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59

Summary of Changes

The following revises references to background information and updates citations to reflect current guidance, including Office of Management and Budget (OMB) Budget Guidance for FY 2021.

Large structural changes:
- Removed non-standard Investments (Type 06) from reporting
- Updated Cost Pool and IT Tower fields and definitions to align to TBM taxonomy v3.0
- Updated Part 3 to include funding transfer Investments (Type 04)

Updates to IT Resource Statement
- Replaced duplicative narrative text with link to authoritative source in A-11 Section 51.3

Updates to Agency Budget Account Summary Requirements:
- No Changes

Updates to Agency IT Investment Portfolio Summary Requirements:
- Removed references to USSM-designated shared service code "36"
- Relocated Public URL field from Major IT Business Case
- Relocated Planned Acquisitions field from Contracts Report
- Removed Line Item Descriptor field
- Updated Cost Pool reporting to be required for every Investment, as applicable

Updates to CIO Evaluation Report Requirements:
- Included requirement for CIO Evaluations to be reported for all standard Investments

Updates to Systems Inventory List Requirements:
- Introduced Systems Unique Identifier Code (SUIC) to track all reported systems
- Removed Average Number of Users field from Systems Table B.1
- Removed End of Contracted Support field from Product Table B.2
- Relocated Function reporting from Product Table B.2 to Systems Table B.1
- Included Custom Developed field to make reporting in Product Table B.2 optional for systems that were custom developed entirely within Government and do not include purchased products or licenses

Updates to Contracts Report Requirements:
- Updated required contracts reporting to apply to major, non-major, and standard Investments
- Updated contracts reporting to differentiate fields for PIID and Reference PIID (as applicable)
- Relocated Planned Acquisitions field to Agency IT Investment Portfolio Summary

Significant Updates to Major IT Business Case Requirements:
- Relocated Public URL field to Agency IT Investment Portfolio Summary
- Removed Investment Description field
- Removed Justifications and Legal Requirements field

Significant Updates to Major IT Business Case Details Requirements:
- Updated Section B Investment Risk table to streamline the number of Risk Areas from 20 to 13 and require each Investment that reports risk data to estimate probability and impact for each Risk Area with at least one identified active risk and provide mitigation plan data for Risk Areas with combined scores of "6" or greater
- Updated Table C.1 Projects Table to remove outdated fields concerning system development lifecycle reporting and replaced them with performance fields to tie project completion to operational outcomes and demonstrate project value
- Removed Modernizing Government Technology (MGT) Act-related fields in Table C.1 Projects Table.

- Consolidated Tables C.2.1 and C.2.2 into Table C.2 Project Activities to remove Agile Scrum-specific fields and introduce fields more broadly applicable to iterative software development activities with multiple releases
- Included new project activity quality fields to address end user engagement and results

Significant Updates to IT Infrastructure, IT Security, and IT Management Standard Investments Requirements:

- Updated Standard Investment reporting to require all Standard Investments to be reported by Agencies as applicable
- Updated all Standard Investment Reports to include risk reporting requirements

Significant Updates to Appendices:

- Updated Appendix B to reflect only the original E-Gov/LoB programs still in operations
- Removed Appendix B table listing USSM-designated shared services
- Removed FY 2020 Appendix D Technology Business Management IT Cost Pools and IT Towers and included in guidance reference to TBM version 3.0 and associated definitions
- Included new Appendix D. Risk Analysis Materials to provide standard definitions for each Risk Area listed in Section B Investment Risk of the Major IT Business Case Detail

60

61   **POST-95% SOLUTION CHANGE LOG**
62
63   *This change log represents revisions made between the 95% solution released on June 5, 2019 and this final*
64   *version.*
65

Page	Edit
5	Added Change Log to Guidance
12	Updated August and September dates that were previously "TBD"
Throughout	Updated and removed links to 2019 OMB Circular A-11
Throughout	Removed self-directing links to FY 2021 IT Budget – Capital Planning Guidance

66

67 **INTRODUCTION**

68 This document provides technical guidance and specific requirements outlined in OMB Circular A-11
69 Section 55. This introduction is designed to provide context and the overarching strategy behind the
70 changes outlined in this document. In this FY 2021 IT Budget – Capital Planning Guidance, OMB is
71 implementing additional changes that build upon what was done in FY 2020 and chart a course that will
72 continue through the FY 2022 budget cycle and the life cycle of these Investments. The cornerstone of
73 this data and Investment management strategy is the Technology Business Management (TBM)
74 Framework.

75 *Technology Business Management (TBM) is a value-management framework instituted*
76 *by CIOs, CTOs, and other technology leaders. Founded on transparency of costs,*
77 *consumption, and performance, TBM gives technology leaders and their business*
78 *partners the facts they need to collaborate on business aligned decisions. Those decisions*
79 *span supply and demand to enable the financial and performance tradeoffs that are*
80 *necessary to optimize run-the-business spending and accelerate business change. The*
81 *framework is backed by a community of CIOs, CTOs, and other business leaders on the*
82 *Technology Business Management Council.*[1]

83 - From TBM Taxonomy Version 3.0, from the Technology Business Management
84 Council.

85 OMB is leveraging this widely adopted open source taxonomy, which is used within private,
86 public, and academic sectors and is generating significant value by enabling leaders to manage
87 the cost, quality, and value of their IT services. Leveraging a taxonomy that provides a standard
88 business model for IT and is proactively managed by a non-profit organization also alleviates
89 some of the burden for the government to identify, define, and achieve consensus on the
90 standards and terms used.

91 OMB has followed an incremental process to roll out these changes. Beginning with the FY 2021
92 submission cycle, the multi-year transition within Capital Planning Investment Control (CPIC)
93 will be completed and all TBM-related reporting will become required. Agencies should plan to
94 leverage progress made during the phased TBM implementation period to establish baselines and
95 prepare to share their data publicly on the IT Dashboard.

96 The Agency IT Investment Portfolio Summary graphic contextualizes the types of structural changes
97 introduced in this Guidance that have been phased in through a multi-year approach, corresponding to the
98 President's Management Agenda (PMA) Cross Agency Priority (CAP) Goal #10, "Improving Outcomes
99 Through IT Cost Transparency." For the FY 2021 reporting cycle, all applicable Part 3 standard
100 Investments will be mandatory for reporting, and the IT Dashboard will no longer accept Part 3 non-
101 standard Investments. Cost Pool and IT Tower data will be made public for the first time on the IT
102 Dashboard following the FY 2021 President's Budget submission.

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[1] Technology Business Management Council, TBM Taxonomy Version 3.0, November, 2018

103

104
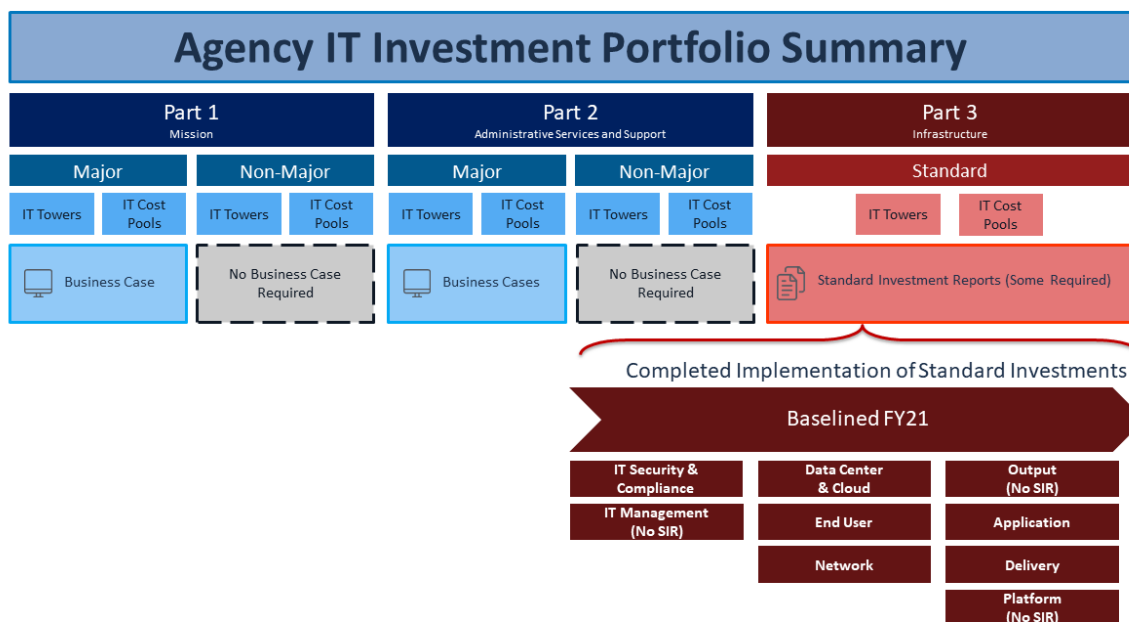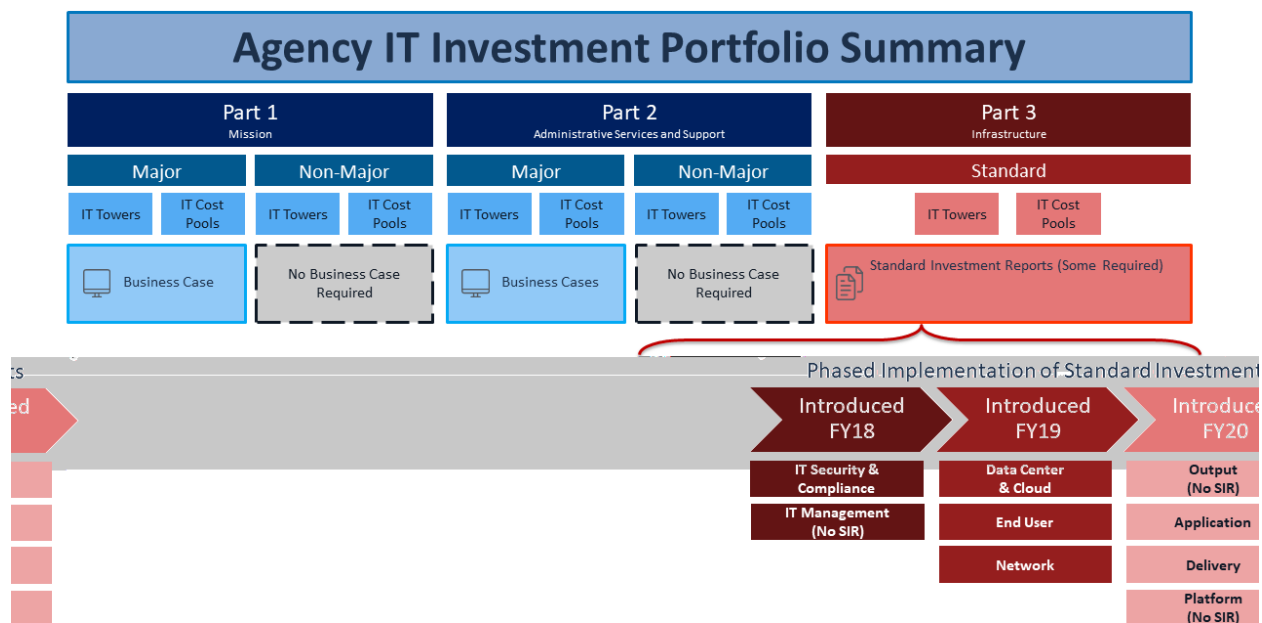
EQUIPPING CHIEF INFORMATION OFFICERS (CIOs)

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

Fully implementing the FITARA requires a strong partnership among CIOs, Chief Financial Officers

113 (CFOs), budget officers, Chief Acquisition Officers (CAOs), Chief Human Capital Officers (CHCOs),
114 and senior officials responsible for physical/personal security. Aligning budget and financial management
115 with TBM will create a strategic framework that supports A-123, IT modernization, and alignment with
116 Agency budgeting process through A-11.

117 With the completion of the multi-year phased-in implementation process of TBM data within CPIC
118 reporting, OMB anticipates significant value for Agency CIOs who will be in a position to leverage
119 existing industry benchmarking data and share identified best practices Government-wide. OMB will
120 continue to be a strong partner to Agencies in promoting consistent improvements in data quality and
121 effective IT oversight.

122 The completed phased approach for TBM reporting implementation is depicted in both the TBM IT Cost
123 Pools and IT Towers Phased Implementation and the standard Investments for Part 3 IT Infrastructure, IT
124 Security, and IT Management Investments Phased Implementation graphics.

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

TBM IT Cost Pools and IT Towers Phased Implementation

126
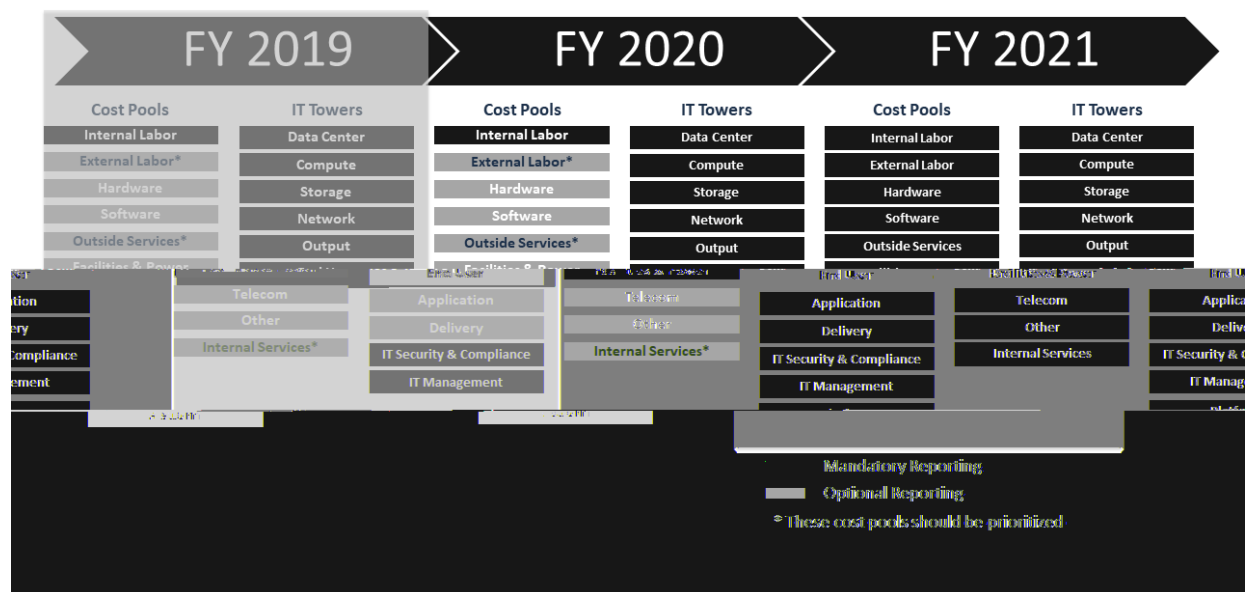
127 All Investments should work to disaggregate the total Investment costs to both IT Cost Pools (financial
128 view) and IT Towers (IT view). It is expected that not every Investment will have costs associated with
129 each Cost Pools and IT Towers. Only applicable fields should be populated.

130 **FY 2021 Requirements for IT Cost Pools:** Beginning in the FY 2021 cycle, all applicable Cost Pool
131 costs will be mandatory for reporting.

132 **FY 2021 Requirements for IT Towers:** All applicable IT Tower costs remain mandatory for reporting.

133 **Standard Investments for Part 3 IT Infrastructure, IT Security, and IT Management Investments**
134 **Phased Implementation**

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

FY 2019

Non-Standard Investments	Business Cases
Type 06: Non-Standard	Optional

Non-standard Investments included all costs except for IT Security & Compliance and IT Management costs.

Standard Investments	Standard Investment Reports
IT Security & Compliance	Yes
IT Management	No
Network	Optional
End User	Optional
Data Center and Cloud	Optional

Mandatory Reporting
Optional/Phased Roll Out Reporting

FY 2020

Non-Standard Investments	Business Cases
Type 06: Non-Standard	Optional

Non-standard Investments can include all costs except for IT Security & Compliance, IT Management, Network, End User, and Data Center and Cloud costs.

Standard Investments	Standard Investment Reports
IT Security & Compliance	Yes
IT Management	No
Network	Yes
End User	Yes
Data Center and Cloud	Yes
Application	No
Output	No
Delivery	Optional
Platform	No

FY 2021

Standard Investments Only

Type 05: Standard

Non-standard Investments will no longer be available. All Non-standard Investments will be deprecated and represented within Standard Investments.

Standard Investments	Standard Investment Reports
IT Security & Compliance	Yes
IT Management	No
Network	Yes
End User	Yes
Data Center and Cloud	Yes
Application	Yes
Output	No
Delivery	Yes
Platform	No

135

136 **FY 2021 Requirements for Standard IT Investments:** Throughout the FY 2020 cycle, the IT Security
137 and Compliance, IT Management, Network, Data Center and Cloud, and End User Standard Investments
138 were mandatory while the four new standard Investments for Output, Application, Delivery, and Platform
139 were optional. For the FY 2021 cycle, all standard Investments will now be mandatory for reporting, as
140 applicable, beginning with the Draft Agency IT Investment Portfolio Summary submission. Agencies
141 may no longer report costs and functions in non-standard Investments.

142

143   **GENERAL**

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

146   44 U.S.C. § 3602 directs the Administrator of the Office of Electronic Government to set strategic
147   direction and oversee implementation of Agency IT governance activities. As such, Circular A-11 Section
148   55 provides general policy and requirements for Agency IT budget, Investment, and portfolio
149   management; whereas, this Guidance includes more detailed information on technical requirements and
150   submissions. This detailed information allows OMB to review and evaluate each Agency's IT spending
151   and to compare IT spending across the Federal government.

152   **2. How do I submit annual, quarterly, and other regular updates of IT budget and management**
153   **information, and when are they due?**

154   The Agency's IT budget and management submissions are executed in three distinct components. First,
155   the Agency IT Portfolio Summary (formerly Exhibit 53) collects information for all Investments aligned
156   to Part 1: Mission Delivery; Part 2: Mission Support Services; and Part 3: IT Infrastructure, IT Security,
157   and IT Management. Second, the Major IT Business Case (formerly Exhibit 300) is used to track the
158   planning, budgeting, and management of all major Investments aligned to Part 1 and Part 2 of the Agency
159   IT Portfolio Summary. Third, Standard Investment Reports for Investments corresponding to Part 3 of the
160   Agency IT Portfolio Summary provide additional transparency into standard Investments. The following
161   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 Services
	Part 3: IT Investments for IT Infrastructure, IT Security, and IT Management
Agency Budget Accounts Summary	

162   **2.1 Annual Reporting**

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

Budget and Management Requirement	**Requirement**	**Reporting Mechanism**	**Frequency**
Agency-Level Reporting			
Budget	eGov/LoB Contributions Verification	MAX.gov Community (Instructions); MAX Collect Exercise	August
Budget	IT Resource Statements	MAX.gov, President's Budget and Congressional Justifications	September (Request) and February (within Congressional Justification materials), and June (Mid-Session Review)

Budget and Management Requirement	Requirement	Reporting Mechanism	Frequency
Budget	Budget Accounts Summary	IT Dashboard	September, January (President's Budget), February, and June
Budget & Management	Submission Confirmation	IT Dashboard	September, January, February, and June Submitted at the end of each submission
Investment-Level Reporting			
Budget	FY 2021 Draft Agency IT Investment Portfolio Summary	Details forthcoming	August
Budget	FY 2021 Agency IT Portfolio Summary	IT Dashboard	September (Request), January (President's Budget), February (Congressional Justification), and June (Mid-Session Review)
Budget & Management	CIO Evaluation Report	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	Systems Inventory	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	Contracts Report	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	Major Investment Business Case	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	Major Investment Business Case Detail	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	IT Security & Compliance Standard Investment Reports	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	Network Standard Investment Reports	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated

Budget and Management Requirement	Requirement	Reporting Mechanism	Frequency
Budget & Management	Data Center and Cloud Standard Investment Reports	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	End User Standard Investment Reports	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	Application Standard Investment Reports	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated
Budget & Management	Delivery Standard Investment Reports	IT Dashboard	September, January, February, June Regular Updates Data should be kept updated

165   The following calendar dates satisfy the FY 2021 CPIC Requirements:

166   • **August 19, 2019**
167   o FY 2021 Draft Agency IT Investment Portfolio Summary submission;
168   o Verification that the required E-Gov/Line of Business (LoB) contribution levels are being
169   included in the Agency's budget plans.
170   • **September 9, 2019 – September 13, 2019**
171   o FY 2021 Budget Request Agency IT Portfolio Summary submission (including the
172   Agency IT Investment Portfolio Summary and Agency Budget Accounts Summary).
173   • **September 10, 2019 – September 20, 2019**
174   o FY 2021 Budget Request Agency IT Portfolio Detail submission (including the Systems
175   Inventory List, Contracts Report, Major IT Investment Business Case, and Standard
176   Investment Reports);
177   o IT Resource Statements submissions.
178   • **January 2020 (specific dates TBD)**
179   o FY 2021 President's Budget Agency IT Portfolio Summary submission (including the
180   Agency IT Investment Portfolio Summary and Agency Budget Accounts Summary).
181   • **January 2020 (specific dates TBD)**
182   o FY 2021 President's Budget Agency IT Portfolio Detail submission (including the
183   Systems Inventory List, Contracts Report, Major IT Investment Business Case, and
184   Standard Investment Reports).
185   • **February 2020 (specific dates TBD)**
186   o The Recertification of "IT Resource Statements" should be included in the Agency's
187   Congressional Justification;
188   o Final FY 2021 Congressional Justification submissions (applicable if there are changes to
189   IT Investments between President's Budget & Agency's development of Congressional
190   Justification materials).
191   • **June 2020 (specific dates TBD)**
192   o If applicable, update budget data in line with the OMB budget cycle's Mid-Session
193   Review MAX lock for enacted budget;
194   o If applicable, IT Resource Statements submissions.

195 The Draft Agency IT Investment Portfolio Summary shall be completed by the Agency and submitted to
196 OMB. This draft will constitute the Agency's proposal to OMB, providing a comprehensive list of all IT
197 Investments that will be reported as part of the Agency's FY 2021 IT submission. The Draft Agency IT
198 Investment Portfolio Summary shall be posted online to the Draft Agency IT Investment Portfolio
199 Summary OMB MAX.gov submission page. At a minimum, the Draft Agency IT Investment Portfolio
200 Summary should include the Previous Unique Investment Identifier (UII), Current UII, Mission Support
201 Services Investment Category, Shared Services Identifier, Part of Agency IT Portfolio Summary, Type of
202 Investment, Investment Title, Investment Description, and Federal Enterprise Architecture (FEA)
203 Business Reference Model (BRM) Services – Primary service area.

204 Details and instructions for submitting the verification of eGov/LoB are provided online on MAX.gov.

205 For the FY 2021 cycle, the submission procedure will continue to include Submission Confirmation for
206 both the Agency IT Portfolio Summary and Agency IT Portfolio Detail to promote consistency across
207 Agency data in submissions. Submission of the confirmation for the Agency IT Portfolio Summary will
208 automatically close the window for that submission and open the window for the Agency IT Portfolio
209 Detail submissions. Submission Confirmation for the Agency IT Portfolio Detail submissions will also
210 include validation of the data submitted to ensure that all required Agency IT Portfolio Detail data have
211 been submitted.

212 All subsequent updates to the Agency IT Investment Portfolio Summary will be submitted to the Federal
213 IT Dashboard (ITDB), or as otherwise directed. The Agency IT capital planning office should coordinate
214 and review all versions/revisions of any section/part of the Agency IT Portfolio Summary and Agency IT
215 Portfolio Detail with the Agency CIO, CFO, and Senior Agency Official for Privacy (SAOP) as required
216 by A-11 prior to submitting the approved version to OMB.

217 Additional updates to the Agency IT Portfolio Summary and Agency IT Portfolio Detail may be required
218 after final budget decisions or if the Agency requests supplemental funds that require changes to improve
219 reporting accuracy. While data is submitted to the ITDB, dates of public release of FY 2021 IT budget
220 requests will be consistent with the release dates of the President's Budget along with an opportunity to
221 submit additional updates, if applicable, to ensure alignment with Congressional Justification materials.
222 Specific instructions and deadlines for submitting updates, corrections, and final submissions will be
223 communicated to Agencies directly. If an Agency requests supplemental funds, approves additional
224 funding, or reallocates funding within its authority and these funding changes result in changes to any part
225 of the Agency IT Portfolio Summary, then the Agency is required to submit a new or revised Agency IT
226 Portfolio Summary and IT Resource Statement as part of their supplemental request.

227 With reference to the requirements in Circular A-11, Sec. 51.3, CIOs should, in conjunction with their
228 Agency's budget submission, provide the common baseline rating demonstrating the level of CFO and
229 CIO collaboration required to fully implement FITARA as applicable under existing public law. For more
230 information on the reporting requirements for IT Resource Statements, see this document's IT Resource
231 Statements section.

232 **2.2 Regular Updates Reporting**

233 • Updates to the IT Dashboard should be maintained to reflect the most current information
234   available for performance metrics, risks, projects, and/or activities (see Appendix C for a
235   description of major IT Investments and standard Investments). Frequency of reporting is based
236   on the contents of a given Investment. For example, an Investment with the required monthly
237   performance metric for Operations and Maintenance (O&M) spending should have monthly
238   performance actuals to report while Investments with only Development, Modernization, and
239   Enhancement (DME) spending may be less regular in the updates they have available to submit.

240 • CIO Evaluation (per 40 U.S.C. § 11315 (c)(2)) should be updated as soon as CIOs have
241   completed their evaluations using the CIO Evaluation Report. There is no mandated reporting

242 frequency; however, at a minimum, OMB expects that CIO evaluations will occur each time a
243 TechStat occurs, a re-baseline is approved by the Agency head (See M-10-27), when the Business
244 Cases are submitted to OMB in the Agency budget request, and when the Business Cases are
245 prepared for the President's Budget release. These ratings are optional for all Investments that are
246 not Type 01: Major Investments or Type 05: Standard Investments.

247 • Contracts Report and Systems Inventory List should be maintained to reflect the most current
248 information available.

249 • Agencies should make every effort to maintain current data on the IT Dashboard. When
250 providing updates to the ITDB, OMB expects that updates are provided within 30 days from the
251 corresponding event (e.g., TechStat sessions, baseline changes, CIO evaluations, status change in
252 projects/activities, status change to the risk information, etc.).

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

254 Agencies are required to submit all of their IT budget-related costs to OMB through the Agency IT
255 Portfolio Summary twice a year, initially in September to accompany the Agency Budget Request and
256 then updated during the President's Budget process. The Agency's complete IT Portfolio must be reported
257 for all Investments, regardless of type, including Type 03 Migration (transition-related activities and
258 planned fee-for-service) and Type 04 Funding Transfer Investments (contributions to shared or
259 centralized IT solutions). Any Agency providing a shared or centralized IT service or solution shall report
260 migration-related costs separately from the spending allocated to maintain operations for current
261 customers. For the FY 2021 President's Budget submission, IT funding levels reported in the Agency IT
262 Portfolio Summary should be consistent with the Agency's budget materials and should be categorized
263 based upon the following three parts:

264

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 Services	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 Services specific to an Agency and IT Investments officially designated as shared or centralized services or solutions, such as E-Gov/LoB. Appendix B provides a list of existing E-gov/LOB Investments.
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 2020 submission, Agencies were required to report the five Standard Investments: IT Security and Compliance, IT Management, Network, Data Center and Cloud, and End User while the Output, Application, Delivery, and Platform standard Investments were optional. For the FY 2021 submission, all standard Investments are now mandatory. These Investments should be reported at the point of management and thus may be defined at the bureau level, 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

Category	Description
	Agencies may exist, particularly by federated Agencies, that are managing standard Investments at lower than the enterprise level.

265

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

If the Agency submitted an Agency IT Portfolio Summary for the FY 2020 Budget, the revised FY 2021 Agency IT Investment Portfolio Summary data must be compliant with the FY 2021 specified formats, or it will be rejected. The Agency must note "change in status" for each Investment, as compared to the final FY 2020 President's Budget (January 2019 or most recent update). Changes must be identified and described in columns fifteen (15) and sixteen (16) of the Agency IT Investment Portfolio Summary.

It is important that the Agency updates its Agency IT Investment Portfolio Summary to reflect current IT Investment data on the IT Dashboard. Note that the prior year (PY) funding should be updated to reflect the FY 2019 budgetary resources for the final FY 2021 President's Budget. An OMB Budget Account code for all "Funding Sources" line items is required for every Investment.

276 <p style="text-align:center">**AGENCY-LEVEL REPORTING**</p>

277 The Agency-level reporting sections include the requirements to be submitted only at the Agency's
278 portfolio level and not for individual IT Investments.

279 **IT RESOURCE STATEMENTS**

280 **5. How do I report IT Resource Statements?**

281 Per the requirements in Circular A-11, Sec. 51.3, CIOs should, in conjunction with their Agency's budget
282 submissions, provide the common baseline rating demonstrating the level of CFO/CIO collaboration
283 required to fully implement FITARA as applicable under existing public law.

284 • **For the Agency IT Portfolio Summary**, Agencies are also required to post a copy of these
285 certifications, hereby termed their "OMB Budget Justification - IT Resource Statement", to the IT
286 Resource Statements (BY 2021) MAX.gov submission page. For required annual submissions,
287 OMB expects that this copy will be posted on the same date the Agency IT Portfolio Detail is
288 submitted. Agencies are required to submit an updated IT Resource Statement whenever they
289 submit an updated Agency IT Portfolio Summary (i.e., during Congressional Justification or Mid-
290 Session Review optional submission windows, if applicable).

291 • **For the Final FY 2021 President's Budget**, Agencies must update and include a copy of the
292 final "IT Resource Statement" in the Agency's public Congressional Justification materials.

293

294   **AGENCY BUDGET ACCOUNTS SUMMARY**

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

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

302   The Agency Budget Accounts Summary is to be completed at the Agency level (i.e., not at a component
303   organization level or at an individual Investment level) for the PY, current year (CY) and the budget year
304   (BY). It should include all budget accounts that fund IT across the entire Agency, comprehensive of all
305   component level organizations, for Agency funding only, not the amounts included in contribution
306   funding columns in the Agency IT Investment Portfolio Summary. While budget account codes are listed
307   within each IT Investment, this table summarizes the total IT funding levels within each account and the
308   CIO's authority for each. For the CIO Oversight Authority column, a dollar amount should be entered
309   depicting the amount within the budget year that the Agency CIO (not a component-level CIO) has direct
310   oversight authority over and decision-making authority over, within the total IT funding level listed for
311   each budget account. The amounts should include all funding sources (see the definition of funding
312   sources in Appendix C) that are spent on IT. The combined Agency total funding for each year in the
313   Agency Budget Accounts Summary Table should be the same as the Agency total funding in the Agency
314   IT Investment Portfolio Summary for the same years.

Agency Budget Accounts Summary Table					
Budget Account Code	**CIO Oversight Authority** *[BY $M]*	**Total Agency Funding PY 2019** *[PY $M]*	**Total Agency Funding CY 2020** *[CY $M]*	**Total Agency Funding BY 2021** *[BY $M]*	**Total Agency Funding BY (Budget Authority) 2021** *[BY $M]*

315

17

316   **INVESTMENT-LEVEL REPORTING**

317   In an effort to clarify the reporting requirements set forth in this Guidance, OMB is separating the
318   sections based on reporting scale. The reports included in this section are required to be submitted for
319   each individual Investment as applicable.

320   Investment reporting requirements vary based on two main factors: Part of Agency IT Portfolio Summary
321   (Column 9 of the Agency IT Portfolio Summary) and Type of Investment (Column 12 of the Agency IT
322   Portfolio Summary). Investment reporting requirements by Part and Type of Investment are detailed in
323   the tables below.

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

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

325   **Part 2: IT Investments for Mission Support Services**

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

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

Guidance Section	Type of Investment	
	4: Funding Transfer	**5: Standard**
Agency IT Investment Portfolio Summary	Required	Required
CIO Evaluation Report	Optional	Required
Systems Inventory List	N/A	Required
Contracts Report	N/A	Required
Standard Investment Report	N/A	Required, if applicable

327

328 **AGENCY IT INVESTMENT PORTFOLIO SUMMARY**

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

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

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

338 To avoid double counting or under-counting for E-Gov/LoB, Multi-Agency and/or Intra-Agency
339 collaboration Investments, or IT Infrastructure, IT Security, and IT Management Standard Investments,
340 the total funding source amounts for an Investment must match the Investment line item. To that end, the
341 Agency Lead Investment's Agency IT Investment Portfolio Summary should only include funding from
342 its own Agency in the "Agency Funding" columns and include funds received from partner Agencies in
343 the "Contributions" columns. Likewise, the partner Agency's Agency IT Investment Portfolio Summary
344 should include funding that is being transferred to the Agency Lead's Service Management Office (SMO)
345 in its own "Agency Funding" columns (using the Investment type: "04-Funding Transfer Investments").
346 The Major IT Business Case will include all funding (both from the managing partner's "Agency
347 Funding" as well as the partner Agency's contributions). As applicable, all investments should report
348 Agency funding as well as partner inter/intra-Agency contributions. All budgetary data reported should
349 reflect budgetary resources.

350 **7.1 Budget Account Codes**

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

Entry	Description
XXX-xx-xxxx-x	The first three digits are your Agency code (See: Appendix C of OMB Circular No. A-11).
xxx-XX-xxxx-x	The next two digits are your bureau code (See: Appendix C of OMB Circular No. A-11). *Note:* 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.gov A-11 application where Agency budget offices provide budget information for the Budget Appendix. (See: Section 79.2 of OMB Circular No. A-11).
xxx-xx-xxxx-X	This is a single-digit Transmittal Code (See: Section 79.2 of OMB Circular No. A-11).

354 **7.2 TBM IT Portfolio Reporting**

355 All Investments (Part 1, Part 2, and Part 3) shall report their full IT spending within applicable IT Cost
356 Pool and IT Tower fields for FY 2021 reporting. It is generally expected that Investments' IT Tower sum,
357 Cost Pool sum, and Investment FY spend sum by DME and O&M should match for every reported FY.

358 While Part 3 standard Investments focus on IT Tower-related program areas within IT Infrastructure, IT
359 Security, and IT Management, standard Investment IT Tower reporting should vary to include all

360 applicable costs needed to establish and maintain the Investment. IT Tower reporting within standard
361 Investments should not be restricted to a subset of one or more IT towers but should instead reflect
362 applicable spending across all IT Towers.

363 Each Investment identified in the Agency IT Investment Portfolio Summary must have a UII. The UII is
364 the primary key for understanding the different Investments.

365 **7.3 Standard Components in the IT Portfolio**

Column/Field	Description
1	**Previous UII** *[12 digits, required for all legacy Investments]* This is the identifier depicting Agency code and unique Investment number used to report the Investment in the previous FY 2020 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.
2	**Current UII** *[12-digit primary key for all Investments]* 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. XXX- xxxxxxxxx: The first three digits represent your Agency code (see Appendix C of OMB Circular No. A-11). xxx- XXXXXXXXX: 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, or reorganized. If an IT Investment is retired, discontinued, or merged with another IT Investment, the UII persists with that IT Investment.
3	**Investment Title** *[255 char max]* 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.
4	**Investment Description** *[1000 char max]* Description for each Investment. This description should briefly explain the purpose of the Investment and what program(s) it supports, including the value to the public.
5	**Shared Services Category** *[2-digit code] (variable element)* 00: Code for all Investments other than those coded "24" or "48." 24: E-Gov initiatives or an individual Agency's participation in one of the E-Gov/LoB initiatives listed in Appendix B. 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.

Column/Field	Description
6	**Shared Services Identifier** *[4-digit code]* These four digits are applicable for all Investments with a Shared Services Category of 24 or 48. A code will be specifically assigned for all E-Gov/LoB 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.
7	**Mission Support Services Investment Category** *[2-digit code]* These two digits indicate the category of common Mission Support Services Investments by Federal Integrated Business Framework (FIBF) Service Area(s). All non-Mission Support Services Investments should use Category 01. Mission Support Services 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
8	**Bureau Code** *[2-digit code] (variable element)* The two digits indicate the bureau code of the Investment (see Appendix C of OMB Circular No. A-11). If this is a department-level or an Agency-wide activity, use "00" as your bureau code. *Note:* 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.
9	**Part of Agency IT Portfolio Summary** *[2-digit code] (variable element)* 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 Services 03: Part 3. IT Investments for IT Infrastructure, IT Security, and IT Management

Column/Field	Description
10	**Standard IT Infrastructure and Management Category** *[2-digit code]* These two digits indicate the sub-category of Investments identified as Part 3: IT Investments for IT Infrastructure, IT Security, and IT Management. For the FY 2021 reporting cycle, the four previous optional Standard Investments Output, Application, Delivery, and Platform will now be required. All Part 3 Investments should select one of the following codes other than "01: Not Applicable," while all Part 1 and 2 Investments should select "01: Not Applicable." 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

11	**Mission Delivery and Management Support Area** *[2-digit code] (variable element)* 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 (ofcio@omb.eop.gov) to include:
	   o Agency Code *[3-digits]*
	   o Mission Delivery and Management Support Area *[2-digit code]*

12	**Type of Investment** *[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).
13	**National Security Systems Identifier** *[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)

Column/Field	Description
14	**Public URL(s)** *[List of URLs]* List any website or digital service that is supported primarily by this Investment.
15	**Change in Investment Status Identifier** *[2-digit code]* 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: 01: Upgraded from non-major to major IT Investment 02: Downgraded from major to non-major IT Investment 03: Split into multiple Investments 04: Consolidation of Investments 05: Reorganization 06: Eliminated by funding 07: Eliminated by split 08: Eliminated by consolidation 09: Eliminated by reorganization 10: New 11: No Change in Status *Note:* 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.
16	**Agency Description of Change in Investment Status** *[255 char max]* 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.
17	**FEA BRM Services – Primary service area** *[3-digit code]* This is the three (3) -digit code that indicates the predominant business function served by the Investment (not necessarily the Agency's mission/business). BRM version 3.1 contains the current mapping codes.
18	**DME PY Agency Funding** (PY/2019) *[$M]* This should indicate FY 2019 amount. See definition of DME in Appendix C.
19	**DME PY Contributions** (PY/2019) *[$M]* This should indicate the FY 2019 amount contributed from other Agencies. See definition of DME in Appendix C.
20	**DME CY Agency Funding** (CY/2020) *[$M]* This should indicate FY 2020 amount. See definition of DME in Appendix C.
21	**DME CY Contributions** (CY/2020) *[$M]* This should indicate the FY 2020 amount contributed from other Agencies. See definition of DME in Appendix C.
22	**DME BY Agency Funding** (BY/2021) *[$M]* This should indicate FY 2021 amount. See definition of DME in Appendix C.

Column/Field	Description
23	**DME BY Contributions** (BY/2021) *[$M]* This should indicate the FY 2021 amount contributed from other Agencies. See definition of DME in Appendix C.
24	**DME BY (Budget Authority) Agency Funding** (BY/2021) *[$M]* This should indicate FY 2021 amount. See definition of DME in Appendix C.
25	**O&M PY Agency Funding** (PY/2019) *[$M]* This should indicate FY 2019 amount. See definition of O&M in Appendix C.
26	**O&M PY Contributions** (PY/2019) *[$M]* This should indicate the FY 2019 amount contributed from other Agencies. See definition of O&M in Appendix C.
27	**O&M CY Agency Funding** (CY/2020) *[$M]* This should indicate FY 2020 amount. See definition of O&M in Appendix C.
28	**O&M CY Contributions** (CY/2020) *[$M]* This should indicate the FY 2020 amount contributed from other Agencies. See definition of O&M in Appendix C.
29	**O&M BY Agency Funding** (BY/2021) *[$M]* This should indicate FY 2021 amount. See definition of O&M in Appendix C.
30	**O&M BY Contributions** (BY/2021) *[$M]* This should indicate the FY 2021 amount contributed from other Agencies. See definition of O&M in Appendix C.
31	**O&M BY (Budget Authority) Agency Funding** (BY/2021) *[$M]* This should indicate FY 2021 amount. See definition of DME in Appendix C.
32	**Functional/Business Sponsor Name** 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	**Functional/Business Sponsor Title** Indicate the title of the Functional/Business Sponsor.
34	**Cloud Computing Alternatives Evaluation** *[one-digit code]* 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 are required to answer this question regardless of the overall life cycle stage of the Investment, as operational Investments should consider cloud computing alternatives during or as a result of an operational analysis. Select one of the following answers: 1. This Investment or a portion of this Investment is leveraging cloud computing. 2. This Investment is migrating to the cloud. 3. This Investment is considering cloud computing. 4. Cloud computing has NOT been considered. 5. Cloud computing is NOT applicable for any portion of this Investment. 6. Cloud computing has been considered but was not selected. *Note:* For Funding Transfer Investments (Investment Type "04"), this field does not need to be completed.
35	**Data Center Inventory ID** The unique identifier (or list of the identifiers) for any 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

Column/Field	Description
47	Cost Pool: **Total Outside Services Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Outside Services.
48	Cost Pool: **Total Outside Services Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Outside Services.
49	Cost Pool: **Total Hardware Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Hardware.
50	Cost Pool: **Total Hardware Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Hardware.
51	Cost Pool: **Total Hardware Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Hardware.
52	Cost Pool: **Total Software Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Software.
53	Cost Pool: **Total Software Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Software.
54	Cost Pool: **Total Software Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Software.
55	Cost Pool: **Total Facilities and Power Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Facilities and Power.
56	Cost Pool: **Total Facilities and Power Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Facilities and Power.
57	Cost Pool: **Total Facilities and Power Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Facilities and Power.
58	Cost Pool: **Total Telecom Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Telecom.
59	Cost Pool: **Total Telecom Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Telecom.
60	Cost Pool: **Total Telecom Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Telecom.
61	Cost Pool: **Total Other Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Other.
62	Cost Pool: **Total Other Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Other.
63	Cost Pool: **Total Other Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Other.
64	Cost Pool: **Total Internal Services Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Internal Services. Only Type 04 Funding Transfer Investments should report amounts within the Internal Services Cost Pool.

Column/Field	Description
65	Cost Pool: **Total Internal Services Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Internal Services. Only Type 04 Funding Transfer Investments should report amounts within the Internal Services Cost Pool.
66	Cost Pool: **Total Internal Services Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Internal Services. Only Type 04 Funding Transfer Investments should report amounts within the Internal Services Cost Pool.

371 **7.5 IT Towers**

372 All applicable IT Tower data is required in the FY 2021 submission year. It is expected that total
373 Investment spending across the IT Towers will generally match Investment totals by DME and O&M.
374 This applies to all Investments types. Agencies should reference the [definitions for TBM v3.0](#) provided
375 online by the TBM Council.

Column/Field	Description
67	IT Tower: **Total IT Security and Compliance Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for IT Security and Compliance.
68	IT Tower: **Total IT Security and Compliance Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for IT Security and Compliance.
69	IT Tower: **Total IT Security and Compliance Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for IT Security and Compliance.
70	IT Tower: **Total IT Management Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for IT Management.
71	IT Tower: **Total IT Management Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for IT Management.
72	IT Tower: **Total IT Management Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for IT Management.
73	IT Tower: **Total Network Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Network.
74	IT Tower: **Total Network Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Network.
75	IT Tower: **Total Network Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Network.
76	IT Tower: **Total Data Center Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Data Center.
77	IT Tower: **Total Data Center Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Data Center.

Column/Field	Description
78	IT Tower: **Total Data Center Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Data Center.
79	IT Tower: **Total Compute Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Compute.
80	IT Tower: **Total Compute Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Compute.
81	IT Tower: **Total Compute Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Compute.
82	IT Tower: **Total Storage Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Storage.
83	IT Tower: **Total Storage Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Storage.
84	IT Tower: **Total Storage Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Storage.
85	IT Tower: **Total End User Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for End User.
86	IT Tower: **Total End User Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for End User.
87	IT Tower: **Total End User Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for End User.
88	IT Tower: **Total Output Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Output.
89	IT Tower: **Total Output Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Output.
90	IT Tower: **Total Output Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Output.
91	IT Tower: **Total Application Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Application.
92	IT Tower: **Total Application Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Application.
93	IT Tower: **Total Application Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Application.
94	IT Tower: **Total Delivery Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Delivery.
95	IT Tower: **Total Delivery Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Delivery.
96	IT Tower: **Total Delivery Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Delivery.
97	IT Tower: **Total Platform Amount** (PY/2019) *[$M] [Required, if applicable]* This is the total PY amount for Platform.
98	IT Tower: **Total Platform Amount** (CY/2020) *[$M] [Required, if applicable]* This is the total CY amount for Platform.

Column/Field	Description
99	IT Tower: **Total Platform Amount** (BY/2021) *[$M] [Required, if applicable]* This is the total BY amount for Platform.

376

377 **CIO EVALUATION REPORT**

378 **8. What is the CIO Evaluation Report?**

379 Provide CIO numeric evaluation (1-5) for all Part 1 and Part 2 major IT Investments as well as Part 3
380 standard IT Investments that reflect the CIO's best judgment of the current level of risk for an Investment
381 in terms of its ability to accomplish its goals (per 40 U.S.C. § 11315 (c)(2)). The evaluation could be
382 informed by the following factors, including but not limited to: risk management, requirements
383 management, contractor oversight, historical performance, human capital, and other factors that the CIO
384 deems important to forecasting future success. CIOs should consult with appropriate stakeholders (e.g.,
385 CAOs, chief management officers, program managers, customers, etc.) in making their evaluation. Each
386 evaluation should include a narrative explanation when the numerical rating has changed since the last
387 evaluation and a numeric rating based on the aforementioned factors.

388 When evaluating the level of risk associated with an Investment that creates, collects, uses, processes,
389 stores, maintains, disseminates, discloses, or disposes of personally identifiable information, the CIO and
390 SAOP are required to work together to ensure that the evaluation considers the associated risk to
391 individuals. The SAOP is the agency official responsible for managing the risk of personally identifiable
392 information (PII) exposure for individuals.

393 While CIOs have authority and responsibility over the entire IT portfolio, OMB is only requiring CIO
394 evaluations to be reported for major IT Investments that relate to Mission Delivery and Mission Support
395 Services Investments (Part 1 and Part 2 of the Agency IT Portfolio Summary) and standard IT Services
396 Investments that relate to IT Infrastructure, IT Security, and IT Management Investments (Part 3 of the
397 Agency IT Portfolio Summary) beginning with the September 2019 annual submission. Agencies may
398 elect to provide CIO evaluations for other Investment types at their discretion.

399 The following factors and supporting examples can be used to inform the CIO Evaluation for all
400 Investment types:

Evaluation Factor	Supporting Examples
Risk Management	• Risks and associated impact are well understood by senior leadership. • Risk log is current and complete. • Risks are clearly prioritized. • Risk response plans are in place to manage risks. • Change control is established and communicated to all stakeholders (especially with system and process dependencies). *Note*: 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.
Requirements/Outcomes Management	• Product delivery increments are small in duration and cost. • Investment objectives are clear and scope is controlled. • Outcomes and/or requirements are clear and validated. • Stakeholders are actively involved in the requirements process per appropriate methodology. • Product backlog is prioritized periodically based on recent release and stakeholder feedback.
Contractor Oversight	• Acquisition strategy is defined and managed via an Integrated Program/Project Team, which includes all the relevant disciplines. • Accountable oversight official (e.g., COR, PM, etc.) receives key deliverables and reports, such as current status and risk logs. • Designated officials are providing appropriate management of contractors such that the government is monitoring, controlling, and

Evaluation Factor	Supporting Examples
	mitigating the impact of any adverse contract performance. • Product demos are conducted and reviewed to ensure stakeholder requirements are being met throughout the systems development process.
Performance	• No significant projected deviations from planned cost, schedule, scope, cost savings/return on Investment, and value of the Investment metrics. • Lessons learned and best practices are incorporated and adopted.
Human Capital	• Qualified management and execution team for the IT Investments and/or contracts supporting the Investment. • Low turnover rate and hiring contingency in place.
Other	• Other Agency or program specific factors that the CIO deems important to forecasting future success.

401

402 The Agency CIO rates each investment based on his or her best judgment, using a set of pre-established
403 criteria. As a rule, the Evaluation should reflect the CIO's assessment of the risk and the Investment's
404 ability to accomplish its goals. CIOs should consult with appropriate stakeholders in making their
405 evaluation, such as CAOs, program managers, etc. Evaluation ratings are scored on a five-point risk scale,
406 as follows:

407

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

408 The following fields will comprise the CIO Evaluation Report:

Column /Field	Description
1	**UII** *[12-digit primary key for all Investments]*
2	**CIO Rating** *[1-digit]*
3	**CIO Comments** *[500 Char]*

409

410   **SYSTEMS INVENTORY LIST**

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

412   Agencies should report all Information Systems (see Appendix C) funded by this Investment in the
413   following tables. Systems data relates to Agency efforts including but not limited to category
414   management, application rationalization, security patching, and asset inventory management.

415   Systems Inventory List (SIL) reporting allows for a many-to-many relationship between Investments and
416   systems; a single system may be funded by multiple Investments with costs split among them, and a
417   single Investment may fund multiple systems. Where single systems are funded by multiple Investments,
418   Agencies should determine how to allocate relevant costs appropriately across those Investments. It is
419   expected that some Investments may not fund a system.

420   For shared services, only the Lead Agency Investment is required to report the relevant system(s). For
421   purposes of reporting in this table, only include systems currently in operation (i.e., post-deployment). A
422   system may include multiple products. If practical, Agencies should leverage existing asset inventory
423   solutions to generate this data.

Section A: General Information	
Column /Field	**Description**
1	**UII** *[12-digit primary key for all Investments]*
2	Are all systems in this Investment PIV-enabled systems (per HSPD-12 and OMB Memorandum M-11-11)? *[Yes/No]*

424

Section B: Systems Inventory	

425   *Note:* Responses to SIL tables are per FISMA definitions (See Appendix A). For Systems Table B.1
426   below, report each system and sub-system funded by the Investment.

Systems Table B.1	
Column /Field	**Data Description**
1	**System Unique Identifier Code** The System Unique Identifier Code (SUIC) includes an Agency code and an eleven-digit unique identifier. XXX- xxxxxxx- xxxx: The first three digits represent your Agency code (see Appendix C of OMB Circular No. A-11). xxx- XXXXXXX- xxxx: The next seven digits serve as the system's unique identifier. xxx- xxxxxxx- XXXX: The last four digits serve as the sub-system's unique identifier. This identifier should be system-generated and applied at the Agency level. *[14-digit primary key for all systems]*
2	**System Name** *Agency internal name for system or sub-system, as applicable (e.g., Delphi, HUDCaps, AGMAX, etc.). [250 char max]*
3	**Initial Operating Year** *The fiscal year in which the system was first deployed. [YYYY]*
4	**System Function(s)** *For administrative and mission support systems, provide all relevant service area functions associated with this system as defined by the Federal Integrated Business Framework (FIBF), e.g., "FFM.010" as applicable. [7 digit code for each function or N/A]*

Systems Table B.1	
5	**Custom Developed** *Indicate whether all components of the system were entirely custom developed within Government and do not contain any purchased products (e.g., commercial-off-the-shelf software, licensing, etc.). [Yes/No]*

427 For Product Table B.2 below, report the following data for every product (e.g., application software,
428 middleware software, reporting products, servers, etc.) of each system and sub-system reported in
429 Systems Table B.1 that indicated "No" in Column 5 "Custom Developed." Systems and sub-systems may
430 have one or more products that should be reported individually rather than included within broader
431 license agreements.

Product Table B.2	
Field	**Data Description**
1	**System Unique Identifier Code** *[14-digit primary key for all systems]*
2	**Product Name** *Indicate the official product name (e.g., Enterprise Business Suite, Momentum, HCM). [250 char max]*
3	**Vendor Name** *Indicate the official vendor name (e.g., Oracle, SAP, CGI, GSA) for the specific product (i.e., non-integrated services). [250 char max]*
4	**Version Number** *Indicate the Product Name version number to at least the first minor version digit (e.g., 12.1, 9.2, etc.). [250 char max]*
5	**Last Major Tech Refresh Date** *Provide the date that the product last had a major refreshment, replacement, or addition of hardware or software (not patching). [MM-YYYY]*
6	**Anticipated Major Tech Refresh Date** *Provide, if applicable, the anticipated date that the product will have its next major refreshment, replacement or addition of hardware or software (not patching). [MM-YYYY]*
7	**Product Expected End of Life** *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. [MM-YYYY or N/A]*

432

433 **CONTRACTS REPORT**

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

435 The Contracts Report contains all contracts in direct support of an Investment and is collected in
436 accordance with OMB's strategy to align Investment data with FPDS data in order to facilitate Agency
437 and OMB engagement around critical points in contract or acquisition management. This collection may
438 include contracts without a defined period of performance. Contract reporting does not include Inter-
439 Agency Agreements (IAAs).

440 For all IT Investments, including major, non-major, and standard Investments, the Contracts Report is
441 required, if applicable. Investments should update these fields regularly throughout the reporting cycle.

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

442

Section B: Contracts/Acquisitions	
Column /Field	**Description**
1	**Procurement Instrument Identifier (PIID)** 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. Completed and/or expired contracts do not need to be included. Data definitions can be found at Federal Procurement Data System. Please note that reference PIIDs should not be entered for this field. *Agencies should provide as many entries as applicable. [PIID by number/character as submitted to FPDS]*
2	**Reference PIID** For each PIID number reported for contract support obtained via an order or call, report the Reference PIID per FPDS instructions for element 1c. *Agencies should provide one entry per PIID reported as applicable; not all PIIDs will have a Reference PIID. [Reference PIID by number/character as submitted to FPDS]*

443

444 **MAJOR IT BUSINESS CASE**

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

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

451 OMB provides specific policy, procedural, and analytic guidelines for planning, budgeting, acquisition,
452 and management of major IT capital Investments in addition to general guidance issued in OMB Circular
453 No. A-11 and OMB Circular No. A-130. A general definition of a major investment can be found in
454 Appendix C.

455 The Agency IT Portfolio Summary and Major IT Business Cases (including Business Case and Business
456 Case Detail) describe the justification, planning, and implementation of an individual capital asset
457 included in the Agency IT Portfolio Summary and serve as key artifacts of the Agency's Enterprise
458 Architecture (EA) and CPIC processes.

459 In keeping with the FY 2020 cycle, Business Cases are only required for Part 1 and Part 2 major IT
460 Investments. Also in keeping with the FY 2020 cycle, Part 3 standard Investments are not required to
461 submit business cases though are required to submit Standard Investment Reports for IT Security and
462 Compliance, Network, Data Center and Cloud, End User, Application, and Delivery standard
463 Investments.

464 Together, the Major IT Business Case and Major IT Business Case Detail provide the budgetary and
465 management information necessary for sound planning, management, and governance of major IT
466 Investments. These documents help Agencies explicitly align IT Investments with strategic and
467 performance goals, and ultimately provide value to the public by making Investment and management
468 information more transparent. As architecture-driven IT Investments are funded in the "Select" CPIC
469 phase, the Investments move forward into the implementation phase. The system development life cycle
470 processes are then followed and actual outputs, schedule, and operational performance expenditures are
471 tracked against planned numbers using performance-based management processes as part of the CPIC
472 "Control" Phase.

473 **11.1 How will Agencies manage IT capital assets/Investments?**

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

476   1.   The Capital Programming Guide of OMB Circular No. A-11 provides guidance on the principles
477   and techniques for effective capital programming.
478   2.   OMB Circular No. A-11, Appendix J explains the principles of financing capital asset
479   acquisitions.
480   3.   OMB Circular No. A-130 establishes additional requirements for EAs, planning and control of
481   information systems and IT Investments, IT Governance, and performance management.

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

484   •   Implement the strategies and requirements of and manage the full scope of decisions related to all
485   Agencies' IT described in FITARA and Title VIII Subtitle D of the National Defense
486   Authorization Act (NDAA) for Fiscal Year 2015, Pub. L. No. 113-291.
487   •   Ensure that the planning and management of Agency IT resources fully implement the
488   requirements of OMB Circular No. A-130, "Managing Information as a Strategic Asset."

489 • Ensure that covered Agencies shall continue to provide information to the ITDB, as detailed
490 within this Guidance, which is issued annually in conjunction with the release of OMB Circular
491 A-11. As a part of that guidance, Agency engagements including PortfolioStat, Agency Strategic
492 Reviews, OMB and/or Agency-led TechStat reviews, and Desk Officer Reviews will be used to
493 meet FITARA requirements. Per OMB M-15-14:

494 o TechStat Sessions - A TechStat is a face-to-face, evidence-based accountability review of
495 an IT program with Agency leadership. TechStat sessions are a tool for getting ahead of
496 critical problems in an Investment, turning around underperforming Investments, or
497 terminating Investments if appropriate. For all Agency-led TechStat reviews of
498 Investments, the Agency shall contact ofcio@omb.eop.gov with the subject line,
499 "[Agency Acronym] TechStat Notification," at least two weeks ahead of the TechStat
500 session. Agencies shall follow the Agency's TechStat policy and procedures based on the
501 CIO.gov TechStat Toolkit when managing TechStat sessions. Agencies shall report the
502 outcomes and outputs of all TechStat sessions to the quarterly IDC process, per FITARA
503 these should include:

504 ▪ the root causes of the high level of risk of the investment;
505 ▪ the extent to which these causes can be addressed; and
506 ▪ the probability of future success.
507

508 • Evaluate and select capital assets that will support core mission functions performed by the
509 Federal Government and that demonstrate projected returns on Investment that are clearly equal
510 to or better than alternative uses of available public resources. The Investments should be
511 informed by and address performance gaps and goals identified in an Agency's strategic plan,
512 annual performance plan, EA Implementation Roadmap, and IT asset inventory.
513 • Initiate improvement to existing assets or acquisition of new assets only after considering
514 alternative governmental source or private sector solutions. Agencies shall maintain an up-to-date
515 comprehensive inventory of all IT systems, IT hardware and software assets at the Agency,
516 bureau and program levels that includes details on the product, vendor, and version types.
517 • Assign an Agency functional/business sponsor (separate from the PM) for each Investment who
518 is responsible for the program or function supported or implemented by the Investment. The
519 sponsor is responsible for expressing the value of, ensuring successful implementation of, and
520 providing accurate and timely data for the IT Investment to the Agency CIO and OMB. Each
521 major and non-major IT Investment listed in Agency IT Portfolio Summary must include the
522 name of the functional/business sponsor name and title.
523 • Encourage iterative (e.g., agile) development whenever possible to ensure that solutions are
524 delivered using an iterative approach through close collaboration with product owners and
525 business sponsors who are embedded in iterative (e.g., agile) teams which allows for frequent
526 reassessment in an incremental manner by implementing IT reforms based upon current guidance
527 and best practices such as U.S. Digital Service Playbook, TechFAR, modular development
528 guidance, and Investment guidance.
529 • Encourage iterative (e.g., agile) development and digitalization where ever possible.
530 "Digitalization" is purposely and deliberately differentiated from "automation," a process which
531 has been underway for decades.

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

538   o Digitalization is fundamentally different from automation in that one of its core premises is to
539   prioritize customer experience. Another core premise of digitization is that the power of
540   information technology and the use of user and ecosystem interaction data can, and should,
541   be harnessed to redefine, optimize, and personalize the experiences by which Agencies
542   interact both internally and externally. Quite often, digitalization harnesses newer forms of
543   technology (such as mobile, sensors, social media, metadata, shared services, etc.) to deliver a
544   differentiated and personalized end-user experience.

545   • Structure major planning and acquisition into useful segments with a narrow scope and brief
546   duration. These segments should make adequate use of competition and appropriately allocate
547   risk between the Federal Government and the contractor. The Agency CIO must approve or
548   define the cost, schedule, and performance goals for major acquisitions, and the Agency's CFO
549   must evaluate the proposed cost goals.

550   • Ensure a continuous linkage between Federal, Agency, and bureau EAs based on the Agency
551   Information Resources Management (IRM) Strategic Plan, demonstrating such consistency
552   through alignment with the Agency's Enterprise Roadmap and target architecture, compliance
553   with Agency business requirements and standards, as well as identification of milestones, as
554   defined in the Agency's EA transition strategy.

555   • Institute performance measures and management processes to monitor and compare actual
556   performance to planned results. Each methodology should have a set of measures that are
557   consistent, appropriate, and tailored to that methodology.

558   • Achieve, on average, 90 percent of Agency cost, schedule, and performance goals for major
559   acquisitions, per requirements of [Federal Acquisition Streamlining Act of 1994 (FASA, Title V)](#).
560   Through the TechStat process and as part of the Clinger-Cohen Act responsibility, Agency heads
561   should review major acquisitions that have not achieved 90 percent of the goals to determine
562   whether there is a continuing need and what corrective action, including termination, should be
563   taken.

564   • Ensure that Agencies' financial management systems conform to the requirements of [OMB](#)
565   [Circular No. A-123, Appendix D](#) (formerly OMB Circular A-127).

566   • Conduct post-implementation or post-occupancy reviews of capital programming and acquisition
567   processes and projects to validate estimated costs and benefits and to document effective
568   management practices (e.g., lessons learned) for broader use.

569   • Establish oversight mechanisms that require periodic review of operational capital assets to
570   determine how mission requirements might have changed and whether the asset continues to
571   fulfill ongoing and anticipated mission requirements, deliver intended benefits to the Agency and
572   customers, and meet user requirements.

573   • Develop, maintain, and submit within five business days (upon OMB request) the following
574   Investment artifacts for all *major IT Investments, as applicable:
575   o Risk management plan and risk register
576   o Investment charter, including Integrated Project Team (IPT) and the associated project
577   charter (if applicable)
578   o Acquisition Strategy
579   o Investment-level alternative analysis and benefit-cost analysis
580   o **Release Plan with budget baseline
581   o **Product Backlog
582   o **Sprint Plan with backlog and burn down chart
583   o Operational analyses (for operational and mixed life cycle systems)
584   o Post implementation review results (Investment level or project-specific)
585   o Documentation of Investment re-baseline management approval(s)
586   o Documentation/justification of an Investment's elimination due to funding, consolidation,
587   reorganization, or split

588   *Note: Specific artifacts required for standard Part 3: IT Infrastructure, IT Security and
589   Management Investments have not been specified.

590   **Note: Release Plan, Product Backlog, and Sprint Plan are project level and not IT
591   Investment level specific. These are required only for software development projects being
592   managed using iterative (e.g., agile) methodology.

593 **11.2 What must I report in the Major IT Business Case and Major IT Business Case Detail, and
594 when?**

595 The policy and budget justification principles in the Major IT Business Case and Major IT Business Case
596 Detail apply to all Agencies of the Executive Branch of the Federal Government that are subject to
597 Executive Branch review (see Clinger-Cohen Act of 1996). Section 25 of OMB Circular No. A-11 details
598 this authority to collect and review Business Cases for major IT Investments.

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

603 Additional information on the submission process will be posted on the OMB MAX.gov site: Official FY
604 2021 Budget Guidance on IT Capital Planning. As always, pre-decisional, IT security-sensitive, and
605 procurement-sensitive information will not be displayed to the public.

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

611 Major IT Business Case Detail in major IT Investments shall establish cost, schedule, and performance
612 targets for PY and CY. Furthermore, periodic performance metric updates for ongoing operations will
613 vary according to the nature of the metric (e.g., reporting frequency), as indicated in Table D.2.

614 **11.3 How will Multi-Agency Collaboration and Intra-Agency Shared Services Investments be
615 captured in the Major IT Business Case and Major IT Business Case Detail?**

616 For Multi-Agency Collaboration and Intra-Agency Shared Services Investments, the Agency Lead that
617 provides services or coordination services to other Agencies or other units within their Agency will be
618 primarily responsible for completing and submitting the Multi-Agency collaboration or Intra-Agency
619 shared services Major IT Business Case and Major IT Business Case Detail, managing it through the
620 Agency Lead's capital programming and budget process. The Agency Lead or SMO for Multi-Agency or
621 Intra-Agency collaboration Investments is also responsible for ensuring that the Investment is included in
622 their Agency IT Portfolio Summary. A SMO is a Federal organization between the agencies and
623 commercial service providers with subject matter experts who drive standardization, integrate solutions,
624 and respond to Agency concerns.

625 Specifically, the tracking of partner Agency funding, and related capital assets (e.g., migration
626 Investments, SMO, supporting components) for Government-wide E-Gov/LoB Investments will be
627 captured via the OMB MAX Funding Tool for E-Gov-LoB Initiatives. Agency Leads for Government-
628 wide E-Gov/ LoB Investments listed in Appendix B are required to submit Major IT Business Cases
629 unless they obtain a waiver from OMB.

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

634   Business Case. The provider is responsible for coordinating with the customer to provide the total cost of
635   migration. The customer Agency will still include this Investment in their Agency IT Portfolio Summary
636   and reference the Current UII of the provider Agency in the "Investment Description" field but only
637   report their shared cost.

638   During the development of the shared services Major IT Business Case and Major IT Business Case
639   Detail, Agencies are encouraged to utilize the USSM M3 Playbook. High risk Investments as identified
640   by the USSM in partnership with OMB will be required to receive approval from OMB prior to
641   advancing to the next phase as identified in the M3 Playbook. OMB may require additional information
642   related to these Investments and will work with the customer and provider Agencies to coordinate data
643   requests.

644   Partner Agencies should reference the name and Current UII of the Multi-Agency/Intra-Agency shared
645   services Investment in the "Investment Description" field of their own partner Agency IT Portfolio
646   Summary. Partner agencies should also ensure their activities and participation are included in the
647   appropriate sections of the Multi-Agency major IT Business Case. The entire Life Cycle Cost total for
648   the Investment, including funds provided by partner Agencies, should be included in the Multi-Agency
649   Collaboration or Intra-Agency Shared Services Investments Business Case.

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

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

657   **11.4 What fields are included and how do I complete the Major IT Business Case?**

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

665   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]*

666

Section B: Investment Detail	
Column /Field	**Description**
1	**Agency Strategic Objective/Priority Goal** Provide at least one Agency Strategic Objective code (A-11 Section 230) and/or Agency Priority Goal code (A-11 Section 250) that this Investment aligns to on performance.gov. 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 spreadsheet available on performance.gov. *Agencies should provide as many entries as applicable. [11 char]*
2	**Return on Investment** 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 (i.e., legislative mandates, outstanding audit findings or material weakness, Presidential Directive) utilized in alternative selection and how this Investment will address those elements. The response in this field should provide the justification for continued funding of this Investment. The results in Table D.1 should map to the Investment's planned outcomes and benefits as described in this section to demonstrate how the ROI is being realized by the Investment. *[3500 char]*
3	**Elimination or Reduction** 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.) • Investment UII(s) [12-digit UII] • To Be Status [to be eliminated/to be reduced]
4	**Current Shared Service** Does the Investment currently include an intra- or inter-Agency shared service (common, shared, or centralized solution)? *[Yes/No]*
5	**Future Shared Service** 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]*
6	**Paperwork Reduction Act OMB Control Number(s)** 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 Reginfo to identify information collection requests and OMB control numbers. Agencies can work with their Records Officers to determine the applicability. *[Optional]*

Section B: Investment Detail	
Column /Field	**Description**
7	**PM Name** Provide the name of the Investment-level project/program manager. *[250 char]*
8	**PM Email** Provide the e-mail address of the Investment-level project/program manager. *[250 char]*
9	**PM Qualifications** The qualification/experience level of the PM. Select one of the following: • FAC-P/PM(DAWIA-3) – Senior • FAC-P/PM(DAWIA-2) – Mid-Level • FAC-P/PM(DAWIA-1) – Entry Level • Other certification with 4 or more years of PM experience (within the last five years) • Other certification with between 2 and 4 years of PM experience (within the last five years) • Other certification with less than two years of PM experience (within the last five years) • No certification, but with 4 or more years of PM experience (within the last five years) • No certification, but with between 2 and 4 years of PM experience (within the last five years) • No certification, but with 2 or less years of PM experience (within the last five years

667

Section C: Life Cycle Costs

668 Provide the total estimated life cycle cost for this Investment by completing the following table. All totals
669 represent all IT resources and budgetary sources of funding, consistent with the Agency IT Portfolio
670 Summary. Totals are to be reported in **millions of dollars**. Variations from planned expenditures will be
671 reflected in Table C.2 in the Major IT Business Case Detail. Federal personnel costs should be included
672 only in the rows designated as "… Govt. FTE costs" and should be excluded from other costs.

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

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

680 For lines in the table that ask for changes in your current submission compared to your most recent
681 previous submission, please use the FY 2020 President's Budget as your previous submission. When
682 making comparisons, please ensure that you compare same-year-to-same-year (e.g., the FY 2019 level for
683 2019 versus the FY 2020 level for 2019). Significant changes from the previous submission should be
684 reflected in an updated Investment-level Alternatives Analysis, subject to OMB review.

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

	PY-1 &	PY 2019	CY 2020	BY 202	FY+ 1	FY+ 2	FY+ 3	FY+4 &

	Prior			1	2022	2023	2024	Beyond
Planning Costs								
DME (Excluding Planning) Costs								
DME (Including Planning) Govt. FTE Costs								
Sub-Total DME (Including Internal Labor/Govt. FTE Costs)								
O&M Costs								
O&M Internal Labor (Govt. FTE) Costs								
Sub-Total O&M Costs (Including Internal Labor/Govt. FTE Costs)								
Total Cost (Including Internal Labor/Govt. FTE Costs)								
Total Internal Labor (Govt. FTE) Costs								
Number of FTE rep by Cost								
Total change from PY final President's Budget ($)								
Total change from PY Final President's Budget (%)								

686

Table/Field	Description
2.a.	In which year did or will this Investment begin? *[YYYY]* *Specify a year, e.g., PY-1 = 2018*
2.b.	In which year will this Investment reach the end of its estimated useful life? *[YYYY]* *Specify a year, e.g., BY+5 = 2026*
3	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]* *When making comparisons, ensure that you compare same-year-to-same-year (e.g., the FY 2019 level for 2019 versus the FY 2020 level for 2019).*

687   **MAJOR IT BUSINESS CASE DETAIL**

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

689   The Major IT Business Case Detail is designed to coordinate OMB's collection of Agency information
690   for its reports to Congress, as required by the Federal Acquisition Streamlining Act of 1994 (FASA, Title
691   V) and Clinger-Cohen Act of 1996. The Major IT Business Case should demonstrate support for the
692   mission statements, long-term goals and objectives, and annual performance plans developed pursuant to
693   the Government Performance and Results Act – Modernization Act (GPRA-MA) of 2010. Major IT
694   Business Case Detail on Major IT Investments establishes reporting requirements through the ITDB to
695   ensure the proper execution of those Investments against the established performance plans.

696   Major IT Business Case Detail is used to provide OMB with Current Year (FY 2020) and Budget Year
697   (FY 2021) Investment plans and performance data. Include in this exhibit, at a minimum, all projects,
698   activities, and operations scheduled to commence or continue in the CY and/or BY. Information in the
699   Major IT Business Case Detail should reflect current status; therefore, the Federal ITDB should be
700   updated as soon as the data becomes available for continuous updates.

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

702   •   Investment

703   o   Projects

704   ▪   Activities

705   o   Operations

706
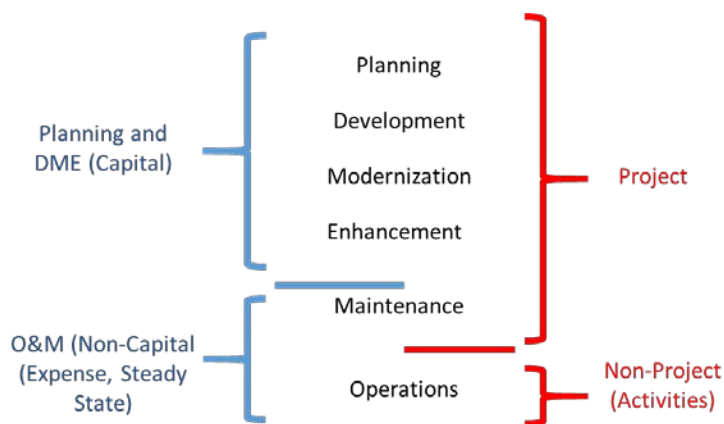
707
708

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

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

718   A: *General Information*: Enter basic information about the major IT Investment.

719   B: *Investment Risk:* Provide data for relevant risks related to the A-11 Risk Areas.

720   C: *Project Plan and Execution Data:*

721   C.1: *Projects:* Identify all of the Investment's projects with activities occurring in CY and BY.

722   C.2: *Project Activities Table:* Outline the activities that are performed to achieve the outcome of
723   each project.

724   D: *Operational Data:*

725   D.1: *Operational Performance Information:* Identify performance targets and results for
726   evaluating operations.

727   D.2: *Metrics Definitions:* Identify measures used for monitoring performance.

728   D.3: *Metrics Actuals:* Identify actual results for measures used for monitoring performance.

729

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

730

Section B: Investment Risk

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 Risk Table B, provide risk assessment information related to each of the 13 Risk Areas at the Investment level. Risk Area data should be consistent with what is included in management briefings or Agency status reviews on an ongoing basis. If the Investment is managing multiple individual risks within a single Risk Area, provide responses for the overall area on the basis of the individual risk with the highest probability and impact combined score. If multiple individual risks within a single Risk Area have the same combined score, report on the basis of the risk with the higher impact rating. The probability and impact combined score will be the product of the probability and impact estimates using the numerical designations for each probability and impact benchmark provided in Risk Table B.1; for example, a Risk Area with probability rated as "Low" (2) and impact rated as "High" (4) will have a combined risk score of 2 x 4 = 8. Include the following data in Table B:

Risk Table B.1	
Column /Field	**Description**

1	**Risk Area**
	 Provide data for relevant risks related to the A-11 Risk Area below. Definitions of each Risk Area are provided in Appendix D.
	 Risk Areas include:
	     1) Technology
	     2) Project Schedule and Resources
	     3) Business
	     4) Organizational and Change Management
	     5) Strategic
	     6) Security
	     7) Privacy

	Section B: Investment Risk	
	8) Data 9) Integration 10) Project Team 11) Requirements 12) Cost 13) Project Management	
2	**Active Risk** For each Risk Area listed in Column 1, indicate whether the Investment has identified at least one active risk. *[Yes/No]*	
3	**Risk Probability** The likelihood that risk associated with each Risk Area will become realized as an issue. Investments should only report Risk Probability for Risk Areas that reported "Yes" in Column 2. *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]:* 1) *Very Low – 0-10%,* 2) *Low – 11-30%,* 3) *Medium – 31-60%,* 4) *High – 61-90%,* 5) *Very High – 91-100%.*	
4	**Risk Impact** The level of a potential negative impact for the Risk Area if realized as an issue. Investments should only report Risk Impact for Risk Areas that reported "Yes" in Column 2. *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]:* 1) *Very Low – little or no impact on achieving Investment objectives,* 2) *Low – some impact on achieving Investment outcome objectives, but has little or no impact on achieving the Agency's mission* 3) *Medium – significant impact on achieving Investment outcome objectives, with moderate impact on the Agency's ability to deliver core mission functions,* 4) *High – significant impact on both achieving Investment outcome objectives and the Agency's ability to deliver core mission values but has little or no impact on the Government as a whole,* 5) *Very High – severe impact on executing the Agency's core mission with ramifications for the Government as a whole.*	
5	**Mitigation Strategy/Contingency Plan** For each Risk Area with a combined probability and impact score of a "6" or greater, provide a short description of each individual risk with a combined probability and impact score of "6" or greater along with both the Investment's mitigation strategy for preventing each risk from becoming realized as an issue and the contingency plan should the mitigation strategy fail. The mitigation strategy and contingency plan should deal with methods for avoiding or pre-empting risk as well as addressing any realized issues. This field is optional for Risk Areas with scores of "5" or lower. Investments should only report Mitigation Strategy/Contingency Plan data for Risk Areas that reported "Yes" in Column 2. *[1000 char]*	

Section C: Project Plan and Execution Data

Tables C.1 and C.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 and C.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.

Include the following data in Table C.1:

Projects Table C.1	
Column /Field	**Description**
1	**Unique Project ID** An Agency-specified number that uniquely identifies the project within the Investment.
2	**Project Name** Name used by the Agency to refer specifically to the project. *Project names should include brief but sufficient wording to align to the project's goal. [100 Char]*
3	**Project Goal** Brief description of primary goal/outcome the project is planning to provide for the Investment upon completion. *[250 char]*
4	**Existing Metric ID** If the primary goal of this project relates to an existing Investment performance metric, provide the metric ID supported by completion of this project. There is an expectation that the Investment will continue reporting actuals for this metric in Section D: Operational Data upon project completion. *Enter the existing metric's ID only if this project's primary metric is currently reported in Section D. This field is optional for End User and Application Standard Investment Reports. [Numeric]*
5	**New Metric Description** If the primary goal of this project does not relate to an existing Investment performance metric, provide the metric description for a new performance metric that will be enabled by completion of this project. There is an expectation that the Investment will begin reporting actuals for this metric in Section D: Operational Data upon project completion. *Enter description if the Investment did not provide a metric ID in Column 4. The Investment should begin reporting this metric using the parameters specified in Projects Table C.1 Columns 6-8 upon project completion. This field is optional for End User and Application Standard Investment Reports. [500 char]*
6	**Metric Target at Deployment** Metric target value at project's completion. *If the value reported in this field relates to an existing metric entered in Column 4, then the Investment should update the metric's current FY target to reflect the value reported in this field upon project completion. If the value reported in this field relates to a new metric described in Column 5, then the Investment should begin reporting the new metric using the value reported in this field as the current FY target upon project completion. This field is optional for End User and Application Standard Investment Reports. [Numeric]*
7	**Unit of Measure** Brief indication of what quantity is measured (e.g., number, percentage, dollar value)

Section C: Project Plan and Execution Data	
	for each metric. *Enter unit of measure only for new metrics reported in Column 5. The Investment should begin reporting the new metric using the value reported in this field as its unit of measure upon project completion. This field is optional for End User and Application Standard Investment Reports. [50 char]*
8	**Measurement Condition** 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. *Enter unit of measure only for new metrics reported in Column 5. The Investment should begin reporting the new metric using the value reported in this field as its measurement condition upon project completion. This field is optional for End User and Application Standard Investment Reports. [Over target/Under target]*
9	**Project Start Date** 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). *[MM-DD-YYYY]*
10	**Project Completion Date** 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). *[MM-DD-YYYY]*
11	**Project Life-Cycle Cost** 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.
12	**Primarily a Software Development or Deployment Project?** Is developing or deploying software solutions a primary focus of this project? *[Yes/No]*

732 Each project listed in Table C.1 should have at least one associated activity. Please include any relevant
733 project activities in Table C.2.

734 In Table C.2, describe, at a minimum, all project activities for projects in Table C.1 that started in a
735 previous FY (PY and earlier) and that have not been completed by the beginning of the CY, as well as
736 activities that are scheduled to start in the current FY and BY. In line with modular development
737 principles, each software development project should produce usable functionality at intervals of no more
738 than six months. "Actual Costs" should include all completed budgetary outlays for that activity, and for
739 the activity to be considered complete, none should remain. Include the following data in Table C.2:

Project Activity Table C.2	
Column /Field	**Description**
1	**Unique Project ID** An Agency-specified number that uniquely identifies the project within this Investment.
2	**Activity Name** A short description consistent with the critical steps within the Agency project management methodology. *[100 char]*
3	**Activity Description** Describe what work is accomplished by the activity. *[250 char]*
4	**Structure ID** 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

Project Activity Table C.2	
Column /Field	**Description**
	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. *[x.x.x.x.x]*
5	**Start Date Planned** The planned start date for the activity. This is the baseline value. *[MM-DD-YYYY]*
6	**Start Date Projected** If the activity has not yet started, enter the current planned start date of the activity. *[MM-DD-YYYY]*
7	**Start Date Actual** When the activity starts, enter the actual start date here. *[MM-DD-YYYY]*
8	**Completion Date Planned** The planned completion date for the activity. This is the baseline value. *[MM-DD-YYYY]*
9	**Completion Date Projected** If the activity has not yet completed, enter the current planned completion date of the activity. *[MM-DD-YYYY]*
10	**Completion Date Actual** When the activity ends, enter the actual completion date here. *[MM-DD-YYYY]*
11	**Total Costs Planned** The planned total cost for the activity. This is the baseline value. *[$M]* *Note*: For programs that are employing earned value management, Agencies should reflect "budget at completion" in the "Total Costs Planned" Column 11 and "estimated at completion" in the "Total Costs Projected" Column 12.
12	**Total Costs Projected** When the activity is not yet completed, enter the current planned total cost of the activity. *[$M]* *Note*: For programs that are employing earned value management, Agencies should reflect "budget at completion" in the "Total Costs Planned" Column 11 and "estimated at completion" in the "Total Costs Projected" Column 12.
13	**Total Actual Costs** When the activity ends, enter the total actual costs for the activity here. *[$M]*
14	**Software Development Activity with Multiple Releases** Indicate whether this activity primarily relates to software development and includes multiple releases. *[Yes/No]*
15	**Last Three Dates of Release to Production** Enter the last three dates of successful software code releases to production. If the activity has successfully released software code to production fewer than three times, enter any relevant release date(s). *Required only for activities that responded "Yes" in Column 14 "Software Development Activity with Multiple Releases." [MM-DD-YYYY]*
16	**Last Three Dates of Release to Test** Enter the last three dates of successful software code releases to test. If the activity has released software code to test fewer than three times, enter any relevant test date(s). *Required only for activities that responded "Yes" in Column 14 "Software Development Activity with Multiple Releases." [MM-DD-YYYY]*
17	**Estimated Frequency of Rollback of Planned Releases** The percent frequency of all planned releases for which the activity performed a rollback. *Required only for activities that responded "Yes" in Column 14 "Software Development Activity with Multiple Releases." [Percentage]*

Project Activity Table C.2	
Column /Field	**Description**
18	**Estimated Time between Code Creation and Releases** The estimated average number of days that occur between software code development and successful release to production. *Required only for activities that responded "Yes" in Column 14 "Software Development Activity with Multiple Releases." [Number]*

19	**Mode of End User Engagement**
	 Enter the type of end user engagement methodology the activity uses to ensure stakeholder acceptance of deliverables.
	 Select one:
	     1. None;
	     2. User Acceptance Testing;
	     3. Through Planning & Needs Development; or
	     4. Other.

20	**End User Results** Enter the date and results of the activity's last end user engagement activity, if applicable. *Responses should reflect the regularity of engagement with end users (e.g., daily, weekly, monthly, etc.) [1000 Char]*

Reporting Parent and Child Activities (WBS Structure)

"Child" activities may be grouped under "Parent" activities to reflect the WBS used by the Agency to manage the Investment. If a WBS is not used by the Agency, report the relationship between parent activities and child activities in "Structure ID" using this method. Agencies are encouraged to report a transparent view of the Investment baseline on the Federal ITDB (at least Level 3 of the WBS). Levels 1 and 2 typically do not provide enough information to describe the work to be accomplished in short enough duration that early warnings of Investment performance can be identified (M-10-27).

When reporting an activity, enter the "Structure ID" as a period-delimited string consisting of the "Unique Project ID" and each nested parent activity between the project level and the child activity. The "Structure ID" to enter will vary depending on the activity's WBS level.

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

>   ▪ Project A

>   o Parent Activity 2

>   ▪ Parent Activity 10

>   • Child Activity 3

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

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

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

Completed activities must also have *Start Date Actual, Completion Date Actual,* and *Total Actual Costs.* Any parent activities with a child activity must be completely described by the aggregate attributes of its

767   child activities. In the ITDB, the cost and schedule information for parent activities will be based on the
768   cost and schedule information of the lowest level of child activities reported. Agency-submitted cost and
769   schedule information is not required for parent activities.

770

Unique Project ID	Activity Name	Structure ID	Start Date Planned	Completion Date Planned	Planned Total Costs
A	Design	A.2	2/1/2019	2/29/2019	$2.5
A	Business Requirements	A.2.1	2/1/2019	2/10/2019	$1.0
A	Technical Requirements	A.2.2	2/11/2019	2/20/2019	$1.0
A	Architecture	A.2.3	2/21/2019	2/28/2019	$0.5

771
772   Parent activities like the one highlighted above (Structure ID: A.2) are optional. Reported parent activities
773   values will be ignored, as calculated values will be determined by aggregating the cost and schedule
774   information reported in the child activities.

Section D: Operational Data

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

777 **Operational Analysis**

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

Operational Analysis Table D.1		
Date of Analysis	**Analysis Results**	**Analysis Conclusion**
[MM-DD-YYYY]	*[Limit: 2500 char] Include a summary of the results including identified actions.*	*[Drop Down menu: continue as-is, initiate remediation action, initiate innovation action, initiate modernization/replacement action, initiate disposal action]*

780 **Operational Performance**

781 Performance of operational Investments is continuously monitored to demonstrate the Investment is
782 meeting the needs of the Agency, delivering expected value, and/or being modernized and replaced
783 consistent with the Agency's Strategic Plan, Investment portfolio, enterprise architecture, risk
784 management framework, acquisition strategy, and human capital plan. Measures used for monitoring
785 performance should be as "outcome" based as possible rather than "output" based and should help
786 benchmark Investment performance and trigger considerations of how the Investment's objectives could
787 be better met, how costs could be reduced, and whether the organization should continue performing a
788 particular function. The OMB Capital Programming Guide (page 45-46) directs that operational
789 performance metrics should seek to answer more subjective questions in the specific categories of:

790 **Customer Satisfaction (Process Results)** – Analysis should focus on whether the Investment
791 supports the Investment's customer processes as designed. The focus is on how well the Investment is
792 delivering goods or services it was designed to deliver. Metrics appropriate for monitoring
793 performance in this category might address the following:

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

799 **Strategic and Business Results** – Analysis should focus on the effect the Investment has on the
800 performing organization. The focus is on how well the Investment contributes to the organization's
801 achievement of strategic goals, fulfillment of its mission, and/or meeting service level agreements
802 with its customers. Metrics appropriate for monitoring performance in this category would be specific
803 to the strategic or business concern and would typically address effectiveness or the Investment
804 contribution. Metrics appropriate for monitoring performance in this category might address the
805 following:

806 • Business process improvements or advances that support Agency priority goals and measures;
807   and
808 • Actions, time, or burden reduction in activities for either Federal users or American taxpayers
809   using the tools.

810 **Financial Performance** – Analysis should focus on the comparison of current performance with a

811 pre-established cost baseline. The Investment should also be subjected to a periodic review for
812 reasonableness and cost efficiency. Metrics appropriate for monitoring performance in this category
813 might address the following:

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

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

825 Of all the metrics in use to monitor Investment performance fully, <u>report a minimum of five,</u> drawing
826 on those that best reflect the value of the Investment based upon the following:

827 1. *Customer Satisfaction (Process Results):* Provide a <u>minimum of one</u> metric that reflects this
828 category.

829 2. *Strategic and Business Results:* Provide a <u>minimum of three</u> metrics that reflects this category.

830 a. *At least one of the metrics must have a monthly reporting frequency.*

831 b. *For Investments listed in Part 1 of the Agency IT Investment Portfolio Summary, at least
832 one of these metrics must contribute to a Strategic Objective or Agency Priority Goal.*

833 3. *Financial Performance: Reporting metrics that reflect this category is optional.*

834 4. *Innovation: Reporting metrics that reflect this category is optional.*

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

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

839 **Defining Metrics**

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

Metrics Definitions Table D.2	
Column /Field	**Description**
1	**Metric ID** Unique ID provided by Agency for the metric. When reporting actual results (see below), use this ID to reference the correct metric. *[numeric]*
2	**Metric Description** Description to help the user understand what is being measured. In this field, describe the units used, any calculation algorithm used, and the definition or limits of the population or "universe" measured. *[500 char]*
3	**Unit of Measure** Brief indication of what quantity is measured (e.g., number, percentage, dollar value) for each metric. *[50 char]*
4	**Performance Measurement Category Mapping**

Metrics Definitions Table D.2	
Column /Field	**Description**
	Identify the measurement category, as shown above in this section's instructions. *[Measurement Category]*
5	**Agency Baseline Capability** 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	**2019 Target** Metric target value from FY 2019, relative to the reporting frequency. *[numeric]*
7	**2020 Target** Metric target value for FY 2020, relative to the reporting frequency. *[numeric]*
8	**Measurement Condition** 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. *[Over target/Under target]*
9	**Reporting Frequency** 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. *[Monthly, Quarterly, Semi-Annual, Annual]*
10	**Agency Strategic Objective or Priority Goal** 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 Section 230 and Section 250 respectively). Provide that code for the associated metric using the appropriate alphanumeric identifier provided by performance.gov. *[11 char]*
11	**Is the Metric Retired?** Check this box when performance metrics are no longer useful for Investment management. *[Check Box]*

841 **Providing Actual Results**

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

Metric Actual Results Table D.3	
Column /Field	**Description**
1	**Metric ID** Unique ID provided by Agency for the metric. When reporting actual results (see below), use this ID to reference the correct metric. *[numeric]*
2	**Actual Result** Actual result measured. *[numeric]*
3	**Date of Actual Result** End date of the most recent reporting period. *[MM-DD-YYYY]*
4	**Comment** Comments for metrics that have not been met will be valuable for OMB and Agency Reviewers. *[500 char] (optional)*

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

845 **IT INFRASTRUCTURE, IT SECURITY, AND IT MANAGEMENT STANDARD**
846 **INVESTMENTS**

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

849 Beginning with the FY 2018 Guidance, standard IT infrastructure Investments were introduced and
850 aligned to the IT Tower layer of the TBM taxonomy. For FY 2021, Agencies shall complete their
851 realignment of costs represented in their IT Portfolio Summary Part 3: IT Infrastructure, IT Security, and
852 IT Management non-standard Investments into standard Investments that will be consistent throughout
853 and across each Agency. This is intended to provide more visibility to Agency CIOs.

854 The standard Investments are related to costs associated with all agencies and are not mission-specific.
855 Some standard Investments will have Standard Investment Report cost breakdowns tailored to the
856 commodity IT data that they comprise while others will be tailored to specific sub-Towers. While
857 standard Investments are organizationally aligned to the IT Towers to represent IT Infrastructure, IT
858 Security, and IT Management programs, it is expected that these Investments will comprise spending
859 across multiple IT Towers (e.g., a Network Standard Investment may include Network and Delivery IT
860 Tower spending). Existing Mission Delivery and Mission Support Services (Part 1 and 2) IT spending
861 should not be included in standard Investments for IT Infrastructure, IT Security, and IT Management
862 (Part 3).

863 Each Standard Investment Report will have its own reporting requirements and frequency. Please refer to
864 table in Section 2.1 Annual Reporting for more detail on this. Please note that the reporting requirements
865 for standard Investments differ from those of major Investments; while PM qualifications are required to
866 be reported within Major IT Business Case submissions, they are not required to be reported for any
867 standard Investment submissions.

Standard Investment	Reporting Level	Relationship to other reporting	Frequency
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 Budget Data Request (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	Agencies 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
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

868

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

870 **Standard Investment Definition:** An IT investment which includes the provisioning of SOCs and
871 associated costs in alignment with the TBM IT Security and Compliance tower.

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

877 **Standard Investment Report: Yes.**

878 Cybersecurity is a top priority for the Administration, and Agencies are required to report on their
879 Standard Investments for IT Security and Compliance at the level at which they are managed and
880 executed. For any Investment designated as an IT Security and Compliance Standard Investment (code
881 "02" in Column 10 of the IT Investment Portfolio Summary), complete the following Investment report.

882 This IT Security and Compliance Standard Investment Report is required for the FY 2021 reporting cycle.
883 Where the Standard Investment Report lists reporting requirements referencing sections within the Major
884 IT Business Case Detail, the standard Investment should fully adhere to all reporting requirements
885 described in those sections.

886 The 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]*

887

Section B: Security Operations Center Reporting

888 Each dollar spent should maintain or enhance security posture and reduce risks. In line with previous
889 years, the security-related information collected through the CPIC process will be used in conjunction
890 with information collected through multiple collections to gain a more complete understanding of
891 agencies' capabilities and resourcing. In a change from previous years, the information collected in the
892 previously used Cybersecurity Costs and Capability table will be removed and replaced. Though the
893 information was valuable in understanding how agencies budget for cybersecurity, the data collected was
894 largely duplicative of information collected through the annual Cyber BDR, where they will remain due
895 to additional reporting requirements that would be impractical to collect through the CPIC process for
896 Agencies.

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

Table B.1 Agency SOC	
Column/Field	**Description**
1	**SOC Identifier** Provide the individual SOC name or numerical designation used by the Agency
2	**Covered Entities** *[5 digit code]* List of Federal organizations (e.g., Agencies, bureaus, components) for which the SOC provides security services *[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"]*
3	**PY 2019 Amount** *[$M]*
4	**PY 2019 Total Federal FTEs** *[Count]*
5	**PY 2019 Total Contractor FTEs** *[Count]*
6	**CY 2020 Amount** *[$M]*
7	**CY 2020 Total Federal FTEs** *[Count]*
8	**CY 2020 Total Contractor FTEs** *[Count]*
9	**BY 2021 Amount** *[$M]*
10	**BY 2021 Total Federal FTEs** *[Count]*
11	**BY 2021 Total Contractor FTEs** *[Count]*
12	**Performance Hours** The number of 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 *[Number]*
13	**Continuous Operations?** Does the SOC operate continuously during weekends, holidays, and Agency closures? *[Yes, No]*

908 In Table B.2 Contracted SOCs, Agencies should report the following data in separate rows for each
909 instance in which this Investment contracts from a SOC service provider. Costs included in this table
910 should be reflected in this standard Investment's Outside Services Cost Pool.

Table B.2 SOC as a Service	
Column/Field	**Description**
1	**SOC Identifier** Provide the individual SOC name or numerical designation used by the Agency
2	**Service Provider Type** Select whether the service provider is "Government" or "Private"
3	**Provider Entity** *[3 digit code]* The top-level Department or Agency which provides SOC services to the reporting Agency *(Note: Required only if Service Provider Type is "Government")* *[Agency Code from OMB Circular A-11 Appendix C]*
4	**Covered Entities** *[5 digit code]* List of Federal organizations (e.g., Agencies, bureaus, components) for which the SOC provides security services *[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"]*
5	**PY 2019 Amount** *[$M]*
6	**CY 2020 Amount** *[$M]*
7	**BY 2021 Amount** *[$M]*
8	**Performance Hours**

Table B.2 SOC as a Service	
	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 *[Number]*
9	**Continuous Operations?** Does the SOC operate continuously during weekends, holidays, and Agency closures? *[Yes, No]*

911

Section C: Investment Risk

912 Please see Section B of the Major IT Business Case Detail (Investment Risk) for fields and instructions
913 on submissions for risk data under the IT Security and Compliance Standard Investment Reports.
914

915 **15. IT Management Standard Investment**

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

918 **Investment Usage:** An IT Management Standard Investment is created for each independently managed
919 enterprise-wide IT Management capability within an Agency. For example, enterprise-wide IT
920 Management capabilities may be independently managed based on sub-agencies or capability. These
921 capabilities may include but are not limited to strategic planning, IT budgeting, enterprise architecture,
922 and IT governance.

923 **Standard Investment Report: No.**

924 There is no Standard Investment Report for IT Management Standard Investments included in the FY
925 2021 cycle. However, the need for a Standard Investment Report will continue to be evaluated to
926 determine whether additional information relating to this type of Standard Investment would provide
927 useful and actionable data for OMB and agencies.

928   **16. Network Standard Investment**

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

932   **Investment Usage:** Agencies should report Network Standard Investments at the WAN level. Agencies
933   should report one Network Standard Investment for each WAN or MAN they manage but may report
934   LANs together in one Investment if they are managed at the same level. Agencies should determine how
935   best to include their LANs in their Investment reporting based on how they are managed (e.g., by region).

936   **Standard Investment Report: Yes.**

937   This Network Standard Investment Report is required for the FY 2021 reporting cycle. Where the
938   Standard Investment Report lists reporting requirements referencing sections within the Major IT
939   Business Case Detail, the standard Investment should fully adhere to all reporting requirements described
940   in those sections.

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

948   Each Network Standard Investment shall report spending across the following categories 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, Private Branch Exchange (PBX)
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	Separately identifiable and separately priced hardware (e.g. router, switches), firmware, and software components, along with the installation (e.g. wiring), maintenance, relocation and/or removal of network services
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.

949   The following are the fields in a Network Investment:

Section A: General Information	
Column/Field	**Description**
1	**UII** *[12-digit primary key for all Investments]*
2	**Brief Description** – Brief description of the organizational/geographic area or areas

Section A: General Information	
	supported by the network that can clarify costs and metrics
3	**Network Primary POC** – The name of the managerial primary point of contact for this network's operations
4	**Primary POC Email** – The email address of the primary POC
5	**Anticipated EIS Transition Date** – The date by which it is expected to disconnect services from Networx. If this network is not intending to transition to EIS, please indicate such by identifying that it is not applicable, "N/A".

950

Section B: Investment Cost Detail

951 Complete a table for each applicable Network Component (Transition Services, Data Services, VoIP
952 Voice Services, Legacy Voice Services, Toll Free Voice Services, Managed Network Services, Satellite
953 Services, Equipment& Cable and Wiring, Labor, and Access Arrangements).

Column/Field	Description
1	**Network Component**
	Note: Accepted responses in this field will be limited to the areas described above, specifically:
	• Transition Services
	• Data Services
	• VoIP Voice Services
	• Legacy Voice Services
	• Toll Free Voice Services
	• Managed Network Services
	• Satellite Services
	• Equipment & Cable and Wiring
	• Labor
	• Access Arrangements
	Definitions for these types can be found above.
2	**PY 2019 Amounts** *[$M]*
3	**CY 2020 Amounts** *[$M]*
4	**BY 2021 Amounts** *[$M]*

954

Section C: Project Plan and Execution Data

955 Please see Section C of the Major IT Business Case Detail section (Project Plan and Execution Data) for
956 instructions on submissions for Projects under the Project Plan and Execution Data for Network Standard
957 Investment Reports. Network Standard Investments should only report those project and activity fields
958 that are applicable to the Investment.

Project Table C.1

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

962 • EIS transition
963 • Network consolidation initiatives
964 • Network cable replacement

Project Activity Table C.2

965   Please see Table C.2 of the Major IT Business Case Detail section (Project Activity Table) for fields and
966   instructions on submissions for Activities under the Project Plan and Execution Data section of Network
967   Standard Investment Reports as well as information on the reporting structure of Parent and Child
968   Activities.

Section D: Performance Metrics

969   Please see Section D of the Major IT Business Case Detail section (Performance Metrics) for instructions
970   on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics section of
971   Network Standard Investment Reports. Network Standard Investments should only report those metrics
972   that are applicable to the Investment.

Operational Analysis Table D.1

973   Please see Table D.1 of the Major IT Business Case Detail section (Operational Analysis) for fields and
974   instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics
975   section of Network Standard Investment Reports.

Metrics Definition Table D.2

976   Please see Table D.2 of the Major IT Business Case Detail section (Metrics Definition) for fields and
977   instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics
978   section of Network Standard Investment Reports.

Metric Actual Results Table D.3

979   Please see Table D.3 of the Major IT Business Case Detail section (Metric Actual Results) for fields and
980   instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics
981   section of Network Standard Investment Reports.

Section E: Investment Risk

982   Please see Section B of the Major IT Business Case Detail (Investment Risk) for fields and instructions
983   on submissions for risk data under the Network Standard Investment Reports.
984

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

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

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

995   **Standard Investment Report: Yes.**

996   This Data Center and Cloud Standard Investment Report is required for the FY 2021 reporting cycle.
997   Where the Standard Investment Report lists reporting requirements referencing sections within the Major
998   IT Business Case Detail, the standard Investment should fully adhere to all reporting requirements
999   described in those sections.

1000   Data centers should be broken down to separate investments at the finest granularity possible by the
1001   Agency. For federated agencies, at a minimum, this should be separated into individual Investments for
1002   each component level organization. Data Center ID may include a list of Data Center IDs if this
1003   information is available for broken-out Investments.[2] This Investment may include multiple data centers if
1004   the Agency is unable to break costs out separately and these data centers are managed together.

1005   For the 2021 budget year submissions, performance metrics and measures for Data Center and Cloud
1006   Investments shall continue to be calculated by OMB from Agencies' quarterly IDC data center inventory
1007   submissions, in order to reduce Agency burden and ensure consistency and fidelity of those metrics.
1008   OMB will leverage the "Data Center ID" to combine performance and spending data for each individual
1009   data center or cloud instance.

1010   *17.1 Tower Mapping*

1011   The Data Center and Cloud Standard Investment Report type combines three TBM Framework IT
1012   Towers: Data Center, Compute, and Storage.

1013   • **Data Center:** Purpose-built data center facilities that house and protect critical IT equipment
1014   including the space, power, environment controls, racks, and cabling, and that require data center
1015   specific upkeep (commonly known as "smart hand" support).
1016   • **Compute:** Physical servers running a version of Microsoft's Windows Server or the Linux
1017   operating system; IBM AS/400 platform; servers running vendor-specific, proprietary Unix
1018   operating systems (e.g., IBM AIX, Sun Solaris, HP UX); and traditional mainframe computers
1019   and operations running legacy operating systems.
1020   • **Storage:** Offline storage resources used for archival, backup, and recovery efforts to prevent data
1021   loss or data corruption, support disaster recovery and compliance requirements of the distributed
1022   storage; includes mainframe offline storage (i.e., any storage resources used for archive, backup
1023   and recovery to support data loss, data corruption, disaster recovery, and compliance
1024   requirements of the mainframe storage).

---

[2] 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, and in OMB's Quarterly IDC Instructions.

1025   **Cloud:** Cloud spending may be included in these towers. In order to separate cloud spending from these
1026   towers, the Investment Cost Detail section of this report asks for the disaggregation of cloud spending
1027   from the IT Towers included in this Standard investment Report. Cloud spending includes, but is not
1028   limited to: Virtual servers running a version of Microsoft's Windows Server or the Linux operating
1029   system; includes hardware, software, labor, and support services and central storage such as SAN, NAS,
1030   and similar technologies for the distributed compute infrastructure; also includes the equipment, software,
1031   and labor to run and operate; includes mainframe online storage (i.e., attached storage arrays and the
1032   associated equipment, software, and labor) to run and operate.

1033   *17.2 Scenario Mapping*

1034   Data Center and Cloud Standard Investment Reports shall be captured at the physical location where the
1035   data center is located or, for cloud environments, at the management unit operating the cloud
1036   infrastructure. If this level of granularity in reporting is not available, Standard Investment Reports should
1037   be captured at the bureau or Agency level. This shall include relevant tiered data centers, including those
1038   housing high-performance computing (HPC)[3] capabilities. This standard Investment type will
1039   accommodate Agencies' different data center infrastructure configurations as follows:

1040   • **A Single Tiered Data Center:** In this scenario, the Agency is reporting this data center through
1041   the quarterly IDC with a Tier Classification equal to "Tiered". This data center requires a Data
1042   Center and Cloud Standard Investment Report. In addition, the Agency shall provide the Federal
1043   Real Property Profile ID (for physical data centers in owned or leased property) associated with
1044   their data center. Agencies with multiple tiered data centers shall submit spending on each data
1045   center data center *separately*.
1046   • **A Tiered Data Center with High Performance Computing (HPC) Capabilities:** In this
1047   scenario the Agency is reporting this data center through the quarterly IDC with a Tier
1048   Classification equal to "Tiered" and with a non-zero number of HPC nodes. This data center
1049   requires a Data Center and Cloud Standard Investment Report. In addition, the Agency shall
1050   provide the Federal Real Property Profile ID (for physical data centers in owned or leased
1051   property) associated with their data center with HPC capabilities.
1052   • **Tiered Data Center with a Physical Location Connected to One or More Cloud**
1053   **Capabilities:** In this scenario the Agency is reporting this data center through the quarterly IDC
1054   with a Tier Classification equal to "Tiered" and the facility is connected to one or more cloud
1055   capabilities. For example, an Agency might manage some resources in-house, while hosting other
1056   key parts of their IT infrastructure as a public or managed service (also known as a hybrid cloud).
1057   This data center requires a Data Center and Cloud Standard Investment Report.
1058   • **A Data Center that Consumes Data Center Shared Services from another Agency:** In this
1059   scenario the Agency is reporting this data center through the quarterly IDC with a Tier
1060   Classification equal to "Tiered" and the facility is connected to one or more cloud capabilities. As
1061   a result, the Agency would report spending associated with the Internal Services (i.e., federal
1062   managed service provider) Cost Pool.
1063   • **A Data Center that Provides Data Center Shared Services to another Agency**: Federal
1064   government data centers that are providing data center shared services to another federal
1065   government Agency shall incorporate their costs for each Cost Pool associated with the data
1066   center for each applicable sub-Tower.
1067   • **A Cloud Data Center (also known as private-sector cloud or "the public cloud"):** This
1068   scenario includes IaaS and PaaS as well as HPC-equivalent cloud implementations not located on
1069   Federal facilities. SaaS costs will be captured under the End User Investment. The Agency shall
1070   incorporate their cost for each Cost Pool associated with their cloud data center for each sub-

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[3] Computing capabilities that are measured in floating point operations per second (FLOPS) typically either gigaFLOPS (10^9) or teraFLOPS (10^{12}).

1071   Tower. Agencies with multiple cloud data centers shall report spending on each instance
1072   *separately*.

1073   •   **A Non-Tiered Data Center with a Physical Location:** This scenario does not require
1074   submission of a Data Center and Cloud Standard Investment Report.

1075 The "Data Center ID" identifier in OMB's IDC will be used to connect Agencies' data centers inventory
1076 and performance data. This will be combined with budget and spending data that will be captured in their
1077 Data Center and Cloud Standard Investment and associated Investment Reports to inform oversight and
1078 Investment decision-making by both the Agencies and OMB.

1079 The following are the sections of the Data Center and Cloud Investment Report:
1080

Section A: General Information	
Column /Field	**Description**
1	**UII** *[12-digit primary key for all Investments]*
2	**Data Center ID** – The unique identifier from your Agency's data center inventory, which is submitted to OMB on a quarterly basis in conjunction with the 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 ofcio@omb.eop.gov. *Agencies should provide as many entries as applicable or enter "N/A" if the standard Investment relates solely to cloud capabilities and does not fund an Agency data center.*

1081

Section B: Investment Cost Detail

1082 The table below shall be reported for each of the tiered and cloud data centers in each Agency's
1083 inventory.

Column/Field	Description
1	**Component** *Note:* Accepted responses in this field will be limited to the areas described above, specifically: • Data Center (non-cloud costs) • Storage (non-cloud costs) • Compute (non-cloud costs)
2	**PY 2019 Amounts** *[$M]*
3	**CY 2020 Amounts** *[$M]*
4	**BY 2021 Amounts** *[$M]*

1084

Section C: Investment Risk

1085 Please see Section B of the Major IT Business Case Detail (Investment Risk) for fields and instructions
1086 on submissions for risk data under the Data Center and Cloud Standard Investment Reports.
1087

1088 **18. End User Standard Investment**

1089 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide end user
1090 capability as defined by the TBM End User tower.

1091 **Investment Usage:** Agencies should report End User Standard Investments at the point of management.

1092 **Standard Investment Report: Yes.**

1093 This End User Standard Investment Report is required for the FY 2021 reporting cycle. Where the
1094 Standard Investment Report lists reporting requirements referencing sections within the Major IT
1095 Business Case Detail, the standard Investment should fully adhere to all reporting requirements described
1096 in those sections.

1097 Agencies have the ability to determine the most appropriate level/approach in reporting Investments in
1098 this section. The crucial requirement is that the Investments are reported where they are managed. If, for
1099 example, software is acquired and deployed at the enterprise level, then a single Investment identifying
1100 the software that is managed in that manner makes sense. If there is a bureau, component, mode or sub-
1101 Agency that acquires and manages other off the shelf software to meet a local requirement, those
1102 acquisitions and their budget should be reported separately.
1103
1104 The End User Investment Report should include costs and relevant information necessary for decision-
1105 making and management oversight of the Agency's End User portfolio which includes:
1106 • **Workspace**
1107 • **Mobile Devices**
1108 • **End User Software**
1109 • **Network Printers**
1110 • **Conferencing & AV**
1111 • **IT Helpdesk**
1112 • **Deskside Support**
1113
1114 OMB memos on Category Management are listed in Appendix A. The desire is to capture End User
1115 performance data within the Category Management sections of the IDC quarterly reporting process.
1116
1117 The following are the sections of the End User Investment Report:
1118

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

1119

Section B: Investment Cost Detail

1120 The below table includes Investment components/sub-Towers (workspace, mobile devices, end user
1121 software, network printers, conferencing & AV, IT Helpdesk, Deskside Support). This Investment may
1122 not have spending in all components/sub-Towers; please complete the table based upon what is applicable
1123 for the scope of this Investment. The budget definition helps with Agencies in portfolio reviews, and will
1124 allow for alignment to appropriate strategic sourcing solutions.

1125

Column /Field	Description
1	**End User Component** *Note:* Accepted responses in this field will be limited to the areas described above, specifically: • Workspace • Mobile Devices • End User Software • Network Printers • Conferencing & AV • IT Helpdesk • Deskside Support
2	**Total PY 2019 Amounts** *[$M]*
3	**Total CY 2020 Amounts** *[$M]*
4	**Total BY 2021 Amounts** *[$M]*

1126

Section C: Project Plan and Execution Data

1127 Please see Section C of the Major IT Business Case Detail section (Project Plan and Execution Data) for
1128 instructions on submissions for Projects under the Project Plan and Execution Data for End User Standard
1129 Investment Reports. End User Standard Investments should only report those project and activity fields
1130 that are applicable to the Investment.

Project Table C.1

1131 Please see Table C.1 of the Major IT Business Case Detail section (Projects Table) for fields and
1132 instructions on submissions for Projects under the Project Plan and Execution Data for End User Standard
1133 Investment Reports.

Project Activity Table C.2

1134 Please see Table C.2 of the Major IT Business Case Detail section (Project Activity Table) for fields and
1135 instructions on submissions for Activities under the Project Plan and Execution Data section of End User
1136 Standard Investment Reports as well as information on the reporting structure of Parent and Child
1137 Activities.

Section D: Investment Risk

1138 Please see Section B of the Major IT Business Case Detail (Investment Risk) for fields and instructions
1139 on submissions for risk data under the End User Standard Investment Reports.
1140

1141 **19. Output Standard Investment**

1142 **Standard Investment Definition:** An Output Standard Investment is an IT investment for the
1143 provisioning of an enterprise-wide independently-managed output capability as defined by the TBM
1144 Output tower.

1145 **Investment Usage:** An Output Standard Investment is created for each independently managed
1146 enterprise-wide output capability within an Agency. For example, several centrally-managed Agency
1147 print shops would call for one Output standard investment; several independently-managed Agency print
1148 shops would call for several Output standard investments.

1149 **Standard Investment Report: No.**

1150 There is no Standard Investment Report for Output Standard Investments included in the FY 2021 cycle.
1151 However, the need for a Standard Investment Report will continue to be evaluated to determine whether
1152 additional information relating to this type of Standard Investment would provide useful and actionable
1153 data for OMB and agencies.

1154 **20. Application Standard Investment**

1155 **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide shared
1156 application capability based on the definition of the TBM Application tower to include sub-towers:
1157 Application Development, Application Support & Operations, and Business Software. Application
1158 resources shared across the enterprise (e.g., testing personnel, integrated development environments,
1159 testing software) are included. Application resources specific to program IT investments (e.g., dedicated
1160 analysts and programmers) are not included. Application resources, tools, and services associated with
1161 development projects for the enterprise application capability itself are included.

1162 **Investment Usage:** An Application Standard Investment is created for each independently managed
1163 enterprise-wide application capability within an Agency. For example, enterprise-wide application
1164 capabilities may be independently managed based on sub-agencies or technologies (e.g., mobile vs. web
1165 vs. mainframe). These capabilities may include but are not limited to Agency custom software
1166 development programs

1167 An Application Standard Investment is not created for an application capability that is provisioned as part
1168 of a program-specific IT investment. The expenditure of IT resources for such an Application capability is
1169 included with the program-specific IT investment. Application Part 3 Investments may exist for some
1170 Agencies in instances where Agency-level software development work is provided as an intra- and/or
1171 inter-Agency service.

1172 **Standard Investment Report: Yes.**

1173 This Application Standard Investment Report is required for the FY 2021 reporting cycle. Where the
1174 Standard Investment Report lists reporting requirements referencing sections within the Major IT
1175 Business Case Detail, the standard Investment should fully adhere to all reporting requirements described
1176 in those sections.

1177 The following are the sections of the Application Investment Report:
1178

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

1179

Section B: Investment Cost Detail

1180 The below table includes Investment components/sub-Towers (Application Development, Application
1181 Support & Operations, and Business Software). This Investment may not have all components/sub-
1182 Towers; please complete the table based upon what is applicable for the scope of this Investment. The
1183 budget definition helps with Agencies in portfolio reviews, and will allow for alignment to appropriate
1184 strategic sourcing solutions.

Column /Field	**Description**
1	**Application Component** *Note:* Accepted responses in this field will be limited to the areas described above, specifically: • Application Development • Application Support & Operations • Business Software
2	**Total PY 2019 Amounts** *[$M]*
3	**Total CY 2020 Amounts** *[$M]*
4	**Total BY 2021 Amounts** *[$M]*

1185

Section C: Project Plan and Execution Data

1186 Please see Section C of the Major IT Business Case Detail section (Project Plan and Execution Data) for
1187 instructions on submissions for Projects under the Project Plan and Execution Data for Application
1188 Standard Investment Reports. Application Standard Investments should only report those project and
1189 activity fields that are applicable to the Investment.

1190

Project Table C.1

1191 Please see Table C.1 of the Major IT Business Case Detail section (Projects Table) for fields and
1192 instructions on submissions for Projects under the Project Plan and Execution Data for Application
1193 Standard Investment Reports.

Project Activity Table C.2

1194 Please see Table C.2 of the Major IT Business Case Detail section (Project Activity Table) for fields and
1195 instructions on submissions for Activities under the Project Plan and Execution Data section of
1196 Application Standard Investment Reports as well as information on the reporting structure of Parent and
1197 Child Activities.

Section D: Investment Risk

1198 Please see Section B of the Major IT Business Case Detail (Investment Risk) for fields and instructions
1199 on submissions for risk data under the Application Standard Investment Reports.
1200

1201   **21. Delivery Standard Investment**

1202   **Standard Investment Definition:** An IT investment for the provisioning of an enterprise-wide shared
1203   delivery capability based on the definition of the TBM Delivery tower that includes enabling capabilities
1204   (e.g., Business Software). Delivery resources, products, and services shared across the enterprise (e.g.,
1205   PMO personnel, account managers) are included. Delivery resources, products, and services specific to a
1206   particular program IT investment (e.g., dedicated project managers and business analysts) or other
1207   standard Investments are not included, as the focus of this standard Investment is on multi-program and
1208   multi-operation centers.

1209   **Investment Usage:** A Delivery Standard Investment is created for each independently managed
1210   enterprise-wide delivery capability within an Agency (e.g., PMOs, Customer Relationship Management
1211   (CRM) operation centers). For example, enterprise-wide delivery capabilities may be independently
1212   managed based on sub-agencies or capability (e.g., IT service management vs. client management).
1213   Delivery capabilities include but are not limited to implementing and managing enterprise business
1214   solutions.

1215   **Standard Investment Report: Yes.**

1216   This Delivery Standard Investment Report is required for the FY 2021 reporting cycle. Where the
1217   Standard Investment Report lists reporting requirements referencing sections within the Major IT
1218   Business Case Detail, the standard Investment should fully adhere to all reporting requirements described
1219   in those sections.

1220   The following are the sections of the Delivery Investment Report:
1221

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

1222

Section B: Investment Cost Detail

1223   The below table includes Investment components/sub-Towers (IT Service Management, Program,
1224   Product, & Project Management, Client Management, and Operations Center). This Investment may not
1225   have all components/sub-Towers, please complete the table based upon what is applicable for the scope of
1226   this Investment. The budget definition helps with Agencies in portfolio reviews, and will allow for
1227   alignment to appropriate strategic sourcing solutions.

Column /Field	Description
1	**Delivery Component** *Note:* Accepted responses in this field will be limited to the areas described above, specifically: • IT Service Management • Program, Product, & Project Management • Client Management • Operations Center
2	**PY 2019 Amounts** *[$M]*
3	**PY 2019 Total Federal FTEs** *[Count]*
4	**PY 2019 Total Contractor FTEs** *[Count]*
5	**CY 2020 Amounts** *[$M]*
6	**CY 2020 Total Federal FTEs** *[Count]*
7	**CY 2020 Total Contractor FTEs** *[Count]*

Column /Field	Description
8	**BY 2021 Amounts** *[$M]*
9	**BY 2021 Total Federal FTEs** *[Count]*
10	**BY 2021 Total Contractor FTEs** *[Count]*

1228

Section C: Performance Metrics

1229 Please see [Section D of the Major IT Business Case Detail](#) section (Performance Metrics) for instructions
1230 on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics section of
1231 Delivery Standard Investment Reports. Delivery Standard Investments should only report those metrics
1232 that are applicable to the Investment. Examples of Delivery performance metrics may include:

1233 • Customer satisfaction
1234 • Cost benchmarks
1235 • Network Operations Center monitoring
1236 • Tier 2 and 3 Help Desk support efficacy
1237

Operational Analysis Table C.1

1238 Please see [Table D.1 of the Major IT Business Case Detail](#) section (Operational Analysis) for fields and
1239 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics
1240 section of Delivery Standard Investment Reports.

Metrics Definition Table C.2

1241 Please see [Table D.2 of the Major IT Business Case Detail](#) section (Metrics Definition) for fields and
1242 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics
1243 section of Delivery Standard Investment Reports.

Metric Actual Results Table C.3

1244 Please see [Table D.3 of the Major IT Business Case Detail](#) section (Metric Actual Results) for fields and
1245 instructions on submissions for Performance Metrics and Metrics Actuals under the Performance Metrics
1246 section of Delivery Standard Investment Reports.

Section D: Investment Risk

1247 Please see [Section B of the Major IT Business Case Detail](#) (Investment Risk) for fields and instructions
1248 on submissions for risk data under the Delivery Standard Investment Reports.
1249

1250 **22. Platform Standard Investment**

1251 **Standard Investment Definition:** An IT Investment for the provisioning of an enterprise-wide platform
1252 capability as defined by the Platform Tower to include sub-towers: database, middleware, mainframe
1253 database, and mainframe middleware, which were all previously under the Application Tower.
1254 Capabilities may include but are not limited to application programming interfaces (APIs) and data
1255 integrator functionality.

1256 **Investment Usage:** Agencies should report Platform Standard Investments at the point of management.

1257 **Standard Investment Report: No.**

1258 There is no Standard Investment Report for Platform Standard Investments included in the FY 2021
1259 cycle. However, the need for a Standard Investment Report will continue to be evaluated to determine
1260 whether additional information relating to this type of Standard Investment would provide useful and
1261 actionable data for OMB and agencies.

1262   **APPENDIX A. LEGAL REGULATORY AUTHORITIES**

1263   The Federal Government must effectively manage its portfolio of capital assets to ensure scarce public
1264   resources are wisely invested. Capital programming integrates the planning, acquisition, and management
1265   of capital assets into the Budget decision-making process. It is intended to assist Agencies in improving
1266   asset management and in complying with the results-oriented requirements of:

1267   • The Federal Information Technology Acquisition Reform (FITARA) is Title VIII Subtitle D
1268   Sections 831-837 of H.R.3979 - Carl Levin and Howard P. "Buck" McKeon National Defense
1269   Authorization Act for Fiscal Year 2015.
1270   • The Clinger-Cohen Act of 1996, which requires Agencies to use a disciplined CPIC process to
1271   acquire, use, maintain, and dispose of IT in alignment with the Agency's EA planning processes.
1272   OMB policy for the management of Federal information resources is detailed in Circular No. A-
1273   130 (P.L. 104-106), Managing Information as a Strategic Asset.
1274   • The Government Performance and Results Act (GPRA) of 1993, which establishes the foundation
1275   for Budget decision making to achieve strategic objectives in order to meet Agency mission
1276   objectives. Instructions for preparing strategic plans, annual performance plans, and annual
1277   program performance reports are provided in Part 6 of OMB Circular No. A-11, Section 220
1278   (P.L. 103-62).
1279   • The GPRA Modernization Act of 2010 (P.L. 111-352), which requires quarterly performance
1280   assessments of Federal Government priorities and establishes Agency Performance Improvement
1281   Officers and the Performance Improvement Council.
1282   • The Federal Managers Financial Integrity Act of 1982 (P.L. 97-255), Chief Financial Officers Act
1283   of 1990 (CFO Act) (P.L. 101-576), and Federal Financial Management Improvement Act of 1996
1284   (P.L. 104-208), which require accountability of financial and program managers for financial
1285   results of actions taken, control over the Federal Government's financial resources, and protection
1286   of Federal assets. OMB policies and standards for developing, operating, evaluating, and
1287   reporting on financial management systems are contained in Circular No. A–127, Financial
1288   Management Systems and OMB Circular No. A-136.
1289   • The Paperwork Reduction Act of 1995 (P.L. 96-511), which requires Agencies to perform their
1290   information resources management activities in an efficient, effective, and economical manner.
1291   • The Federal Information Security Management Act (FISMA) of 2014 (P.L. 113-283), which
1292   requires Agencies to integrate IT security into their capital planning and EA processes, conduct
1293   annual IT security reviews of all programs and systems, and report the results of those reviews to
1294   OMB.
1295   • The E-Government Act of 2002 (P.L. 107–347), which requires Agencies to support
1296   Government-wide E-Government (E-Gov) initiatives and to leverage cross-Agency opportunities
1297   to further E-Gov. The Act also requires Agencies to establish a process for determining which
1298   government information the Agency intends to make available and accessible to the public on the
1299   Internet and by other means. In addition, as a general matter and absent an applicable exception,
1300   the Act requires Agencies to conduct and make publicly available privacy impact assessments
1301   (PIAs) when the agency develops, procures, or uses information technology to create, collect, use,
1302   process, store, maintain, disseminate, disclose, or dispose of personally identifiable information.
1303   • The National Technology Transfer and Advancement Act of 1995 (P.L. 104-113) and OMB
1304   Circular No. A-119, which state that voluntary consensus standards are the preferred type of
1305   standards for Federal Government use. When it would be inconsistent with law or otherwise
1306   impractical to use a voluntary consensus standard, Agencies must submit a report to OMB
1307   through NIST describing the reason(s) for the Agency's use of government-unique standards in
1308   lieu of voluntary consensus standards.
1309   • The Federal Records Act (44 U.S.C. Chapters 21, 29, 31, and 33), which requires Agencies to
1310   establish standards and procedures to ensure efficient and effective records management. The

1311   National Archives and Records Administration (NARA) issues policies and guidance for
1312   Agencies to meet their records management goals and requirements. NARA also provides
1313   policies and guidance for planning and evaluating Investments in electronic records management.

1314   • The Privacy Act of 1974 (5 U.S.C. § 552a), which can generally be characterized as an omnibus
1315   "code of fair information practices" that attempts to regulate the collection, maintenance, use, and
1316   dissemination of personal information by Federal executive branch Agencies.

1317   • NIST Special Publication 800-146 concepts and definitions regarding cloud computing.

1318   • Recent OMB IT policies and guidance, including:
1319   o Federal Information Technology Shared Services Strategy
1320   o The Common Approach to Federal Enterprise Architecture
1321   o The Federal Enterprise Architecture, Version 2.0
1322   o Contracting Guidance to Support Modular Development
1323   o The Federal Cloud Computing Strategy
1324   o Digital Government Strategy: Building a 21st Century Platform to Better Serve the
1325   American People
1326   o Security Authorization of Information Systems in Cloud Computing Environments
1327   (FedRAMP)
1328   o National Strategy for Information Sharing and Safeguarding
1329   o OMB Circular No. A-131, Value Engineering
1330   o OMB memo M-13-08 – Improving Financial Systems Through Shared Services
1331   o OMB memo M-13-09 – Fiscal Year 2013 PortfolioStat Guidance: Strengthening Federal
1332   IT Portfolio Management
1333   o OMB memo M-13-13 – Open Data Policy-Managing Information as an Asset
1334   o OMB memo M-14-03 – Enhancing the Security of Federal Information and Information
1335   Systems
1336   o OMB memo M-14-08 – Fiscal Year 2015 PortfolioStat
1337   o OMB memo M-15-14 – Management and Oversight of Federal Information Technology
1338   o OMB memo M-16-11 – Improving Administrative Functions Through Shared Services
1339   o OMB M-16-24 – Role and Designation of Senior Agency Officials for Privacy
1340   o Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic
1341   Performance
1342   o Executive Order 13423, Strengthening Federal Environmental, Energy, and
1343   Transportation Management
1344   o Executive Order 13642, Making Open and Machine Readable the New Default for
1345   Government Information, May 9, 2013
1346   o Executive Order 13587, Structural Reforms to Improve the Security of Classified
1347   Networks and the Responsible Sharing and Safeguarding of Classified Information
1348   o Federal Acquisition Regulation, including subchapter B, parts 5 through 12 and part 23
1349   o Federal Management Regulation, including subchapters B and C
1350   o Energy Independence and Security Act of 2007 (P.L. 110-140), including sections 431
1351   through 435 and 523 through 525
1352   o Energy and Policy Act of 2005 (P.L. 109–58), including sections 103, 104, 109, and 203
1353   o The Modernizing Government Technology Act (P.L. No. 115-91, National Defense
1354   Authorization Act for Fiscal Year 2018, Title X, Subtitle G, §§ 1076 through 1078)
1355   establishes the centralized Technology Modernization Fund for technology-related
1356   activities to improve information technology and enhance cybersecurity across the
1357   Federal Government, and further authorizes Agency IT Working Capital Funds for
1358   similar purposes.
1359

1360   **APPENDIX B. CODING INSTRUCTIONS FOR ADMINISTRATIVE AND MISSION SUPPORT**
1361   **SHARED OR CENTRALIZED SOLUTIONS**

1362   Agency shared services Investments not included in the table below should report code "48" for the
1363   "Shared Services Category" field in the IT Portfolio Summary.

E-Gov and LoB Initiative Investments (Category Code "24")				
E-Gov or LoB Initiative	**Acronym**	**Responsible Agency**	**Includes**	**Identifier**
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
Integrated Award Environment	IAE	GSA	Former IAE-Loans & Grants	0230
Geospatial LoB	GeoLoB	Interior		3100
Grants.Gov		HHS		0160
Human Resources LoB	HRLoB	OPM		1200
Recreation.Gov		USDA		0010
USAJOBS	USAJOBS	OPM	Former RecruitOnestop	1218

1364   *E-Rulemaking is scheduled to transition Responsible Agency in FY 2020 from EPA to GSA.

1365   A Partner Agency should list its Investment as Type 04 Funding Transfer and report funding in the
1366   Agency Funding fields. The Agency Lead should report both their Investment as a Type 01 Major
1367   Investment and funding from customers in the Agency Contribution fields.

1368   **APPENDIX C. DEFINITIONS**

1369   The list of common IT Budget – Capital Planning definitions is provided below:

Term	Source Document	Definition
Adequate Incremental Development	OMB Memo M-15-14	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	OMB Memo M-15-14	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)	OMB Memo M-18-12	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.
Alternatives Analysis	Capital Programming Guide	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 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

Term	Source Document	Definition
		development, modernization or enhancement. This terms refers to best practices outlined in the Capital Programming Guide under "I.4-Alternatives to Capital Assets" and "Evaluate Asset Options."
Application Programming Interface (API)	IT Budget - Capital Planning Guidance	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	31 U.S.C. § 1513(b); Executive Order 11541; OMB Circular A-11 Section 120	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	OMB Memo M-10-27	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)	OMB Circular A-94; Capital Programming Guide	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	OMB Circular A-11 Section 20.4	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 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.

Term	Source Document	Definition
Budgetary Resources	OMB Circular A-11 Section 20.3	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	OMB Memo M-15-14	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)	Business Reference Model, Version 3.1	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	Capital Programming Guide, Appendix 1	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)	IT Budget - Capital Planning Guidance	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)	40 U.S.C. § 11302	This term refers to a decision-making process that ensures IT Investments integrate strategic planning, budgeting, procurement, and management of IT in support of Agency missions and business needs. 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	IT Budget - Capital Planning	This term refers to an integrated process within an

Term	Source Document	Definition
Programming	Guidance	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 -The NIST Definition of Cloud Computing	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 - The NIST Definition of Cloud Computing for official government definition).
Cloud Computing Spending	IT Budget - Capital Planning Guidance	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	OMB Memo M-13-09	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 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

Term	Source Document	Definition
		cloud option exists. Additionally, Agencies shall continually evaluate cloud computing solutions across their IT portfolios, regardless of Investment type or life cycle stage.
Collaboration Tools	FEA Framework, Version 2.0	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. • 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. • 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.gov). • Does NOT include IT costs associated with conference-room audio or video teleconferencing as these are included under telecommunications.
Commodity IT	OMB Memo M-11-29; OMB Memo M-12 -10; OMB Memo M-19 -16	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 provider or consumer, instead of standing up separate independent services to eliminate duplication, rationalize the Agency's IT Investments, and drive down costs. There are three categories of Commodity IT:

Term	Source Document	Definition
		• 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. • IT Infrastructure - Items that pertain to this are: Desktop Systems; Mobile Devices; Mainframes and Servers; and Telecommunications. • 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.
Community Cloud	NIST Special Publication 800-145 -The NIST Definition of Cloud Computing	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 -The NIST Definition of Cloud Computing.
Contributions (or Expected Contributions)	IT Budget - Capital Planning Guidance	This term refers to 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 be collected from partner Agencies or partner sub-Agencies by either Multi-Agency collaborations or Intra-Agency shared services. • Contributions represents the sum portion for all funds collected by the SMO of the shared service. • Fee-for-service (a type of contribution) are typically use the Economy Act, 31 U.S.C. § 1535 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.
Cost	Capital Programming Guide	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 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

Term	Source Document	Definition
		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.
Cost Avoidance	OMB Circular A-131	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 OMB Circular A-131).
Cost Savings	OMB Circular A-131	Cost Saving refers to the reduction in actual expenditures to achieve a specific objective (as defined in OMB Circular A-131).
Current Year (CY)	OMB Circular A-11, Section 55	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.
Data Center	OMB Memo M-16-19	"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."
Dataset	OMB Memo M-13-13	This term refers to a collection of structured data presented in tabular or non-tabular form (per OMB M-13-13 Open Data Policy-Managing Information as an Asset).
Defense Acquisition Workforce Improvement Act (DAWIA) of 1990 (P.L. 101-510)	IT Budget - Capital Planning Guidance	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.
Dependency	IT Budget - Capital Planning Guidance	Dependency refers to the identification of relationships between projects and operational assets within an Investment as well as the identification of relationships between Investments.

Term	Source Document	Definition
		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)	IT Budget - Capital Planning Guidance	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	IT Budget - Capital Planning Guidance	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 www.acq.osd.mil/evm.	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 www.acq.osd.mil/evm.
E-mail	FEA Framework, Version 2.0	Electronic mail is the exchange of computer generated and stored messages by 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

Term	Source Document	Definition
		vendor, this is the obligation for e-mail related costs. • 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. • Does not include the cost of the end user client computing device/software or the telecommunications cost for the LAN/WAN/wireless costs.
Enterprise Architecture (EA)	OMB Circular A-130	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, publics access, end-user satisfaction, and IT security.
Enterprise Roadmap	OMB Memo M-13-09	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.
Evaluation (by Agency CIO)	IT Budget - Capital Planning Guidance	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

Term	Source Document	Definition
		important whenever the rating has changed since the last evaluation.
FEA Mapping Codes	FEA Framework, Version 2.0	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.
Federal Acquisition Certification for Program and Project Managers (FAC-P/PM)	FAC-P/PM	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.
Federal Enterprise Architecture (FEA)	IT Budget - Capital Planning Guidance	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 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.

Term	Source Document	Definition
Federal Information System	OMB Circular A-130	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)	www.itdashboard.gov	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.
Full Funding	OMB Circular A-11, Section 31.5	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 cost (see Section 31.5 of OMB Circular A-11 and the Capital Programming Guide).
Functional/Business Sponsor	IT Budget - Capital Planning Guidance	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)). 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.
Funding	Capital Programming Guide	There are two types of funding for projects: (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

Term	Source Document	Definition
		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. (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.
Funding Source	IT Budget - Capital Planning Guidance	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 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	IT Budget - Capital Planning Guidance	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	[OMB Circular A-130](#)	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 [OMB Circular A-131](#)).
Help desk (End User Support)	[FEA Business Reference Model v 3.1](#)	Help Desk Services involves the operation of a service center to respond to government and contract employees' end user device and software

Term	Source Document	Definition
		support needs (includes, but is not limited to, costs related to employees, contractors, and ticket management software).
Hybrid Cloud	NIST Special Publication 800-145 -The NIST Definition of Cloud Computing	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 -The NIST Definition of Cloud Computing 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. • Costs include all IT related to identity and access management including cost of PIV cards, certificates, software licenses, server and communications hardware, equipment, data center allocation/charges, storage, backup solution, and contractors.
Information Resources Management (IRM) Strategic Plan	44 U.S.C. § 3506(b)(2); OMB Circular A-130	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	Federal Information Security Management Act (FISMA) of 2014 (P.L. 113-283)	This term refers to protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide-- (A) integrity, which means guarding against improper information modification or destruction,

Term	Source Document	Definition
		and includes ensuring information nonrepudiation and authenticity;
		(B) confidentiality, which means preserving authorized restrictions on access and disclosure, including means for protecting personal privacy and proprietary information; and
		(C) availability, which means ensuring timely and reliable access to and use of information.
Information System	44 U.S.C. § 3502; OMB Circular A-130	Information System refers a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, transmission, or dissemination of information (see Circular A-130 and 44 U.S.C. § 3502).
Information Technology (IT)	OMB Memo M-15-14	IT is defined as: A. Any services or equipment, or interconnected system(s) or subsystem(s) of equipment, that are used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the Agency; where 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. 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. D. IT Includes High Performance Computing (HPC) capabilities including capabilities that are not commodity in nature. 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.
Infrastructure as a Service (IaaS) Cloud Computing	NIST Special Publication 800-145 -The NIST Definition of Cloud Computing	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

Term	Source Document	Definition
		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 - The NIST Definition of Cloud Computing for official government definition).
Integrated Program/ Project Team (IPT)	Capital Programming Guide	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	Capital Programming Guide	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	OMB Circular A-11 Section 55	This term refers to the expenditure of IT resources to address mission delivery and management support. An IT Investment may include a project or

Term	Source Document	Definition
		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, 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. 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.
IT Migration Investment	IT Budget - Capital Planning Guidance	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.
IT Program Managers and IT Project Managers	IT Budget - Capital Planning Guidance	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).
IT Resources	OMB Memo M-15-14	IT Resources is defined as: 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; B. acquisitions or Inter-Agency agreements that include IT and the services or equipment provided by such acquisitions or Inter-Agency agreements; but C. does not include grants to third parties which establish or support IT not operated directly by the

Term	Source Document	Definition
		Federal Government.
IT Service	ISO 20000	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: ISO 20000)
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.
Legacy Information Technology System	Modernizing Government Technology Act (MGT Act); National Defense Authorization Act (NDAA Act)	An outdated or obsolete system of information technology.
Life Cycle Costs	Capital Programming Guide; OMB Circular A-131	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 OMB Circular A-131.
Local-Area Network (LAN)	IT Budget - Capital Planning Guidance	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	Federal Accounting Standards Advisory Board Statement of Federal Financial Accounting Standards Number 10	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

Term	Source Document	Definition
		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 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	OMB Memo M-15-14	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. 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	Contracting Guidance to Support Modular Development, June 14, 2012	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	OMB Circular A-131	The amount of cost savings (per Circular A-131) minus the cost required to implement and operate the cost savings or cost avoidance strategy.
Network storage	OMB Circular A-130	Applies to any data processing environment (such as production, backup, DR/COOP, test, development, etc.) and includes: • Hardware (storage controllers, storage servers): Includes all dedicated storage hardware devices

Term	Source Document	Definition
		such as controllers, servers, disk arrays, tape libraries, and optical jukeboxes, as well as supplies (media) used to store data offline such as tapes. • 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. • Disaster recovery: Includes the hardware, software, facilities and contracts specifically dedicated to disaster recovery for storage management. • Outsourcing: Includes third party and outsource contracts, such as managed storage services and cloud-based storage. • 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. *Note*: Dollars should only appear in ONE category, for example network storage OR mainframes and servers.
New IT Investment	IT Budget - Capital Planning Guidance	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	IT Budget - Capital Planning Guidance	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	IT Budget - Capital Planning Guidance	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 respect to the President's Budget for the current

Term	Source Document	Definition
		year (CY) — in this case, for FY 2017.
Operational Analysis	Capital Programming Guide; GAO-13-87	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 GAO-13-87 report.
Operations	OMB Circular A-130; IT Budget - Capital Planning Guidance	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.
Operations and Maintenance (Steady State) Costs	IT Budget - Capital Planning Guidance	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-to-day service issues. The Managing Partner handles major contract issues and resolves escalation items with Suppliers. The Partner

Term	Source Document	Definition
		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.
Performance-Based Acquisition Management	FAR 37.6	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&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.
Performance Reference Model (PRM)	FEA Framework, Version 2.0; GPRA 2010 Public Law 111-352	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 and outcome measurements throughout the Executive Branch of the Federal Government, as is required by the Government Performance and

Term	Source Document	Definition
		Results Modernization Act of 2010 (P.L. 111-352). Current PRM service codes can be found in PRM version 3.
Planning	40 U.S.C. § 11315; OMB Circular A-130	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 -The NIST Definition of Cloud Computing	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 -The NIST Definition of Cloud Computing).
PortfolioStat Review	OMB memo M-13-09; 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 Portfolio Management.
Post-Implementation	Capital Programming Guide; OMB Circular A-130	PIR refers to an evaluation of how successfully the Investment or project objectives were met and how

Term	Source Document	Definition
Review (PIR)		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	OMB Circular A-130	Privacy impact assessment is an analysis of how information is handled to ensure handling conforms to applicable legal, regulatory, and policy requirements regarding privacy; to determine the risks and effects of creating, collecting, using, processing, storing, maintaining, disseminating, disclosing, and disposing of information in identifiable form in an electronic information system; and to examine and evaluate protections and alternate processes for handling information to mitigate potential privacy concerns. A privacy impact assessment is both an analysis and a formal document detailing the process and the outcome of the analysis. Privacy impact assessments are required when developing, procuring, or using IT, in accordance with the E-Government Act, and should be made available to the public in accordance with OMB policy.
Private Cloud	NIST Special Publication 800-145 - The NIST Definition of Cloud Computing	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 - The NIST Definition of Cloud Computing).
Project	40 U.S.C. § 11315; OMB Circular A-130	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

Term	Source Document	Definition
		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.
Project Manager Level of Experience	Federal IT Project Manager Guidance Matrix published by the CIO Council	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 Federal IT Project Manager Guidance Matrix published by the CIO Council.
Provisioned IT Service	IT Budget - Capital Planning Guidance	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 -The NIST Definition of Cloud Computing	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 -The NIST Definition of Cloud Computing).
Records	44 U.S.C. § 3502; OMB Circular A-130	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

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		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.
Risk Management	OMB Circular A-123	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	OMB Circular A-123	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)	Federal Security Operations Center Best Practices, 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.
Senior Agency Official for Privacy (SAOP)	OMB M-16-24	To ensure that agencies effectively carry out the privacy-related functions described in law and OMB policies, Executive Order 13719 requires the head of each agency to designate or re-designate an SAOP who has agency-wide responsibility and accountability for the agency's privacy program.
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)	OMB Memo M-15-14	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

Term	Source Document	Definition
		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	IT Budget - Capital Planning Guidance	This term refers to the provider of a technical solution and/or service that supports the business of 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)	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. • 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. • 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. • Centralized Services – Creating a single Federal-wide location for highly standardized activities, allowing organizations and users to benefit from consistent and uniform processes.
Software as a Service (SaaS) Cloud Computing	NIST Special Publication 800-145 -The NIST Definition of Cloud Computing	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 -The NIST Definition of Cloud Computing).
Standard Investment	IT Budget - Capital Planning Guidance	Part 3: IT Investments for IT Infrastructure, IT Security, and IT Management. Also see IT Security and Compliance, IT Management, Network, Data

Term	Source Document	Definition
		Center and Cloud, End User, Output, Application, Delivery, and Platform Standard Investment definitions found in sections 14-21 of this guidance.
Standard Investment Report	IT Budget - Capital Planning Guidance	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. Some Standard Investment Report performance data is reported through the IDC.
TBM IT Cost Pool and IT Tower Definitions	TBM Taxonomy v3.0	TBM v3.0 provides definitions for every IT Cost Pool and IT Tower referenced by the IT Budget – Capital Planning Guidance.
TechStat Accountability Review	OMB Memo M-10-31	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 https://www.cio.gov/fed-it-topics/sustainability-transparency/techstat/browse-toolkit/).
Telecommunications	44 U.S.C. § 3542; OMB Circular A-130	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 WAN/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). • Voice Network/Services are (WASP/WITS, Legacy Analogue/Digital Voice, Voice Mail, Conference Bridge, automated operator services, and VoIP). • Wide Area Network (WAN) is a private, public or hybrid geographically dispersed network. • Local Area Network (LAN) is a private, public, or hybrid local area network. • Trusted Internet Connection (TIC) infrastructures, which provide a layer of consolidation and security for internet facing traffic. • 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

Term	Source Document	Definition
		specialized VTC used for remote or ad hoc shared connectivity. Typically utilizes PRI, IP, ISDN, or Ethernet for connectivity. • Labor Costs including - FTE, Contract Support, Managed Services, and Other elements. Excludes cellular equipment, devices, or services which are included in Mobile Devices.
Unique Investment Identifier (UII)	OMB Memo M-11-33	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." http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-33.pdf - Page 14
Wide-Area Network (WAN)	IT Budget - Capital Planning Guidance	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 MAN.

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1372 **APPENDIX D. RISK ANALYSIS MATERIALS**

1373 The table below provides standard definitions for each Risk Area listed in Major IT Business Case Detail
1374 Section B. The Risk Areas are the same as those presented in the Capital Programming Guide Appendix 5
1375 in A-11 and incorporate elements from the GSA OSSPI Risk-Assessment-Tool for IT migrations.

Risk Area	Definition
Technology	Risk(s) associated with technical functionality or IT tools.
Project Schedule and Resources	Risk(s) associated with the adequacy of the time estimated for completion of IT program milestones.
Business	Risk(s) associated with acquisition planning and contract management.
Organizational and Change Management	Risk(s) associated with the organizational/Agency/Government-wide cultural resistance to change and standardization.
Strategic	Risk(s) associated with the Investment's failure to achieve the Agency's strategic goals or to drive Agency priorities.
Security	Risk(s) associated with threats to the confidentiality, integrity, or availability of Agency information.
Privacy	Risk(s) to individuals associated with creating, collecting, using, processing, storing, maintaining, disseminating, disclosing, or disposing of Personally Identifiable Information (PII).
Data	Risk(s) associated with the data or information collection burden and accuracy.
Integration	Risk(s) associated with the integration of technology, people, and processes.

Project Team	Risk(s) associated with the investment having a team of qualified professionals with the necessary skills and experience to execute upon the project's goals, budget, and timelines.
Requirements	Risk(s) associated with the adequacy of requirements definition and agreement by relevant functional and technical subject matter experts.
Cost	Risk(s) associated with inadequate cost estimates during planning or unanticipated overruns.
Project Management	Risk(s) associated with an investment having qualified management, strong leadership, and effective communication.

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