various options. The analysis is performed prior to the initial decision to implement a solution and updated periodically, as appropriate, to capture changes in the context for an Investment

Term	Source Document	Definition
		<p>decision. Alternatives Analysis should be performed for Investments with projects in the planning or DME stages, whereas strictly operational Investments should instead perform operational analyses until such time as a decision is made to re-evaluate the Investment or to resume development, modernization or enhancement. This terms refers to best practices outlined in the <a href="#">Capital Programming Guide</a> under "I.4-Alternatives to Capital Assets" and "Evaluate Asset Options"</p>
Application Programming Interface (API)	<a href="#">IT Budget - Capital Planning Guidance</a>	API refers to a protocol intended to be used as an interface by software components to communicate with each other. An API is a library that may include specification for routines, data structures, object classes, and variables.
Apportionment	<a href="#">31 U.S.C. § 1513(b); Executive Order 11541; OMB Circular A-11 Section 120</a>	This term refers to an OMB-approved plan to use budgetary resources (31 U.S.C. § 1513(b); Executive Order 11541). It typically limits the obligations you may incur for specified time periods, programs, activities, projects, objects, or any combination thereof. It may also place limitations on the use of other resources, such as FTEs or property. An apportionment is legally binding, and obligations and expenditures (disbursements) that exceed an apportionment are a violation of, and are subject to reporting under, the Antideficiency Act (31 U.S.C. § 1517(a)(1), (b)).
Baseline	<a href="#">OMB Memo M-10-27</a>	This term refers to the approved work breakdown structure, costs, schedule, and performance goals for a given Investment. For additional information on baselines and baseline management, see OMB Memo M-10-27, "Information Technology Investment Baseline Management Policy".
Benefit-Cost Analysis (BCA)	<a href="#">OMB Circular A-94; Capital Programming Guide</a>	Benefit-Cost Analysis refers to the recommended technique to use in a formal economic analysis of government programs or projects. Guidance for Benefit-Cost Analysis is described in OMB Circular A-94.
Budget Authority	<a href="#">OMB Circular A-11 Section 20.4</a>	Authority provided by federal law to enter into financial obligations that will result in immediate or future outlays involving Federal Government funds. The basic forms of budget authority include (1) appropriations, (2) borrowing authority, (3) contract authority, and (4) authority to obligate and expend offsetting receipts and collections.
Budget Year (BY)	OMB Circular A-11, Section 55	Budget Year (BY) is defined as "Agency Request" for the Initial Submission and "President's Budget Request" for the President's Budget Submission. These amounts should only reflect budgetary

Term	Source Document	Definition
		resources (unless specifically indicating “Budget Authority) by year and include appropriations, borrowing authority, contract authority, spending authority from offsetting collections, transfers from other accounts, and carryover of unobligated balances.
Budgetary Resources	<a href="#">OMB Circular A-11 Section 20.3</a>	This term refers to an amount available to enter into new obligations and to liquidate them. Budgetary resources are made up of new budget authority (including direct spending authority provided in existing statute and obligation limitations) and unobligated balances of budget authority provided in previous years. Direct spending authorities include appropriations and collections of fees authorized under 42 U.S.C. § 14953.
Bureau CIO	<a href="#">OMB Memo M-15-14</a>	Official with the title or role of CIO within a principal subordinate organizational unit of the Agency, as defined in Section 20 of OMB Circular A-11, or any component organization of the Agency (contrasts with “Agency CIO”).
Business Reference Model (BRM)	<a href="#">Business Reference Model, Version 3.1</a>	This term refers to one of six (6) reference models of the Federal Enterprise Architecture. The BRM is a classification taxonomy used to describe mission sectors, business functions, and services that are performed within and between Federal Agencies and with external partners. It provides a functional view of Federal Government organizations and their LoBs, including mission and support business services opportunities for collaboration, shared services, and solution reuse can be identified by mapping IT Investments to the BRM.
Capital Assets	<a href="#">Capital Programming Guide, Appendix 1</a>	Capital Assets refer to land, structures, equipment, intellectual property (e.g., software), and IT (including the output of IT service contracts) that has been acquired by the Federal Government and have an estimated useful life of two years or more. See Appendix One (1) of the Capital Programming Guide for a more complete definition of capital assets.
Capital Investment (or Investment)	<a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to the planning, development, and acquisition of a capital asset and the management and operation of that asset through its usable life after the initial acquisition. IT capital Investments may consist of one or more assets which provide functionality in an operational (production) environment.
Capital Planning and Investment Control (CPIC)	<a href="#">40 U.S.C. § 11302</a>	This term refers to a decision-making process that ensures IT Investments integrate strategic planning, budgeting, procurement, and management of IT in

Term	Source Document	Definition
		support of Agency missions and business needs. The CPIC process has three distinct phases: Select, Control, and Evaluate. See 40 U.S.C. § 11302 for statutory requirements and Clinger-Cohen Act of 1996.
Capital Programming	<a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to an integrated process within an Agency that focuses on the planning, budgeting, procurement, and management of the Agency’s portfolio of capital Investments to achieve the Agency’s strategic goals and objectives with the lowest overall cost and least risk.
Cloud Computing	NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a>	Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. Cloud computing promotes availability and is composed of five essential characteristics (On-demand self-service, Broad network access, Resource pooling, Rapid elasticity, Measured Service); three service models (Cloud Software as a Service (SaaS), Cloud Platform as a Service (PaaS), Cloud Infrastructure as a Service (IaaS)); and, four deployment models (Private cloud, Community cloud, Public cloud, Hybrid cloud). Key enabling technologies include: (1) fast wide-area networks, (2) powerful, inexpensive server computers, and (3) high-performance virtualization for commodity hardware (see NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a> for official government definition).
Cloud Computing Spending	<a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to implementation and operational costs directly attributable to the cloud computing systems within the Investment for the specified year.
Cloud First Policy	<a href="#">OMB Memo M-13-09</a>	This term refers to OMB’s Cloud First policy, launched in December 2010, which is intended to accelerate the pace at which the government realizes the value of cloud computing by requiring Agencies to evaluate safe, secure cloud computing options before making any new Investments. Per the Federal Cloud Computing Strategy, Agencies should evaluate their technology sourcing plans to include consideration and application of cloud computing solutions as part of the budget process. Agencies should seek to optimize the use of cloud technologies in their IT portfolios to take full

Term	Source Document	Definition
		<p>advantage of the benefits of cloud computing in order to maximize capacity utilization, improve IT flexibility and responsiveness, and minimize costs. When evaluating options for new IT deployments, OMB requires that Agencies default to cloud-based solutions whenever a secure, reliable, cost-effective cloud option exists. Additionally, Agencies shall continually evaluate cloud computing solutions across their IT portfolios, regardless of Investment type or life cycle stage.</p>
<p>Collaboration Tools</p>	<p><a href="#">FEA Framework, Version 2.0</a></p>	<p>Collaboration tools include all software and services used to support digital collaboration (e.g., wiki, social media services, document/file sharing, web conferencing solutions, and text messaging, desktop video conferencing solutions). Capabilities that allow for the concurrent, simultaneous communication and sharing of content, schedules, messages and ideas within an organization: Threaded Discussions support the running log of remarks and opinions about a given topic or subject; Document Library supports the grouping and archiving of files and records on a server; Shared Calendaring allows an entire team as well as individuals to view, add and modify each other’s schedules, meetings and activities; Task Management supports a specific undertaking or function assigned to an employee.</p> <ul style="list-style-type: none"> <li>• Costs include all IT related to the collaboration solution including software licenses, server, communications, and specialized hardware equipment, data center allocation / charges, storage, backup solution, and contractors.</li> <li>• Does NOT include IT costs related to e-mail, office productivity software (e.g., office software suites, groupware, e-mail clients), or services for which the Agency does not pay (e.g., OMB MAX).</li> <li>• Does NOT include IT costs associated with conference-room audio or video teleconferencing as these are included under telecommunications.</li> </ul>
<p>Commodity IT</p>	<p><a href="#">OMB Memo M-11-29</a>;  <a href="#">OMB Memo M-12 -10</a>;  <a href="#">Federal IT Shared Services Strategy</a></p>	<p>This term refers to a category of back-office IT services whose functionality applies to most, if not all, Agencies (e.g., infrastructure and asset management, e-mail, hardware and software acquisition, and help desks). This also relates to OMB's PortfolioStat initiative and a CIO-lead business approach to the delivery of IT infrastructure, enterprise IT, and administrative/business systems that emphasizes pooling Agencies' purchasing power across their entire organization through shared services as a</p>

Term	Source Document	Definition
		<p>provider or consumer, instead of standing up separate independent services to eliminate duplication, rationalize the Agency’s IT Investments, and drive down costs.</p> <p>There are three categories of Commodity IT:</p> <ul style="list-style-type: none"> <li>• Enterprise IT – Items that pertain to this are: E-mail; Collaboration; Identity and Access Management; IT Security (Not Identity and Access Mgmt.); and Web Hosting, Infrastructure, and Content.</li> <li>• IT Infrastructure - Items that pertain to this are: Desktop Systems; Mobile Devices; Mainframes and Servers; and Telecommunications.</li> <li>• Business Systems - Items that pertain to this are: Financial Management; Human Resources Management; Grants-Related Federal Financial Assistance; Grants-Related Transfer to State and Local Governments.</li> </ul>
Community Cloud	<p>NIST Special Publication 800-145 -<a href="#">The NIST Definition of Cloud Computing</a></p>	<p>This term refers to cloud computing technology in which the cloud infrastructure is provisioned for exclusive use by a specific community of consumers from organizations that have shared concerns (e.g., mission, security requirements, policy, and compliance considerations). It may be owned, managed, and operated by one or more of the organizations in the community, a third party, or some combination of them, and it may exist on or off premises (see NIST Special Publication 800-145 -<a href="#">The NIST Definition of Cloud Computing</a>).</p>
Contributions (or Expected Contributions)	<p><a href="#">IT Budget - Capital Planning Guidance</a></p>	<p>This term refers to both monetary contributions or a dollar-equivalent of In-kind services and fees for services provided by a partner Agencies/sub-Agencies to managing partners or shared service providers. Contributions can collected from partner Agencies or partner sub-Agencies by either Multi-Agency collaborations or Intra-Agency shared services.</p> <ul style="list-style-type: none"> <li>• Contributions represents the sum portion for all funds collected by the SMO of the shared service.</li> <li>• Fee-for-service (a type of contribution) are typically use the Economy Act, <a href="#">31 U.S.C. § 1535</a> as the authorization for the transfer of funds. Other monetary contributions or in-kind equivalents contributions typically use the Clinger-Cohen Act of 1996, 40 U.S.C. § 1424.</li> </ul>
Cost	<p><a href="#">Capital Programming Guide</a></p>	<p>Defined in Statement of Federal Financial Accounting Concepts (SFFAC) No. 1, Objectives of Federal Financial Reporting, as the monetary value of resources used. Defined more specifically</p>



Term	Source Document	Definition
		<p>in Statement of Federal Financial Accounting Standards (SFFAS) No. 4, Managerial Cost Accounting Concepts and Standards for the Federal Government, as the monetary value of resources used or sacrificed or liabilities incurred to achieve an objective, such as to acquire or produce a good or to perform an activity or service. Depending on the nature of the transaction, cost may be charged to operations immediately (i.e., recognized as an expense of the period) or to an asset account for recognition as an expense of subsequent periods. In most contexts within SFFAS No. 7, Accounting for Revenue and Other Financing Sources, "cost" is used synonymously with expense.</p>
Cost Avoidance	<a href="#">OMB Circular A-131</a>	<p>An action taken in the immediate time frame that will decrease costs in the future. For example, an engineering improvement that increases the mean time between failures and thereby decreases operation and maintenance costs is a cost avoidance action (as defined in <a href="#">OMB Circular A-131</a>).</p>
Cost Savings	<a href="#">OMB Circular A-131</a>	<p>Cost Saving refers to the reduction in actual expenditures to achieve a specific objective (as defined in <a href="#">OMB Circular A-131</a>).</p>
Current Year (CY)	OMB Circular A-11, Section 55	<p>Current Year (CY) is defined as “Likely/Enacted” for the Initial Submission and “Likely/Enacted” for the President’s Budget Submission. These amounts should only reflect budgetary resources by year and include appropriations, borrowing authority, contract authority, spending authority from offsetting collections, transfers from other accounts, and carryover of unobligated balances.</p>
Data Center	<a href="#">OMB Memo M-16-19</a>	<p>“For the purposes of this memorandum, rooms with at least one server, providing services (whether in a production, test, staging, development, or any other environment), are considered data centers. However, rooms containing only print servers, routing equipment, switches, security devices (such as firewalls), or other telecommunications components shall not be considered data centers.”</p>
Dataset	<a href="#">OMB Memo M-13-13</a>	<p>This term refers to a collection of structured data presented in tabular or non-tabular form (per <a href="#">OMB M-13-13</a> Open Data Policy-Managing Information as an Asset).</p>
Defense Acquisition Workforce Improvement Act (DAWIA) of 1990 (P.L.	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>DAWIA of 1990 (P.L. 101-510) refers to a congressional act that established for the Department of Defense an Acquisition Corps to professionalize the acquisition workforce in the DoD through education, training, and work experience.</p>

Term	Source Document	Definition
101-510)		
Dependency	<a href="#">IT Budget - Capital Planning Guidance</a>	Dependency refers to the identification of relationships between projects and operational assets within an Investment as well as the identification of relationships between Investments. Action taken by one affects the other. Identification of dependencies is critical to the management of project, program, and portfolio risk.
Development, Modernization, and Enhancement (DME)	<a href="#">IT Budget - Capital Planning Guidance</a>	DME refers to projects and activities leading to new IT assets/systems, as well as projects and activities that change or modify existing IT assets to substantively improve capability or performance, implement legislative or regulatory requirements, or meet an Agency leadership request. DME activity may occur at any time during a program’s life cycle. As part of DME, capital costs can include hardware, software development and acquisition costs, commercial off-the-shelf acquisition costs, government labor costs, and contracted labor costs for planning, development, acquisition, system integration, and direct project management and overhead support.
Disposition Cost	<a href="#">IT Budget - Capital Planning Guidance</a>	Disposition Cost refers to the cost of retiring a capital asset once its useful life is completed or a replacement asset has superseded it; disposition costs may be included in operational activities near the end of the useful life of an asset.
Earned Value Management (EVM)	American National Standards Institute (ANSI)/Electronic Industries Alliance (EIA) Standard–748–1998, Earned Value Management Systems. Additional information on EVMS is available at <a href="http://www.acq.osd.mil/evm">www.acq.osd.mil/evm</a> .	EVM refers to an integrated management system that coordinates the work scope, schedule, and cost goals of a program or contract, and objectively measures progress toward these goals. EVM is a tool used by program managers to: (1) quantify and measure program/contract performance, (2) provide an early warning system for deviation from a baseline, (3) mitigate risks associated with cost and schedule overruns, and (4) provide a means to forecast final cost and schedule outcomes. The qualities and operating characteristics of earned value management systems (EVMS) are described in American National Standards Institute (ANSI)/Electronic Industries Alliance (EIA) Standard–748–1998, Earned Value Management Systems. Additional information on EVMS is available at <a href="http://www.acq.osd.mil/evm">www.acq.osd.mil/evm</a> .
E-mail	<a href="#">FEA Framework, Version 2.0</a>	Electronic mail is the exchange of computer generated and stored messages by



Term	Source Document	Definition
		<p>telecommunication. An e-mail can be created manually via messaging applications or dynamically/ programmatically such as automated response systems. For Agencies that have outsourced e-mail services to another Agency or vendor, this is the obligation for e-mail related costs.</p> <ul style="list-style-type: none"> <li>• Costs should include the full cost of the e-mail solution including software licenses, server and communications hardware, equipment, data center allocation/charges, storage, backup solution, and contractors.</li> <li>• Does not include the cost of the end user client computing device/software or the telecommunications cost for the LAN/WAN/wireless costs.</li> </ul>
Enterprise Architecture (EA)	<a href="#">OMB Circular A-130</a>	<p>This term refers to the strategic, business, and technology and documentation of the current and desired relationships among business and management processes and IT of an organization. An EA includes the rules and standards and systems life cycle information to optimize and maintain the environment which the Agency wishes to create and maintain through its IT portfolio. An EA must provide a strategy that enables the Agency to support its current state and provides a roadmap for transition to its target environment. An EA defines principles and goals and sets a direction on such issues as the promotion of interoperability, open systems, public access, end-user satisfaction, and IT security.</p>
Enterprise Roadmap	<a href="#">OMB Memo M-13-09</a>	<p>This term refers to a document that describes the business and technology plan for the entire organization using EA methods. The Roadmap provides current views, future views, and transition plans at an appropriate level of detail for all IT Investments, services, systems, and programs. The Enterprise Roadmap also contains an IT asset inventory using the FEA Reference Models and other attachments or appendices for CPIC, EA, shared service, and other planning products requested by OMB that provide additional information regarding Roadmap plans.</p>
Epic	Agile Methodology	<p>A container for large initiatives or functionalities that typically require multiple releases to implement. Epics represent the key strategic direction of a program or enterprise that affects the systems supporting the program or enterprise. Epics are decomposed as part of the backlog refinement</p>

Term	Source Document	Definition
Evaluation (by Agency CIO)	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>process into features and user stories.</p> <p>This term refers to the CIO’s best judgment of the current level of risk for an Investment in terms of its ability to accomplish its goals (40 U.S.C. § 11315(c)(2)). The evaluation should be informed by the following factors, including, but not limited to: risk management, requirements management, contractor oversight, historical performance, human capital and other factors that the CIO deems important to the forecasting future success. Each evaluation should include narrative to address/explain the rating. This is particularly important whenever the rating has changed since the last evaluation.</p>
FEA Mapping Codes	<a href="#">FEA Framework, Version 2.0</a>	<p>This term refers to the unique identifiers for the information contained in the FEA Reference Models. The mapping codes are used to align information reported by Agencies back to a common FEA taxonomy. Use of the Reference Models provides a common vocabulary and framework to relate information captured across the Federal Government. The first three-digit code indicates the primary service area served by this Investment (the three-digit BRM service code). The second through fifth three-digit codes indicate the secondary services associated with this Investment. Guidance on the codes for these mappings can be found at FEA Reference Model document library.</p>
Federal Acquisition Certification for Program and Project Managers (FAC-P/PM)	<a href="#">FAC-P/PM</a>	<p>Federal Acquisition Certification for Program and Project Managers (FAC-P/PM) refers to a certification program that was established to clearly identify general training and experience requirements for program and project managers (PMs) in civilian Agencies. The FAC-P/PM focuses on essential competencies needed for program managers and PMs. The certification program does not include functional or technical competencies, such as those for IT or Agency-specific competencies. Defense Agencies have a similar certification program under DAWIA. Agencies were required to be compliant with FAC-P/PM starting in FY 2008. Available levels are Entry/Apprentice, Mid/Journeyman, and Expert/Advanced for FAC-P/PM and 1, 2, and 3 for DAWIA.</p>
Federal Enterprise Architecture (FEA)	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>This term refers to a business-based documentation and analysis framework for Agency and government-wide improvement. The FEA provides standardized methods to describe the relationship</p>

Term	Source Document	Definition
		<p>between an Agency’s strategic goals, business functions, and enabling technologies at various levels of scope and complexity. The FEA is comprised of documentation in six domain areas (strategic goals, business services, data and information, systems and applications, infrastructure, and security) that includes required and elective artifacts. More information about the FEA is available in The Common Approach to Federal Enterprise Architecture (OMB, May 2, 2012) and at FEA Reference Model document library.</p>
Federal Information System	<a href="#">OMB Circular A-130</a>	An information system used or operated by an Agency, by a contractor of an Agency, or by another organization on behalf of an Agency.
Federal IT Dashboard (ITDB)	<a href="http://www.itdashboard.gov">www.itdashboard.gov</a>	This term refers to a website (www.itdashboard.gov) that enables Federal Agencies, industry, the general public, and other stakeholders to view details regarding the performance of Federal IT Investments. The ITDB is used by the Administration and Congress to inform budget and policy decisions.
Financial Management Systems	<a href="#">OMB Circular A-123, Appendix D</a> (formerly OMB Circular A-127).	This term refers to systems necessary to support financial management, including automated and manual processes, procedures, controls, data, hardware, software, and support personnel dedicated to the operation and maintenance of system functions. The following are examples of financial management systems: core financial systems, procurement systems, loan systems, grants systems, payroll systems, budget formulation systems, billing systems, and travel systems (see OMB Circular A-127 for additional information and guidance).
Full Funding	<a href="#">OMB Circular A-11, Section 31.5</a>	Full Funding means appropriations are enacted sufficient to complete a useful segment of a capital project or Investment (or the entire project or Investment, if it is not divisible into useful segments) before any obligations for the useful segment (or project or Investment) may be incurred. Incrementally funding the planning and acquisition of capital assets (or useful segments), without certainty if or when future funding will be available, can result in poor planning, inadequate justification of asset acquisition, higher acquisition costs, cancellation of projects, the loss of sunk costs, or inadequate funding to maintain and operate the assets. Requests for procurement programs must provide for full funding of the entire

Term	Source Document	Definition
Functional/Business Sponsor	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>cost (see Section 31.5 of OMB Circular A-11 and the Capital Programming Guide).</p> <p>This term refers to the Agency official who is responsible for the program or function supported or implemented by the Investment (44 U.S.C. § 3501 (a) (4)).</p> <p>The sponsor is responsible for expressing the value of, ensuring successful implementation of, and providing accurate and timely data for the IT Investment to the Agency CIO and OMB. The designated person may (or may not) be the same as the “Business Process owner/Subject Matter Expert” serving on the IPT. Each major and non-major IT Investment must include the name of the functional/business sponsor as well as the individual’s title.</p>
Funding	<a href="#">Capital Programming Guide</a>	<p>There are two types of funding for projects:</p> <p>(1) Full funding means that appropriations are enacted that are sufficient in total to complete a useful segment of a capital project (Investment) before any obligations may be incurred for that segment. When capital projects (Investments) or useful segments are incrementally funded, without certainty if or when future funding will be available, it can result in poor planning, acquisition of assets not fully justified, higher acquisition costs, projects (Investments) delays, cancellation of major projects (Investments), the loss of sunk costs, or inadequate funding to maintain and operate the assets. Budget requests for full acquisition propose for full funding.</p> <p>(2) Incremental (annual) funding means that appropriations are enacted that only fund an annual or other part of a useful segment of a capital project (Investment). OMB or the Congress may change the Agency's request for full finding to incremental funding in order to accommodate more projects in a year than would be allowed with full funding.</p>
Funding Source	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>Funding Source refers to the direct appropriation or other budgetary resources an Agency receives for an IT Investment. When “original paying accounts” within Agencies are transferring resources to a different Agency account that ultimately supports the IT Investment (for example, when bureau accounts are paying into a central CIO office account or a working capital fund), the funding source provided in Agency IT Investment Portfolio should be the account that ultimately pays contracts and other costs for the Investment directly (not the</p>

Term	Source Document	Definition
		original account(s) for the funds); the point of execution. Note: For Agencies on the ITDB, funding sources are planned as the primary drivers in the algorithm to display “spending by bureau,” rather than using the bureau code associated with Investments. It is critical that valid OMB Budget Account (funding source) codes be provided for each funding source in Agency submissions.
Funding Transfer Investment	<a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to the portion of funding a partner Agency provides funding contributions to another IT Investment. The description of the IT Investment should indicate the UII of the Agency Lead’s Investment.
Government Information	<a href="#">OMB Circular A-130</a>	Government Information refers to information created, collected, processed, disseminated, or disposed of by or for the Federal Government .
Gross Savings	IDC	The amount of cost savings (per Circular A-131) on an annual basis without taking into account the one-time costs of implementing the cost savings or cost avoidance strategy (as defined in <a href="#">OMB Circular A-131</a> ).
Help desk (End User Support)	<a href="#">FEA Business Reference Model v 3.1</a>	Help Desk Services involves the operation of a service center to respond to government and contract employees' end user device and software support needs (includes, but is not limited to, costs related to employees, contractors, and ticket management software).
Hybrid Cloud	NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a>	Cloud computing technology in which the cloud infrastructure is a combination of two or more distinct cloud infrastructures (private, community, or public) that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability (e.g., cloud bursting for load balancing between clouds) (see NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a> for official government definition).
Identity and Access Management	OMB Circular A-11 (2010)	Includes funding of activities required to implement HSPD-12 and the Federal Identity, Credentialing and Access Management (FICAM) roadmap segment architecture requirements as directed by OMB. This includes but is not limited to HSPD-12 PIV Card deployment and operations, logical PIV Card access implementations, to include network and application access, identity management systems, physical access control systems, etc. <ul style="list-style-type: none"> <li>• Costs include all IT related to identity and access management including cost of PIV cards, certificates, software licenses, server and</li> </ul>

Term	Source Document	Definition
		communications hardware, equipment, data center allocation/charges, storage, backup solution and contractors.
Information Resources Management (IRM) Strategic Plan	<a href="#">44 U.S.C. § 3506(b)(2)</a> ; <a href="#">OMB Circular A-130</a>	IRM Strategic Plan refers to a document that addresses all information resources management of an Agency. Agencies must develop and maintain their IRM strategic plans as required by 44 U.S.C. § 3506(b)(2) and OMB Circular A-130. IRM strategic plans should support the Agency's strategic plan that is required in OMB Circular A-11; provide a description of how information resources management activities help accomplish the Agency's missions delivery area and program decisions; and ensure IRM decisions are integrated with management support areas, including organizational planning, budget, procurement, financial management, and human resources management.
Information Security	<a href="#">OMB Memo M-04-25</a>	<p>This term refers to all functions pertaining to the protection of federal information and information systems from unauthorized access, use, disclosure, disruptions, modification, or destruction, as well as the creation and implementation of security policies, procedures and controls. It includes the development, implementation, and maintenance of security policies, procedures, and controls across the entire information life cycle. These functions should include implementation and activities associated with NIST 800-37, Security Awareness training (but not the technical infrastructure required for the delivery of training), FISMA compliance reporting, development of a security policy, and security audits and testing.</p> <ul style="list-style-type: none"> <li>• IT security should include systems that oversee Agency IT needs.</li> <li>• Do Not Include IT costs related to Identity or Access Management systems/solutions.</li> <li>• Do Not Include physical protection of an organization (e.g., guards, cameras, and facility protection).</li> </ul>
Information System	<a href="#">44 U.S.C. § 3502</a> ; <a href="#">OMB Circular A-130</a>	Information System refers a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, transmission, or dissemination of information, in accordance with defined procedures, whether automated or manual (see <a href="#">Circular A-130</a> and <a href="#">44 U.S.C. § 3502</a> ).
Information Technology (IT)	<a href="#">OMB Memo M-15-14</a>	<p>IT is defined as:</p> <p>A. Any services or equipment, or interconnected system(s) or subsystem(s) of equipment, that are</p>

Term	Source Document	Definition
		<p>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; where</p> <p>B. such services or equipment are 'used by an Agency' if used by the Agency directly or if used by a contractor under a contract with the Agency that requires either use of the services or equipment, or requires either use of the services or equipment to a significant extent in the performance of a service or the furnishing of a product.</p> <p>C. IT includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar procedures, services (including provisioned services such as cloud computing and support services that support any point of the life cycle of the equipment or service), and related resources.</p> <p>D. IT Includes High Performance Computing (HPC) capabilities including capabilities that are not commodity in nature.</p> <p>E. IT does not include any equipment that is acquired by a contractor incidental to a contract that does not require use of the equipment.</p>
<p>Infrastructure as a Service (IaaS) Cloud Computing</p>	<p>NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a></p>	<p>The capability provided to the consumer to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications. The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g., host firewalls) (see NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a> for official government definition).</p>
<p>Inter-Agency Acquisition</p>	<p><a href="#">31 U.S.C. § 1535</a></p>	<p>Inter-Agency Acquisition refers to the use of the Federal Supply Schedules; a Multi-Agency contract (i.e., a task order or delivery order contract established by one Agency for use by multiple government Agencies to obtain supplies and services, consistent with the Economy Act, <a href="#">31 U.S.C. § 1535</a>) or a government-wide acquisition contract (i.e., a task order or delivery order contract for IT established by one Agency for Government-</p>



Term	Source Document	Definition
		wide use operated by an executive agent, as designated by OMB pursuant to Section 11302(3) of the Clinger-Cohen Act of 1996).
Integrated Program/ Project Team (IPT)	<a href="#">Capital Programming Guide</a>	A multi-disciplinary team led by a program/project manager responsible and accountable for planning, budgeting, procurement and life-cycle management of the Investment to achieve its cost, schedule, and performance goals. Team skills include: budgetary, financial, capital planning, procurement, user, program, architecture, earned value management, security, and other staff as appropriate. In order for OMB to approve the Investment budget, an IPT must include at a minimum: a qualified, fully dedicated IT program manager; a contracting specialist, if applicable; an IT specialist; an IT security specialist; and a business process owner or subject matter expert (SME). Other members of the IPT might include enterprise architects; IT specialists with specific expertise in data, systems, or networks; capital planners; or performance specialists. Key members of the IPT should be co-located during the most critical junctures of the program, to the maximum extent possible. Agencies should establish IPT members' individual performance goals to hold team members accountable for both individual functional goals and the overall success of the program. The Investment IPT should be defined in a program or an IPT charter.
IT Asset	<a href="#">Capital Programming Guide</a>	This term refers to anything (tangible or intangible) that has value to an organization, including, but not limited to: a computing device, IT system, IT network, IT circuit, software (both an installed instance and a physical instance), virtual computing platform (common in cloud and virtualized computing), and related hardware (e.g., locks, cabinets, keyboards) as well as people and intellectual property (including software). Assets are the lowest level at which IT is planned, acquired, implemented, and operated.
IT Investment	<a href="#">OMB Circular A-11 Section 55</a>	This term refers to the expenditure of IT resources to address mission delivery and management support. An IT Investment may include a project or projects for the development, modernization, enhancement, or maintenance of a single IT asset or group of IT assets with related functionality, and the subsequent operation of those assets in a production environment. All IT Investments should have a defined life cycle with start and end dates,



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		<p>with the end date representing the end of the currently estimated useful life of the Investment, consistent with the Investment’s most current alternatives analysis if applicable.</p> <p>When the asset(s) is essentially replaced by a new system or technology, the replacement should be reported as a new, distinct Investment, with its own defined life cycle information.</p>
IT Migration Investment	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>This term refers to the migration costs associated with systems in a Shared Service partner Agency that are not captured by the Agency Lead when the partner Agency is migrating to the shared system. The description of the IT Investment should indicate the UII of the major IT Investment of the managing partner.</p>
IT Program Managers and IT Project Managers	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>IT Program Managers and IT Project Managers refers to the IPT members responsible for IT Investments and lead the required IPT for the Investment. In some cases, IT program managers and PMs can hold positions in other classification series; however they must still meet the requisite Federal certification and/or IT program management experience requirements. Further definitions are available in the Office of Personnel Management’s Job Family Standard for Administrative Work in the Information Technology Group (series 2200 in the Federal Classification and Job Grading Systems).</p>
IT Resources	<a href="#">OMB Memo M-15-14</a>	<p>IT Resources is defined as:</p> <p>A. All Agency budgetary resources, personnel, equipment, facilities, or services that are primarily used in the management, operation, acquisition, disposition, and transformation, or other activity related to the life cycle of IT;</p> <p>B. acquisitions or Inter-Agency agreements that include IT and the services or equipment provided by such acquisitions or Inter-Agency agreements; but</p> <p>C. does not include grants to third parties which establish or support IT not operated directly by the Federal Government.</p>
IT Service	<a href="#">ISO 20000</a>	<p>A means of delivering IT, in combination with any inherent people or processes, of value to customers by facilitated outcomes customers want to achieve without the ownership of specific costs and risks. (See: <a href="#">ISO 20000</a>)</p>

Term	Source Document	Definition
IT Systems for National Security	40 U.S.C. § 5141 & 5142	Any telecommunications or information system operated by the United States Government, the function, operation, or use of which: 1. involves intelligence activities; 2. involves cryptologic activities related to national security; 3. involves command and control of military forces; 4. involves equipment that is an integral part of a weapon or weapons system; or 5. subject to subsection (b), is critical to the direct fulfillment of military or intelligence missions. (b) LIMITATION. Subsection (a)(5) does not include a system that is to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel management applications). National Security Systems are required to report as a part of the Capital Planning process.
Iteration / Sprint	Agile Methodology	A distinct sequence of activities with a baselined plan and valuation criteria resulting in a release.
Legacy Information Technology System	<a href="#">Modernizing Government Technology Act (MGT Act)</a> ; <a href="#">National Defense Authorization Act (NDAA Act)</a>	An outdated or obsolete system of information technology.
Life Cycle Costs	<a href="#">Capital Programming Guide</a> ; <a href="#">OMB Circular A-131</a>	Life Cycle Costs refers to all Investment costs (including government FTEs) from the commencement of the Investment through its estimated useful life (or the composite estimated useful life of the assets within the Investment), independent of the funding source (e.g., revolving fund, appropriated fund, working capital fund, trust fund). For more information about life cycle costs, see the Capital Programming Guide of OMB Circular A-11 and <a href="#">OMB Circular A-131</a> .
Local-Area Network (LAN)	<a href="#">IT Budget - Capital Planning Guidance</a>	Physical and wireless local area network connecting equipment within the core data centers and connecting end users in office working areas to the company's broader networks.
Maintenance	<a href="#">Federal Accounting Standards Advisory Board Statement of Federal Financial Accounting Standards Number 10</a>	Maintenance refers to the activity necessary to keep an asset functioning as designed during the O&M phase of an Investment. Maintenance activities may also include, but are not limited to, operating system upgrades, technology refreshes, and security patch implementations. Some maintenance activities should be managed as projects and reported in Section B of Major IT Investment Update. As defined in the Federal Accounting Standards Advisory Board Statement of Federal

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		Financial Accounting Standards Number 10, maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from or significantly greater than those originally intended.
Major IT Investment	<a href="#">OMB Memo M-15-14</a>	An IT Investment in Part 1 and Part 2 of the IT Portfolio requiring special management attention because of its importance to the mission or function to the government; significant program or policy implications; high executive visibility; high development, operating, or maintenance costs; unusual funding mechanism; or definition as major by the Agency’s CPIC process. Agencies should also include all “major automated information system” as defined in 10 U.S.C. § 2445 and all “major acquisitions” as defined in the OMB Circular A-11 Capital Programming Guide consisting of information resources. OMB may work with the Agency to declare IT Investments as major IT Investments. Agencies must consult with assigned OMB desk officers and Resource Management Offices (RMOs) regarding which Investments are considered “major.” Investments not considered “major” are “non-major.”
Mobile Devices	OMB Circular A-11 (2010)	Total non-desktop, non-laptop, small form factor wireless end user device costs, including: hardware (including handsets, tablets, and wireless modems such as air cards), software, labor, maintenance, and service (including network service, such as cellular voice and data plans). Help desk costs should not be included here.
Modular Development	<a href="#">Contracting Guidance to Support Modular Development, June 14, 2012</a>	An approach that focuses on the delivery of specific Investments, projects, or activities of an overall capability by progressively expanding upon delivered capabilities until the full capability is realized. Investments may be decomposed into discrete projects, increments, or useful segments, each of which is undertaken to develop and implement products and capabilities that the larger Investment delivers. For more information, see Contracting Guidance to Support Modular Development (OMB, June 14, 2012).
Net Savings	<a href="#">OMB Circular A-131</a>	The amount of cost savings (per <a href="#">Circular A-131</a> ) minus the cost required to implement and operate the cost savings or cost avoidance strategy.
Network storage	<a href="#">OMB Circular A-130</a>	Applies to any data processing environment (such as production, backup, DR/COOP, test, development, etc.) and includes: <ul style="list-style-type: none"> <li>• Hardware (storage controllers, storage servers):</li> </ul>

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		<p>Includes all dedicated storage hardware devices such as controllers, servers, disk arrays, tape libraries, and optical jukeboxes, as well as supplies (media) used to store data offline such as tapes.</p> <ul style="list-style-type: none"> <li>• Software: Includes software dedicated to managing the storage systems, including creation and setup, storage maintenance, reporting, security, monitoring, backup/restore, archival, replication, media handling and data migration/tiering.</li> <li>• Disaster recovery: Includes the hardware, software, facilities and contracts specifically dedicated to disaster recovery for storage management.</li> <li>• Outsourcing: Includes third party and outsource contracts, such as managed storage services and cloud-based storage.</li> <li>• Personnel: In-house costs for government personnel (salaries and benefits) and costs for contract personnel supporting operations/maintenance, engineering/technical services, planning and process management, services administration, management and administration allocated to storage systems.</li> </ul> <p><i>Note:</i> Dollars should only appear in ONE category, for example network storage OR mainframes and servers.</p>
New IT Investment	<a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to an IT Investment and its associated projects that is newly proposed by the Agency and that has not been previously reported/funded by OMB. An asset(s) within an Investment that is essentially replaced by a new system or technology may be reported as a new, distinct Investment, with its own defined life cycle costs, or may be included within the current Investment.
Non-Major IT Investment	<a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to any IT Investment in the Agency's IT Portfolio that does not meet the definition of "major IT Investment" (01), "Funding Transfer Investment" (04) or "IT Migration Investment" (03). All non-major IT Investments must be reported in the Agency IT Investment Portfolio. For more details see section 10 of CPIC IT Portfolio Guidance.
Ongoing IT Investment	<a href="#">IT Budget - Capital Planning Guidance</a>	Ongoing IT Investment refers to an Investment and its associated assets, including both maintenance projects and operational activities, that has been through a complete Budget Cycle with OMB with

Term	Source Document	Definition
		respect to the President's Budget for the current year (CY) — in this case, for FY 2017.
Operational Analysis	<a href="#">Capital Programming Guide;</a> <a href="#">GAO-13-87</a>	This term refers to a method of examining the ongoing performance of an operating asset Investment and measuring that performance against an established set of cost, schedule, and performance goals. An operational analysis is, by nature, less structured than performance reporting methods applied to developmental projects and should trigger considerations of how the Investment's objectives could be better met, how costs could be reduced, and whether the organization should continue performing a particular function. Guidance for Operational Analysis is described in the Capital Programming Guide. Best Practices can also be found in GAO's <a href="#">GAO-13-87</a> report.
Operations	<a href="#">OMB Circular A-130;</a> <a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to the day-to-day management of an asset in which the asset is in operations production environment and produces the same product or provides a repetitive service. Operations include, but are not limited to, activities that operate data centers, help desks, operational centers, telecommunication centers, and end-user support services. Operational activities are located in Section C of the Major IT Investment Update part of the FY 2016 CPIC Guidance.
Operations and Maintenance (Steady State) Costs	<a href="#">IT Budget - Capital Planning Guidance</a>	Operations & Maintenance Costs refers to the expenses required to operate and maintain an IT asset that is operating in a production environment. O&M costs include costs associated with operations, maintenance activities, and maintenance projects needed to sustain the IT asset at the current capability and performance levels. It includes Federal and contracted labor costs, corrective hardware and software maintenance, voice and data communications maintenance and service, replacement of broken or obsolete IT equipment, overhead costs, business operations and commercial services costs, and costs for the disposal of an asset. Also commonly referred to as steady state.
Partner (Customer) Agency	Federal IT Shared Services Strategy, May 2, 2012	This term refers to the Agency in an inter/intra Agency collaboration (such as an E-Gov or LoB initiatives or a shared services). The Federal Agency or sub-organization that enters a relationship with and pays an Agency Lead or SMO to receive an IT shared or centralized service. The Customer Agency organization may be required to interact with a Supplier for the coordination of day-

Term	Source Document	Definition
		<p>to-day service issues. The Managing Partner handles major contract issues and resolves escalation items with Suppliers. The Partner Agency usually provides resources (e.g., funding, FTEs, in-kind) for the management, development, deployment, or maintenance of a common solution. The partner Agency is also responsible for including the appropriate line items in its own Agency IT Investment Portfolio budget submission, and reflecting the amount of the contribution for each of the initiatives to which the Agency provides resources.</p>
<p>Performance-Based Acquisition Management</p>	<p><a href="#">FAR 37.6</a></p>	<p>Performance-Based Acquisition Management refers to a documented, systematic process for program management, which includes the integration of program scope, schedule and cost objectives, the establishment of a baseline plan for accomplishment of program objectives, and the use of earned value techniques for performance measurement during execution/acquisition of the program. This type of management includes prototypes and tests to select the most cost-effective alternative during the planning phase; the work during the acquisition phase; and any developmental, modification, or upgrade work done during the O&amp;M phase. A performance-based acquisition or contract/agreement with a defined quality assurance plan that includes performance standards/measures should be the basis for monitoring contractor or in-house performance of this phase.</p>
<p>Performance Reference Model (PRM)</p>	<p><a href="#">FEA Framework, Version 2.0;</a> <a href="#">GPRA 2010 Public Law 111-352</a></p>	<p>PRM refers to one of six reference models of the FEA. The PRM allows Agencies to better manage the business of government at a strategic level, by providing a means for using the EA to measure the success of Investments and their impact on strategic outcomes. The PRM establishes a line of sight to outcomes and a common language to describe the outputs and measures used to achieve strategic objectives through coupled business services (mission and support). The PRM shows the linkage between internal business components and the achievement of business and customer-centric outputs and outcomes. Most importantly, the PRM helps to support planning and decision-making based on comparative determinations of which programs and services are more efficient and effective. The PRM is both a taxonomy and a standard method for performance measurement as it provides for a common approach to performance</p>

Term	Source Document	Definition
		and outcome measurements throughout the Executive Branch of the Federal Government, as is required by the Government Performance and Results Modernization Act of 2010 (P.L. 111-352). Current PRM service codes can be found in PRM version 3.
Planning	<a href="#">40 U.S.C. § 11315</a> ; <a href="#">OMB Circular A-130</a>	Planning refers to preparing, developing, or acquiring the information used to design the asset; assess the benefits, risks, and risk-adjusted costs of alternative solutions; and establish realistic cost, schedule, and performance goals for the selected alternative, before either proceeding to full acquisition of the capital project or useful component or terminating the project. Planning must progress to the point where the Agency is ready to commit to achieving specific goals for the completion of the acquisition before proceeding to the acquisition phase. Information gathering activities to support planning may include market research of available solutions, architectural drawings, geological studies, engineering and design studies, and prototypes. Planning may be general to the overall Investment or may be specific to a useful component. For Investments developed or managed using an incremental or agile methodology, planning will be conducted throughout the entire acquisition, focusing on each iteration/sprint.
Platform as a Service (PaaS) Cloud Computing	NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a>	The capability provided to the consumer to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages, libraries, services, and tools supported by the provider. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment (NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a> ).
PortfolioStat Review	<a href="#">OMB memo M-13-09</a> ; FY 2013 PortfolioStat Guidance: Strengthening Federal IT Portfolio Management	PortfolioStat refers to a face-to-face, evidence-based review of an Agency's IT portfolio. 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. More detail regarding the PortfolioStat process is described in OMB memo M-13-09 – Fiscal Year 2013 PortfolioStat Guidance: Strengthening Federal IT



Term	Source Document	Definition
Post-Implementation Review (PIR)	<a href="#">Capital Programming Guide</a> ; <a href="#">OMB Circular A-130</a>	Portfolio Management PIR refers to an evaluation of how successfully the Investment or project objectives were met and how effective the project management practices were in keeping the Investment or project on track. A PIR can be conducted after a project has been completed, or after an Investment concludes the implementation phase. Additional details regarding the PIR process is described in the Capital Programming Guide.
Prior Year (PY)	OMB Circular A-11 Section 55	Prior Year (PY) is defined as “Likely/Enacted” for the Initial Submission and “Actual” for the President’s Budget Submission. These amounts should only reflect budgetary resources by year and include appropriations, borrowing authority, contract authority, spending authority from offsetting collections, transfers from other accounts, and carryover of unobligated balances.
Privacy Impact Assessment	<a href="#">OMB Memo M-03-22</a>	Privacy Impact Assessment is a process for examining the risks and ramifications of using IT to collect, maintain, and disseminate information from or about members of the public in an identifiable form. The process also is also used to identify and evaluate protections and alternative processes to mitigate the impact to privacy of collecting such information. Consistent with OMB guidance M-03-22 regarding implementing the privacy provisions of the E-Government Act, Agencies must conduct and make publicly available PIAs for all new or significantly altered IT Investments that administer information in an identifiable form collected from or about members of the public.
Private Cloud	NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a>	Cloud computing technology in which the cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units). It may be owned, managed, and operated by the organization, a third party, or some combination of them, and it may exist on or off premises. (NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a> ).
Product Backlog	Agile Methodology	This term refers to a comprehensive to-do list, expressed in priority order based on the business value each piece of work will generate.
Product Owner	Agile Methodology	The Product Owner is responsible for maximizing the value of the product and the work of the Development Team. The Product Owner is the sole person responsible for managing the Product Backlog. Product Backlog management includes: Clearly expressing Product Backlog items;



Term	Source Document	Definition
		<p>Ordering the items in the Product Backlog to best achieve goals and missions; Optimizing the value of the work the Development Team performs; Ensuring that the Product Backlog is visible, transparent, and clear to all, and shows what the Scrum Team will work on next; and, Ensuring the Development Team understands items in the Product Backlog to the level needed.</p> <p>The Product Owner may do the above work, or have the Development Team do it. However, the Product Owner remains accountable.</p> <p>The Product Owner is one person, not a committee. The Product Owner may represent the desires of a committee in the Product Backlog, but those wanting to change a Product Backlog item’s priority must address the Product Owner.</p> <p>For the Product Owner to succeed, the entire organization must respect his or her decisions. The Product Owner’s decisions are visible in the content and ordering of the Product Backlog. No one is allowed to tell the Development Team to work from a different set of requirements, and the Development Team isn’t allowed to act on what anyone else says.</p>
Project	<p><a href="#">40 U.S.C. § 11315</a>;  <a href="#">OMB Circular A-130</a></p>	<p>This term refers to a temporary endeavor undertaken to accomplish a unique product or service with a defined start and end point and specific objectives that, when attained, signify completion. Projects can be undertaken for the development, modernization, enhancement, disposal, or maintenance of an IT asset. Projects are composed of activities. When reporting project status, to the maximum extent practicable, Agencies should detail the characteristics of “increments” under modular contracting as described in the Information Technology Management Reform Act of 1996 (ITMRA, also known as the “Clinger-Cohen Act”) and the characteristics of “useful segments,” as described in OMB Circular A-130.</p>
Project Manager Level of Experience	<p><a href="#">Federal IT Project Manager Guidance Matrix</a> published by the CIO Council</p>	<p>This term refers to the specific certification(s) or number of years of direct project management experience that the PM holds. Examples of PM certifications include FAC-P/PM, Project Management Institute’s Project Management Professional (PMP), and other recognized certifications. Refer to <a href="#">Federal IT Project Manager Guidance Matrix</a> published by the CIO Council.</p>

Term	Source Document	Definition
Provisioned IT Service	<a href="#">IT Budget - Capital Planning Guidance</a>	Provisioned IT Service is a new category of funds that must be reported as appropriate. A “Provisioned IT Service” refers to an IT service that is (1) owned, operated, and provided by an outside vendor or external government organization (i.e., not managed, owned, operated, and provided by the procuring organization) and (2) consumed by the Agency on an as-needed basis. Provisioned IT services are considered subcategories of DME and O&M. Examples of Provisioned IT Service may include the purchase of E-Gov LoB from another Federal Agency, or the purchase of SaaS, PaaS, IaaS from a private service provider, or the purchase of shared services or cloud services. Provisioned IT Service excludes Software Licenses but includes both Intra-Agency and Inter-Agency Shared Services.
Public Cloud	NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a>	Cloud computing technology in which the cloud infrastructure is provisioned for open use by the general public. It may be owned, managed, and operated by a business, academic, or government organization, or some combination of them. It exists on the premises of the cloud provider. (NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a> ).
Records	<a href="#">44 U.S.C. § 3502</a> ; <a href="#">OMB Circular A-130</a>	Records refers to all books, papers, maps, photographs, machine-readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an Agency of the United States Government under Federal law or in connection with the transaction of public business. Records may also include items that are preserved or appropriate for preservation by that Agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Federal Government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and processed documents are may not be included as records.
Release	Agile Methodology	A Release is a release of a product that is shipped to the customer. Each development project has a set number of releases, and within the releases can be multiple versions if that is how the Product Owner or Manager sets up the schedule.

Term	Source Document	Definition
		<p>Example for Release #0001:</p> <p>Version 1: login, logout, password management                      Epics: 1                      Sprints: 3                      Total Story Points: 48</p> <p>Version 2: purchase history                      Version 3: saving preferences</p>
Risk Management	<a href="#">OMB Circular A-123</a>	Risk Management refers to a systematic process of identifying, analyzing, and responding to risk. It includes maximizing the probability and consequences of positive events and minimizing the probability and consequences of adverse events to overall objectives. Risk management should be conducted throughout the entire life cycle of the program.
Risk Management Plan	<a href="#">OMB Circular A-123</a>	Risk Management Plan refers to a documented and approved plan developed at the onset of the Investment and maintained throughout that specifies the risk management process.
Security Operations Center (SOC)	<a href="#">Federal Security Operations Center Best Practices</a> , March 20, 2018	Per Federal Security Operations Center Best Practices, a SOC defends an organization against unauthorized activity within computer networks, including, at a minimum, detecting, monitoring, and analyzing suspicious activity as well as leading the response to malicious activity, contributing to restoration activities, and providing a structure for users to report suspected cybersecurity events. A SOC would generally be composed of security analysts organized to detect, analyze, respond to, report on, and prevent cybersecurity incidents.
Service Management Office (SMO)	2018 President’s Management Agenda (PMA)	Federal storefront to the commercial service providers. Subject Matter Experts drive standardization (per FIBF), respond to user concerns, manage the creation of Federal unique microservices, and manage the integration of commercial suppliers. Accountable for overall performance of service.
"Shadow IT" or "Hidden IT"	<a href="#">OMB Memo M-15-14</a>	Refers to spending on IT that is not fully transparent to the Agency CIO and/or IT resources included as a portion of a program that is not primarily of an “information technology” purpose but delivers IT capabilities or contains IT resources. For example, a grants program that contains a portion of its spending on equipment, systems, or services that provide IT capabilities for administering or delivering the grants.
Shared Service Provider	<a href="#">IT Budget - Capital Planning Guidance</a>	This term refers to the provider of a technical solution and/or service that supports the business of

Term	Source Document	Definition
		multiple Agencies using a shared architecture. For Multi-Agency services, this is the Agency Lead or SMO for the Investment.
Shared Services	2018 President’s Management Agenda (PMA)	<p>This term refers to services that are provided by a Agency Lead or SMO to Federal organizations that are outside of the provider’s organizational boundaries. Shared services may be Intra-Agency or Inter-Agency. There are three categories of shared service models in the Federal Government: Common Solutions, Shared Services, and Centralized Services.</p> <ul style="list-style-type: none"> <li>• Common Solutions – Technology and/or contracts that can be used by more than one Federal Agency. May be government-to-government or citizen-to-government.</li> <li>• Shared Services – Consolidating routine or standard operations to a limited number of organizations. Uses common solutions (technology and contracts) and sharing of human resource expertise either within an Agency or across agencies.</li> <li>• Centralized Services – Creating a single Federal-wide location for highly standardized activities, allowing organizations and users to benefit from consistent and uniform processes.</li> </ul>
Software as a Service (SaaS) Cloud Computing	NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a>	The capability provided to the consumer to use the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based e-mail), or a program interface. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings (see NIST Special Publication 800-145 - <a href="#">The NIST Definition of Cloud Computing</a> ).
Standard Investment	<a href="#">IT Budget - Capital Planning Guidance</a>	Formerly Part 3: IT Infrastructure Investments that have been disaggregated to their discrete components and managed separately.
Standard Investment Report	<a href="#">IT Budget - Capital Planning Guidance</a>	Reports submitted on a regular basis to accompany Standard Investments, which include performance metrics, projects, and a variety of other metrics specific to the type of infrastructure
Standard IT Infrastructure, Security and Management	<a href="#">IT Budget - Capital Planning Guidance</a>	See also IT Management, IT Security and Compliance, Data Center and Cloud, Network and End User Standard Investment definitions.

Term	Source Document	Definition
Investment		
TBM IT Cost Pool and IT Tower Definitions	<a href="#">TBM Taxonomy v2.1</a> ; <a href="#">IT Budget - Capital Planning Guidance</a>	See Appendix D.
Technology Modernization Fund (TMF)	<a href="#">OMB Memo M-18-12</a>	A centralized Fund that provides up-front funding for technology modernization activities pursuant to project recommendations made by the Technology Modernization Board.
TechStat Accountability Review	<a href="#">OMB Memo M-10-31</a>	This term refers to a face-to-face, evidence-based review of an IT program with Bureau/Agency leadership and OMB as appropriate. TechStat sessions enable the Federal Government to turn around, halt, or terminate IT Investments that do not produce dividends for the American people. More detail regarding the TechStat process is described in the TechStat Training Deck (see <a href="https://www.cio.gov/fed-it-topics/sustainability-transparency/techstat/browse-toolkit/">https://www.cio.gov/fed-it-topics/sustainability-transparency/techstat/browse-toolkit/</a> ).
Telecommunications	<a href="#">44 U.S.C. § 3542</a> ; <a href="#">OMB Circular A-130</a>	<p>Includes telecommunications that are organized, procured and managed and/or operated by the Agency. Services may be provided for elements such as voice (voicemail, legacy voice service, and VoIP), data communications through the Wide Area Network (WAN)/Local Area Network (LAN) and associated access/transport options, Trusted Internet Connection (TIC), non-desktop Audio and Video Teleconference (VTC), and associated communications infrastructure elements (e.g., Structured Cabling Costs).</p> <ul style="list-style-type: none"> <li>• Voice Network/Services are (WASP/WITS, Legacy Analogue/Digital Voice, Voice Mail, Conference Bridge, automated operator services, and VoIP).</li> <li>• Wide Area Network (WAN) is a private, public or hybrid geographically dispersed network.</li> <li>• Local Area Network (LAN) is a private, public, or hybrid local area network.</li> <li>• Trusted Internet Connection (TIC) infrastructures, which provide a layer of consolidation and security for internet facing traffic.</li> <li>• Video Teleconferencing (VTC) is a collaborative meeting communications method. Only shared (non-desktop) locations should be included under telecommunications unless the desktop instance is a part of a specialized VTC used for remote or ad hoc shared connectivity. Typically utilizes PRI, IP, ISDN or Ethernet for connectivity.</li> </ul>

Term	Source Document	Definition
		<ul style="list-style-type: none"> <li>Labor Costs including - FTE, Contract Support, Managed Services, and Other elements. Excludes cellular equipment, devices or services which are included in Mobile Devices.</li> </ul>
Unique Investment Identifier (UII)	<a href="#">OMB Memo M-11-33</a>	<p>UII refers to a persistent numeric code applied to an Investment that allows the identification and tracking of an Investment across multiple FYs of an Agency’s IT portfolio. The UII is composed of a three-digit Agency code concatenated with a nine-digit unique Investment number generated by the Agency. Some nine-digit numbers are reserved for OMB to assign and may not be assigned by Agencies, as controlled by the restrictions described in the section on “Variable Information.”</p> <p><a href="http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-33.pdf">http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-33.pdf</a> - Page 14</p>
User Stories	Agile Methodology	<p>This term refers to high level requirements written by the project stakeholders or customers. These requirements are prioritized and further developed during sprints and determined acceptable by product owner or manager and stakeholders or customers.</p>
Wide-Area Network (WAN)	<a href="#">IT Budget - Capital Planning Guidance</a>	<p>Wide-area network (WAN) equipment, labor, and support services directly connecting data centers, offices, and third parties (excludes telecom and communication services). This definition also includes region-specific Agency WANs, such as in the case of a metropolitan-area network (MAN).</p>

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1404 **APPENDIX D. TECHNOLOGY BUSINESS MANAGEMENT IT COST POOLS AND IT**  
 1405 **TOWERS**

1406 The following table provides the TBM Council’s open source Taxonomy v2.1 intended to support a  
 1407 standard and consistent approach for Federal reporting.

<b>Tower</b>	<b>Sub-Tower</b>	<b>Definition</b>
Security & Compliance	Security	IT Security resources setting policy, establishing process & means, measuring compliance and responding to security breaches and providing real-time operational security such as vulnerability scanning, managing firewalls, intrusion prevention systems, and security information and event management (SIEM). Optional Level 3 categories include: Cyber Security. The implementation actions defined by security policies (e.g., mitigating security breaches by applying patches) are not included in the Security sub-tower and are part of the respective towers where the actions take place (e.g., Compute, Storage, Network).
	Compliance	IT Compliance resources setting policy, establishing controls and measuring compliance to relevant legal and compliance requirements. Optional Level 3 categories include: Data Privacy. The implementation actions defined by Compliance policy (e.g., implementing controls like multi-factor authentication) are not included in the Compliance sub-tower and are part of the respective towers where the actions take place (e.g., Compute, Storage, Network, Application, End User).
	Disaster Recovery	IT Disaster Recovery resources setting DR policy, establishing process & means, dedicated failover facilities, performing DR testing. NOTE: DR designated equipment is included directly in its own sub-tower (e.g., extra servers for DR are included in Compute tower, etc.). The implementation actions defined by Disaster Recovery policy (e.g., building DR servers) are not included in the Disaster & Recovery sub-tower and are part of the respective towers where the actions take place (e.g., Compute, Storage, Network).
IT Management	IT Management & Strategic Planning	IT management and administration resources; typically CIO, senior IT leaders and administrative support including centralized IT strategy and planning.
	Enterprise Architecture	Enterprise architecture services including business, information, application and technical architecture to drive standardization, integration and efficiency among business technology solutions.
	IT Finance	Resources involved in the planning, budgeting, spend management and chargeback of IT expenditures and the costing of IT products and services.

<b>Tower</b>	<b>Sub-Tower</b>	<b>Definition</b>
	IT Vendor Management	Resources involved in the selection, contract management, oversight, performance management and general delivery of services by 3rd party vendors and external service providers.
Network	LAN/WAN	Physical and wireless local area network connecting equipment within the core data centers and connecting end users in office working areas to the organization’s broader networks. Wide area network equipment, labor and support services directly connecting data centers, offices and third parties (excludes telecom and communication services). Optional Level 3 categories include: LAN, WAN.
	Voice	Voice resources which enable or distribute voice services through on premise equipment including PBX, VoIP, voicemail and handsets (excludes telecom and communication services).
	Transport	Data network circuits and associated access facilities and services; includes dedicated and virtual data networks and internet access. Also includes usage associated with mobility and other data transit based on usage billing. Voice network circuits and associated access facilities and services. Also includes usage associated with standard telephone calls and 800 number service. Both voice and data transport may include terrestrial and non-terrestrial (e.g., satellite) technologies. Optional Level 3 categories include: Data, Voice.
Data Center	Enterprise Data Center	Purpose-built data center facilities that house and protect critical IT equipment including the space, power, environment controls, racks, cabling, and “smart hand” support.
	Other Facilities	Computer rooms and MDF/IDF/telco closets that house IT equipment in corporate headquarters, call centers, or other general purpose office buildings.
Compute	Servers	Physical and virtual servers running a version of Microsoft's Windows Server or the Linux operating system; includes hardware, software, labor and support services. Optional Level 3 categories include: Windows, Linux and Public Cloud Compute.
	UniX	Servers running vendor-specific, proprietary Unix operating systems (e.g., IBM AIX, Sun Solaris, HP UX); includes hardware, software, labor and support services.
	Midrange	Servers running IBM AS/400 platform including hardware, software, labor and support services.
	Converged Infrastructure	Purpose-built appliances that provide compute, storage and network capabilities in one box.



Tower	Sub-Tower	Definition
	High Performance Computing	High-Performance Computing (HPC) is used for solving complex computational problems through massive concurrent use of computing resources and parallel processing techniques. HPC technology is applied in areas such as scientific and industrial research, product engineering and development, and complex business modeling, simulation and analysis. HPC hardware and software technologies are specialized and optimized for massively parallel computing and processing vast amounts of data
	Mainframe	Traditional mainframe computers and operations running legacy operating systems.
Storage	Online Storage	Central storage such as SAN, NAS and similar technologies for the distributed compute infrastructure; includes the equipment, software and labor to run and operate. Optional Level 3 categories include: On-Premise, Public Cloud Storage.
	Offline Storage	Offline storage resources used for archive, backup & recovery to support data loss, data corruption, disaster recovery and compliance requirements of the distributed storage.
	Mainframe Online Storage	Mainframe attached storage arrays and the associated equipment, software and labor to run and operate.
	Mainframe Offline Storage	Any storage resources used for archive, backup & recovery to support data loss, data corruption, disaster recovery and compliance requirements of the mainframe storage.
End User	Workspace	Client compute physical desktops, portable laptops, thin client machines, peripherals (including monitors, pointer devices and attached personal printers) used by individuals to perform work.
	Mobile Devices	Client compute tablets, smart phones (iOS, Android, Windows Mobile) and apps used by individuals to perform work.
	End User Software	Client related software used to author, create, collaborate and share documents and other content. Examples include email, communications, messaging, word processing, spreadsheets, presentations, desktop publishing, graphics and others. Optional Level 3 categories include Productivity; Communications; Collaboration.
	Network Printers	Printers located on or near users' desktops. Examples include network connected personal printers, ink-jet printers, laser printers, departmental or copy-room printers. Only include network connected printers. Do not include printers connected to an end user computer.
	Conferencing & AV	Audio and video conferencing equipment typically used in conference rooms and dedicated telepresence rooms to enable workforce communications.

<b>Tower</b>	<b>Sub-Tower</b>	<b>Definition</b>
	IT Help Desk	Centralized Tier 1 help desk resources that handle user requests, answer questions and resolve issues.
	Deskside Support	Local support resources that provide on-site support for moves, adds, changes and hands on issue resolution.
Output	Central Print	Central print services; often provided to support customer billing or customer documentation support processes. Unit of measure: page.
Application	Application Development	Resources involved with the analysis, design, development, code, test and release packaging services associated with application development projects. Optional Level 3 categories include: Development, QA
	Application Support & Operations	The operations, support, fix and minor enhancements associated with existing applications.
	Business Software	Software expenditures including licensing, maintenance and support related to off-the-shelf software purchases.
Delivery	IT Service Management	Resources involved with the incident, problem and change management activities as part of the IT Service Management process (excludes the Tier 1 help desk).
	Program, Product & Project Management	Resources involved with managing and supporting IT related projects and/or continuous product development (e.g., Agile) across business and IT-driven initiatives.
	Client Management	Resources or “account managers” aligned with the lines of business to understand business needs, communicate IT products, services and status of IT projects.
	Operations Center	Centralized IT Operations Center resources including monitoring and intervention e.g., NOC (network operations center), GOC (global operations center).
Platform	Database	Distributed database services focused on the physical database (versus the logical design) including DBAs, DBMS, tools and operational support.
	Middleware	Distributed platform, application and system integration resources enabling cross application development, communications and information sharing.
	Mainframe Database	Mainframe database services focused on the physical database (versus the logical design) including the DBAs, DBMS, tools and operational support.

Tower	Sub-Tower	Definition
	Mainframe Middleware	Mainframe platform, application and system integration resources enabling cross application development, communications and information sharing.

1408 The list of TBM cost pool definitions is provided below:

Cost Pool	Cost Sub-Pool	Definition
<b>Operating Expenditures (OpEx)</b>		
Internal Labor	Expense	Employee wages, benefits, expenses & occupancy.
External Labor	Expense	External contractor fees, travel, and expenses.
Outside Services	Consulting	External consulting project-based services.
	Managed Service Providers	External managed service providers.
	Cloud Service Providers	External public cloud service providers including IaaS, PaaS, and SaaS.
Hardware	Expense	Hardware expense of non-capitalized purchases (e.g., spare parts, consumables or equipment below capitalization threshold).
	Lease	Hardware lease expenditures (e.g., hardware purchased through a supplier or financial services leasing arrangement).
	Maintenance & Support	Hardware maintenance and support expenditures.
	Depreciation & Amortization	Hardware depreciation of capitalized purchases.
Software	Expense	Software expense of non-capitalized software purchases.
	Licensing	Software license expenditures for the use of non-SaaS provided software. SaaS subscriptions belong under Outside Services > Cloud Service Providers.
	Maintenance & Support	Software maintenance and support expenditures.
	Depreciation & Amortization	Software depreciation of capitalized software license purchases & software development efforts.
Facilities and Power	Expense	Data center space, power, security and other operating expenses (e.g., co-location facility services, electricity, water, etc.).
	Lease	Data center lease expenditures.

Cost Pool	Cost Sub-Pool	Definition
	Maintenance & Support	Data center maintenance & support expenditures.
	Depreciation & Amortization	Data center depreciation of facility build and leasehold improvements (e.g., raised floor Investments, power/PDU infrastructure, and rack build-out).
Telecom	Expense	Voice and data network connectivity expenses including circuit and usage expenditures.
	Lease	Telecom lease expenditures.
	Maintenance & Support	Telecom maintenance & support expenditures.
	Depreciation & Amortization	Depreciation/amortization of any capitalized telecom expenditures; typically, this will show up under Hardware or Facilities depreciation/amortization.
Other	Other	Miscellaneous or non-standard expenses.
Internal Services	Shared Service	Miscellaneous charges received from other internal shared services groups (e.g., HR service fees from the HR department). Real estate management fees for space and power should be included in the Facilities and Power cost pool.
<b>Capital Expenditures (CapEx)</b>		
Internal Labor	Capital	Capitalized labor (internal employees)
External Labor	Capital	Capitalized labor (external contractors)
Hardware	Capital	Capitalized hardware expenditures
Software	Capital	Capitalized software expenditures
Outside Services	Capital	Capitalized services
Facilities & Power	Capital	Capitalized leasehold improvements
Telecom	Capital	Capitalized telecom expenditures