# CIRCULAR NO. A–11 PART 7

# PLANNING, BUDGETING, ACQUISITION, AND MANAGEMENT OF CAPITAL ASSETS



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
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## SECTION 300—PLANNING, BUDGETING, ACQUISITION, AND MANAGEMENT OF CAPITAL ASSETS

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Ex-300 Capital Asset Plan and Business Case

Appendix 300A: Principles of Budgeting for Capital Asset Acquisitions

Appendix 300B: Selected OMB Guidance and Other References Regarding Capital Assets

#### **Summary of Changes**

Renames exhibit 300 "Capital Asset Plan and Business Case."

Provides details on risk identification and assessment, project and funding plan, and Section 508 compliance to part I of exhibit 300.

Adds requirement of earned value management system and ANSI/EIA Standard 748.

Adds questions about cyber-security and homeland security to the beginning section of exhibit 300.

Moves the questions that apply to all assets (IT, construction, etc.) to part I of exhibit 300, and reserves part II for additional business case criteria for IT.

Adds dates to many of the life-cycle documents mentioned in the business cases.

Removes the "significant" project classification for IT.

Adds a new section on how OMB will evaluate the business cases in the exhibits 300 (300.10).

#### 300.1 What is the purpose of this section?

Part 7 (section 300) of this Circular establishes policy for planning, budgeting, acquisition and management of Federal capital assets, and instructs you on budget justification and reporting requirements for major acquisitions and major IT systems or projects. OMB provides procedural and analytic guidelines for implementing specific aspects of these policies as appendices and supplements to this Circular and in other OMB Circulars. For information technology, this is a companion section to section 53.

#### 300.2 Does this section apply to me?

The policy and budget justification and reporting requirements in this section apply to all agencies of the Executive Branch of the government that are subject to Executive Branch review (see section 25.1).

#### 300.3 What background information must I know?

The Federal Government must effectively manage its portfolio of capital assets to ensure that scarce public resources are wisely invested. Capital programming integrates the planning, acquisition and management of capital assets into the budget-decision-making process, and is intended to assist agencies improve asset management and to comply with the results-oriented requirements of:

- The Government Performance and Results Act of 1993, which establishes the foundation for budget decision-making to achieve strategic goals in order to meet agency mission objectives. Instructions for preparing strategic plans, annual performance plans and annual program performance reports are provided in part 6 of this Circular (see section 220.4 (d)).
- The Federal Managers Financial Integrity Act of 1982, Chief Financial Officers Act of 1990 and Federal Financial Management Improvement Act of 1996, which require accountability of financial and program managers for financial results of actions taken, control over the Federal government's financial resources, and protection of Federal assets. OMB policies and standards for developing, operating, evaluating, and reporting on financial management systems are contained in Circular A–127, Financial Management Systems and section 52 of this Circular.
- The Paperwork Reduction Act of 1995, which requires that agencies perform their information resource management activities in an efficient, effective and economical manner.
- The Clinger-Cohen Act of 1996, which requires agencies to use a disciplined capital planning and investment control process to acquire, use, maintain and dispose of information technology. OMB policy for management of Federal information resources is contained in Circular A–130, *Management of Federal Information Resources*, and section 53 of this Circular.
- The Federal Acquisition Streamlining Act of 1994, Title V (FASA V), which requires agencies to establish cost, schedule and measurable performance goals for all major acquisition programs, and achieve on average 90 percent of those goals. OMB policy for performance-based management is also provided in this section.
- The Government Information Security Reform Act of 2000 (GISRA), which requires agencies to integrate IT security into their capital planning and enterprise architecture processes at the agency.

#### 300.4 What special terms must I know?

Capital assets are land, structures, equipment, intellectual property (e.g., software), and information technology (including IT service contracts) that are used by the Federal government and have an estimated useful life of two years or more. See Appendix One of the Capital Programming Guide for a more complete definition of capital assets. Capital assets do not include items acquired for resale in the ordinary course of operations or items that are acquired for physical consumption, such as operating materials and supplies. Capital assets may be acquired in different ways: through purchase, construction, or manufacture; through a lease-purchase or other capital lease (regardless of whether title has passed to the Federal Government); through an operating lease for an asset with an estimated useful life of two years or more; or through exchange. Policy on leases is contained in part I, section 33.4. Capital assets

may or may not be capitalized (i.e., recorded in an entity's balance sheet) under Federal accounting standards. Capital assets do not include grants to State and local governments or other entities for acquiring capital assets (such as National Science Foundation grants to universities or Department of Transportation grants to AMTRAK) or intangible assets, such as the knowledge resulting from research and development or the human capital resulting from education and training. For more discussion on capital assets, you should consult the *Capital Programming Guide* (June 1997), a Supplement to this Circular

Capital planning and investment control (CPIC) is the same as capital programming and is a decision-making process for ensuring that information technology (IT) investments integrate strategic planning, budgeting, procurement, and the management of IT in support of agency missions and business needs. The term comes from the Clinger-Cohen Act of 1996 and generally is used in relationship to IT management issues.

*Capital programming* means an integrated process within an agency for planning, budgeting, procurement and management of the agency's portfolio of capital assets to achieve agency strategic goals and objectives with the lowest life-cycle cost and least risk.

*Capital project* means the acquisition of a capital asset and the management of that asset through its lifecycle after the initial acquisition. Capital projects may consist of several useful segments.

**Earned value management (EVM)** is a project management tool that effectively integrates the project scope of work with schedule and cost elements for optimum project planning and control. The qualities and operating characteristics of earned value management systems are described in American National Standards Institute (ANSI)/Electronic Industries Alliance (EIA) Standard –748–1998, *Earned Value Management Systems*, approved May 19, 1998. A copy of Standard 748 is available from Global Engineering Documents (1–800–854–7179). Information on earned value management systems is available at <a href="http://www.acq.osd.mil/pm">http://www.acq.osd.mil/pm</a>.

*E-business* (Electronic Business) means doing business online. E-business is often used as an umbrella term for having an interactive presence on the Web. A government e-business initiative or project includes web-services type technologies, component based architectures, and open systems architectures designed around the needs of the customer (citizens, business, governments, and internal Federal operations).

**E-Government** is the use by the government of web-based Internet applications and other information technologies, combined with processes that implement these technologies.

Federal enterprise architecture business reference model (IT related) is a function-driven framework for describing the Lines of Business and Internal Functions performed by the Federal Government independent of the Agencies that perform them. The Business Reference Model (BRM) serves as the business layer of the Federal Enterprise Architecture (FEA). It provides a foundation on which the applications, data, and technology layers of the FEA are developed. Agency Capital Asset Plans and Business Cases (exhibit 300s) will be mapped against this framework to identify opportunities for crossagency collaboration and potential system redundancies.

The BRM employs a three-tiered hierarchy to describe the business of the Federal government. *Business Areas* provide a high-level view of the types of operations the Federal Government performs. The Four Business Areas decompose into 31 *Lines of Business* and *Internal Functions*. The Lines of Business describe more specifically the services and products the Government provides to its stakeholders, while the Internal Functions describe the back office and support activities that enable the Government to

operate. Finally, there are 132 *Sub-Functions* that form the final level of decomposition within the FEA BRM and communicate the specific activities that Federal Agencies perform within each Line of Business and Internal Function.

**Full acquisition** means the procurement and implementation of a capital project or useful segment/module of a capital project. Full acquisition occurs after all planning activities are complete and the agency's Executive Review Committee or Investment Review Board selects and approves the proposed technical approach and project plan, and establishes the baseline cost, schedule and performance goals for this phase of the investment.

**Full funding** means that appropriations—regular annual appropriations or advance appropriations—are enacted that are sufficient in total to complete a useful segment of a capital project before any obligations may be incurred for that segment. When capital projects or useful segments are incrementally funded, without certainty if or when future funding will be available, it can result in poor planning, acquisition of assets not fully justified, higher acquisition costs, project delays, cancellation of major projects, the loss of sunk costs, or inadequate funding to maintain and operate the assets. Budget requests for full acquisition of capital assets must propose full funding (see section 31.4).

Information technology, as defined by the Clinger-Cohen Act of 1996, sections 5002, 5141, and 5142, means any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For purposes of this definition, equipment is "used" by an agency whether the agency uses the equipment directly or it is used by a contractor under a contract with the agency that (1) requires the use of such equipment or (2) requires the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product. Information technology includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources. It does not include any equipment that is acquired by a Federal contractor incidental to a Federal contract.

**Integrated project team (IPT)** means a multi-disciplinary team led by a program manager responsible and accountable for planning, budgeting, procurement and life-cycle management of the project to achieve its cost, schedule and performance goals. Team skills include: budgetary, financial, capital planning, procurement, user, program, value management, earned value management, and other staff as appropriate.

*Life-cycle costs* means the overall estimated cost for a particular program alternative over the time period corresponding to the life of the program, including direct and indirect initial costs plus any periodic or continuing costs of operation and maintenance.

*Major acquisition* means a capital project that requires special management attention because of its: (1) importance to an agency's mission; (2) high development, operating, or maintenance costs; (3) high risk; (4) high return; or (5) significant role in the administration of an agency's programs, finances, property, or other resources. The agency's documented capital programming process should include the criteria for determining when a project is classified as major.

Major IT system or project means a system that requires special management attention because of its importance to an agency mission; its high development, operating, or maintenance costs; or its significant role in the administration of agency programs, finances, property, or other resources. Large infrastructure investments (e.g., major purchases of personal computers or local area network improvements) should also be evaluated against these criteria. Your agency Capital Planning and Investment Control Process may also define a "major system or project." All major systems or projects must be reported on exhibit 53. In addition, a "major" IT system is one reported on your "Capital Asset Plan and Business Case,"

exhibit 300. For the financial management mission area, "major" is any system that costs more than \$500,000. Additionally, if the project or initiative directly supports the President's Management Agenda Items, then the project meets the criteria of "high executive visibility". Projects that are E-Government in nature or use e-business technologies must be identified as major projects regardless of the costs. If you are unsure about what systems to consider as "major," consult your agency budget officer or OMB representative. Systems not considered "major" are "small/other."

**Mixed life-cycle project** means a project that has both development/modernization/enhancement (DME) and steady state aspects. For example, a mixed life-cycle project could include a prototype or module of a system that is operational with the remainder of the system in DME stages; or, a service contract for steady state on the current system with a DME requirement for system upgrade or replacement.

**On-going project** means a project that has been through a complete budget cycle with OMB and represents budget decisions consistent with the President's Budget for the prior year (BY-1).

*Operational (steady state) asset* means an asset or part of an asset that has been delivered and is performing the mission.

**Performance-based acquisition management** means a documented, systematic process for program management, which includes integration of program scope, schedule and cost objectives, establishment of a baseline plan for accomplishment of program objectives, and use of earned value techniques for performance measurement during execution of the program. For the acquisition parts of the project, the system is established and applied by the contractor(s) and must meet the requirements of ANSI/EIA Standard 748, Earned Value Management Systems. For those parts of the project accomplished by Government personnel or in an operational (steady state) mode, a performance-based management system must be established, using EVMS where possible, to measure achievement of the cost, schedule and performance goals.

**Planning** means preparing, developing or acquiring the information you will use to design the project; assess the benefits, risks, and risk-adjusted life-cycle 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 segment or terminating the project. Planning must progress to the point where you are ready to commit to achieving specific goals for the completion of the acquisition. Information gathering activities may include market research of available solutions, architectural drawings, geological studies, engineering and design studies, and prototypes. Planning is a useful segment of a capital project. Depending on the nature of the project, one or more planning segments may be necessary.

**Section 508** refers to Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d), which requires Federal agencies to develop, procure, maintain, or use electronic and information technology (EIT) that is accessible to Federal employees and members of the public with disabilities.

**Small/other IT project** means any initiative or project not meeting the definition of major defined above but that is part of the agency's IT investments.

*Useful segment/module* means an economically and programmatically separate component of a capital project that provides a measurable performance outcome for which the benefits exceed the costs, even if no further funding is appropriated.

Additional budget terms and definitions are included in the Glossary in Appendix 300A, "Principles of Budgeting for Capital Asset Acquisitions."

#### 300.5 How will agencies manage capital assets?

Agencies must establish and maintain a capital programming process that links mission needs and capital assets in an effective and efficient manner. Effective capital programming requires long-range planning and a disciplined budget decision-making process as the basis for managing a portfolio of assets to achieve performance goals and objectives with minimal risk, lowest life-cycle costs, and greatest benefits to the agency's business. The process will integrate the agency's capital investments; strategic and performance plans prepared pursuant to the Government Performance and Results Act of 1993; financial management plans prepared pursuant to the Chief Financial Officer Act of 1990 (31 U.S.C. 902a5); information resource management plans prepared pursuant to the Clinger-Cohen Act (Pub. L. 104–106, Division E); method for performance-based acquisition management under the Federal Acquisition Streamlining Act of 1994, Title V; and budget formulation and execution processes.

The documented capital programming process defines how an agency will select capital projects included in the agency's capital asset portfolio for funding each year; how capital projects, once initiated, will be controlled to achieve intended cost, schedule, and performance outcomes; and how once the asset is operational the agency will continue to evaluate asset performance to maintain a positive return on investment. A cross-functional executive review committee acting for or with the Agency Head must be responsible for managing the agency's entire capital asset portfolio, making decisions on the best allocation of assets to achieve strategic goals and objectives within budget limits. This process must also leverage opportunities for collaboration across agencies on capital assets that support common lines of business to serve the citizens, businesses, governments, and internal Federal operations.

The Capital Programming Guide, which supplements this part, provides guidance on the principles and techniques for effective capital programming. Appendix 300A of this part explains the principles of financing capital asset acquisitions. Section 8b of OMB Circular A–130 establishes additional requirements for enterprise architectures, planning and control of information systems and technology investments and performance management. Agencies must develop, implement and use a capital programming process to develop their capital asset portfolio, and must:

- Evaluate and select capital asset investments that will support core mission functions that must be performed by the Federal government and demonstrate projected returns on investment that are clearly equal to or better than alternative uses of available public resources;
- Initiate improvements to existing assets or acquisitions of new assets only when no alternative private sector or governmental source can more efficiently meet the need;
- Simplify or otherwise redesign work processes to reduce costs, improve effectiveness, and make maximum use of commercial services and off-the-shelf technology;
- Reduce project risk by avoiding or isolating custom designed components, using components that
  can be fully tested or prototyped prior to full implementation or production, ensuring involvement
  and support of users in the design and testing of the asset;
- Structure major acquisitions into useful segments with a narrow scope and brief duration, make
  adequate use of competition and appropriately allocate risk between government and contractor.
  The agency head must approve or define the cost, schedule and performance goals for major
  acquisitions, and the agency's Chief Financial Officer must evaluate the proposed cost goals;
- Institute performance measures and management processes that monitor and compare actual performance to planned results. Agencies must use a performance-based acquisition management

system, based on the ANSI/EIA Standard 748, to obtain timely information regarding the progress of capital investments. The system must also measure progress towards milestones in an independently verifiable basis, in terms of cost, capability of the investment to meet specified requirements, timeliness, and quality. Agencies are expected to achieve, on average, 90 percent of the cost, schedule and performance goals for major acquisitions. Agency heads must review major acquisitions that are not achieving 90 percent of the goals to determine whether there is a continuing need and what corrective action, including termination, should be taken;

- Ensure that information technology systems conform to the requirements of OMB Circular No. A–130, "Management of Federal Information Resources;"
- Ensure that financial management systems conform to the requirements of OMB Circular No. A–127, "Financial Management Systems;"
- Conduct post-implementation reviews of capital programming and acquisition processes, and projects to validate estimated benefits and costs, and document effective management practices, i.e., lessons learned, for broader use; and
- Establish oversight mechanisms that require periodic review of operational capital assets to determine how mission requirements might have changed, and whether the asset continues to fulfill ongoing and anticipated mission requirements, deliver intended benefits to the agency and customers, and meet user requirements.

#### 300.6 How are capital asset acquisitions funded?

#### (a) Background.

Good budgeting requires that appropriations for the full costs of asset acquisition be enacted in advance to help ensure that all costs and benefits are fully taken into account when decisions are made about providing resources. For most spending on acquisitions, this rule is followed throughout the Government. When capital assets are funded in increments, without certainty if or when future funding will be available, it can and occasionally does result in poor planning, acquisition of assets not fully justified, higher acquisition costs, project delays, cancellation of major projects, the loss of sunk costs, or inadequate funding to maintain and operate the assets.

#### (b) *Full funding policy*.

The full funding policy (see section 31.4) requires that each useful segment (or module) of a capital project be fully funded with either regular annual appropriations or advance appropriations. For definitions of these terms, see section 300.4 or the Glossary to Appendix 300A. Appendix 300A elaborates on the full funding concept (see the Principles of Financing section).

For the initial budget submissions, you are required to request full budget resources for all ongoing and new proposals for capital assets or at least for each useful segment of a capital project.

Identify in the initial budget submission any additional budget authority required to implement full funding for existing projects. Adjustments to your planning guidance levels will be considered based on your budget submissions.

#### 300.7 What is exhibit 300 and how is it organized?

The information you report on exhibit 300 helps OMB:

- Understand your agency's capital programming and investment decision-making processes;
- Ensure that spending on capital assets directly supports your agency's mission and will provide a return on investment equal to or better than alternate uses of funding;
- Identify poorly performing projects, i.e. projects that are behind schedule, over budget, or lacking in capability; and
- Identify capital assets that no longer fulfill ongoing or anticipated mission requirements or do not deliver intended benefits to the agency or its customers.
- For IT, ensure that strong business cases are provided for IT investments. These business cases should include security, privacy, enterprise architecture, and provide the effectiveness and efficiency gains planned by the business lines and functional operations.

Exhibit 300 consists of two parts, each of which is designed to collect information that will assist OMB during budget review. Agencies must review their portfolio of capital assets each year to determine whether it continues to meet agency mission needs reconciled with existing capabilities, priorities and resources. Capital asset investments should be compared against one another, rated and ranked using decision criteria (such as investment size, complexity, technical risk, expected performance benefits or improvement) to create a prioritized portfolio. You should request funding only for priority capital asset investments that demonstrate compliance with the requirements for managing capital assets described in this section and the agency's capital programming process. As a general presumption, OMB will only consider recommending for funding in the President's budget, priority capital asset investments that comply with the policies for good capital programming described in section 300.5, and the Capital Programming Guide.

New projects must be justified based on the need to fill a gap in the agency's ability to meet strategic goals and objectives (including those identified in section 53) with the least life-cycle costs of all the various possible solutions and provide risk-adjusted cost and schedule goals and measurable performance benefits. Projects that are still in the planning or full acquisition stages must demonstrate satisfactory progress toward achieving baseline cost, schedule and performance goals. Assets that are in operation (steady state) must demonstrate how close actual annual operating and maintenance costs are to the original life-cycle cost estimates, and whether the level or quality of performance/capability meets the original performance goals and continues to meet agency and user needs.

OMB will present investments for the President's E-Government initiatives, as well as new E-Government investments identified through the Federal business architecture, using an integrated budget process that compliments each agency's investment portfolio. OMB will work with agencies to build from the IT and E-Government strategy outlined in section 53 of OMB Circular A–11 in identifying these cross-agency investments. Accordingly, where one agency's activities should be aligned with those of another agency in order to serve citizens, businesses, governments, and internal Federal operations, OMB will give priority to agencies that have worked collectively to present and support activities in an integrated fashion. The FY 2004 Budget will appropriately reflect such interagency collaboration, and agencies will be expected to use the exhibit 300 to demonstrate these efforts.

#### 300.8 What other requirements does exhibit 300 fulfill?

Exhibit 300 is designed to coordinate OMB's collection of agency information for its reports to Congress required by the Federal Acquisition Streamlining Act of 1994 (FASA) (Title V) and the Clinger-Cohen Act of 1996; to ensure that the business case for investments are made and tied to the mission statements, long-term goals and objectives, and annual performance plans that you developed pursuant to the Government Performance and Results Act of 1993 (GPRA); and for IT, to ensure that security, privacy, records management, and electronic transactions policies are fully implemented.

#### 300.9 What must I report on exhibit 300 and when?

Capital asset plans and business cases (exhibit 300) are products of your capital programming and/or capital planning and investment control process and should be developed for all capital assets. Capital asset plans for major acquisitions, projects, or systems are reported to OMB. You must submit a capital asset plan for each major new and on-going major project, system, or acquisition, and operational (steady state) asset included in your agency's capital asset portfolio. For agency programs that cover more than one asset, separate exhibit 300s are required for each asset along with a program summary exhibit 300. A major project requires special management attention because of its: (1) importance to an agency's mission; (2) high development, operating, or maintenance costs; (3) high risk; (4) high return; or (5) significant role in the administration of an agency's programs, finances, property, or other resources.

Major IT projects are also defined as projects, systems, or initiatives that employ e-business or E-Government technologies thereby supporting the expanding E-Gov initiative of the President's Management Agenda. Major IT projects must have the concurrence of the Chief Information Officer (see section 53 for more information about major information technology projects). Your documented capital planning and investment control process must also define a major IT project.

Exhibit 300 requires information that demonstrates compliance with the capital programming and capital planning and investment control policies of this section and, for IT, OMB Circular A–130, and justifies new or continued funding for major acquisitions by demonstrating: a direct connection to your agency's strategic plan; a positive return on investment for the selected alternative; sound acquisition (program and procurement) planning; comprehensive risk mitigation and management planning; and realistic cost and schedule goals and measurable performance benefits. Detailed information to substantiate the portfolio of major projects included in your justification will be documented in accordance with your agency's capital programming process. An electronic version of exhibit 300 is available at <a href="https://www.cio.gov">www.cio.gov</a>.

For information technology, the funding stages for "Planning" plus "Full acquisition" are the same as the "Development/modernization/enhancement" entry described in exhibit 53, and "Maintenance" is the same as "Steady state" in exhibit 53. For further details on IT and IT reporting please see section <u>53</u>. Detail on information technology reported in exhibit 300 should be aggregated and used to prepare exhibit 53.

The information you must report will depend on whether you are reporting a new project or an ongoing project (see the exhibit heading in part I).

#### **New Projects**

If you are reporting a new project, i.e., proposed for BY or later, or are reporting this project to OMB for the first time, you must complete part I, except for sections I.H.3 and I.H.4. For IT, you must also complete part II. Projects in initial concept or planning phase will have less detail and defined specificity than projects moving into the acquisition or operational phase. Where prototypes are acquired as part of

the planning process, they must be reported as full acquisitions. All of the areas on the exhibit 300 must be part of an agency's planning and the business case (exhibit 300) updated as soon as the information is known. While exhibit 300s are officially submitted to OMB twice yearly, they should be management tools used within an agency and updated as the information is available. If a project you are reporting has not reached the life-cycle phase that would provide a particular part of the business case, the exhibit 300 should note that information and when you believe the information will be available or when the decision can be made

#### **Ongoing Projects**

If you are reporting an ongoing project that is other than IT, you must complete all sections of part I as appropriate for the phase of the project. IT projects must complete parts I and II. If any of the cost, schedule or performance variances are a negative 10 percent or more you must provide a complete analysis of the reasons for the variances, the corrective actions that will be taken and the most likely estimate at completion (EAC). Use the EVMS system to identify the specific work packages where problems are occurring. Discuss why the problems occurred and corrective actions necessary to return the program as close as feasible to the current baseline goals. Based on the above analysis, provide and discuss the rationale for the IPT's latest EAC as the most likely EAC. In addition, provide the contractor's EAC and EAC's derived from at least two common prediction formulas (see paragraph I.H.4 in exhibit 300) from the EVMS system and discuss the differences with the IPT EAC. EAC's are subjective in nature and contractor and government EAC's are often quite optimistic in an attempt to favor project continuation. Using the prediction formulas will give the IPT some proven parameters to structure the discussion. The objective is to provide a realistic EAC for management decisions, to continue, restructure or terminate the project.

#### Ongoing IT Project and the E-Government Strategy Review

If you are reporting an Ongoing IT Project that is in operational mode (Steady State), you must demonstrate that the project has undergone an E-Government Strategy Review. In order to perform an E-Government Strategy Review, you must answer all sections in parts I and II with responses that reflect that the project is undergoing an E-Gov review.

An E-Government review is a comprehensive review and analysis performed on legacy systems and projects with a strategy for identifying smarter and more cost effective methods for delivering the performance. All of the sections of the business case should be used for completing an E-Gov review including:

- The business case for these type projects are not designed to recreate answers and analysis for projects that should have been performed at the inception of the project but rather answer the questions and criteria with a focus toward using web services, XML, J2EE, .NET technologies and other e-business type tools.
- When addressing the justification questions, you must indicate whether the current way of doing business and performing the function is the most advantageous and cost-effective to the government.
- The section on performance goals must identify the performance goals for the project as it stands today; program management must address the four questions identified in exhibit 300.
- Alternatives analysis must be performed with a future-focus included in your E-Gov strategy rather than an alternatives analysis that was performed several years ago and no longer valid.

- The section on actual performance and variances from the OMB-approved baseline provide information from the operational analysis system to show whether the asset is meeting program objectives and the needs of the owners and users, as well as performing within baseline cost, schedule and performance goals.
- The sections in part II must be answered in their entirety with a focus on the E-Gov strategy review. All of your answers must demonstrate that you have reviewed alternative ways to perform the business with a specific focus on E-Government or e-business technologies and supporting the President's Management Agenda.

#### **Infrastructure Projects**

Infrastructure projects such as local area networks (LANs), wide area networks (WANs), telecommunications, and desktop upgrades, require a different level of information in the business case than projects in the development, modernization, or enhancement category. While the business case must still be made for the infrastructure projects, infrastructure projects in most cases are investments that are made in support of the business applications of the agency. In many cases the success of the business applications depend upon a strong and well-planned infrastructure. The business cases for infrastructure projects must still address the same issues as other projects and complete all sections on the business cases, parts I and II of the exhibit 300.

Exhibit 300 must be submitted with your initial budget submission, which is due by September 9, 2002 (see section 25.5). In alignment with the President's Management Agenda Item, "Expanding E-Gov", OMB will begin migrating all IT reporting (exhibits 53 and 300s) to XML during preparation of the FY 2004 Budget. Later this summer, OMB will release the XML schema for exhibits 53 and 300. This schema must be used by all agencies for reporting the exhibits. For those agencies using the Information Technology Investment Portfolio System (I-TIPS), this XML transmission will happen electronically from the agency I-TIPS. If any agency is unable to move the reporting to XML format for the FY 2004 budget process, you must contact your OMB representative as soon as possible to work out an alternative solution. For capital projects other than IT, agencies are encouraged to submit the exhibit 300 electronically, following the same instructions provided above.

#### 300.10 How will OMB evaluate the business cases in the exhibits 300?

All business cases are scored against a core set of criteria and the results are provided to the agency via the budget pass-back process. While one size scoring does not fit all categories, this scoring is meant to ensure that agency planning and management of assets is consistent with OMB policy and guidance. For projects other than IT, the IT specific categories are awarded full points as they are not applicable. The scoring of a business case is two-fold. The business case is scored based upon the criteria listed below and then a programmatic review is done for the project. A business case may be the strongest possible based upon the criteria listed here and if the program is deemed ineffective and changes are being made, then there is no need for the investment represented by the business case scoring. Business case scoring is as follows:

#### Business Case (BC) (composite of all categories) Total Score for Business Case

Projects scoring 5 and meeting program requirements are automatically recommended for funding. Projects scoring a 4 and meeting program requirements, and meeting most of the business case requirements are recommended for funding and the agency is instructed to continue improvements in the areas identified as needing work. Projects scoring 3 or below have the opportunity to improve to a 4 or degrade to a 2 rather easily. Projects scoring a 2 or below are not recommended for funding.

Score		Definition
5	41–50	Strong documented business case (including all sections as appropriate).
4	31-40	Very few weak points within the BC but still needs strengthening.
3	21–30	Much work remains to solidify and quantify BC. BC has the opportunity to either improve or degrade very quickly.
2	11-20	Significant gaps in the required categories of the BC.
1	1–10	Inadequate in every category of the required BC.

#### Supports the President's Management Agenda Items (AI) (Multiple Sections)

- This is a collaborative project that includes multiple agencies, state, local, or tribal governments, uses e-business technologies and the project is governed by citizen needs. Project also supports the Federal Business Architecture published by OMB. If project is a steady state project, then an E-Gov strategy review is underway and includes all of the necessary elements. If appropriate, this project is fully aligned with one or more of the President's E-Gov initiatives.
- This is a collaborative project that includes multiple agencies, state, local, or tribal governments, uses e-business technologies though work remains to solidify these relationships. Project also supports the Federal Business Architecture published by OMB though work remains to solidify the linkage. If project is a steady state project, then an E-Gov strategy review is underway but needs work in order to strengthen the analysis. If appropriate, project supports one or more of the President's E-Gov initiatives but is not yet fully aligned.
- This is not a collaborative project though it could be and much work remains to strengthen the ties to the President's Management Agenda. If a steady state project and no E-Gov strategy is evident, this project will have a difficult time securing continued or new funding from OMB. If appropriate, this project supports one or more of the President's E-Gov initiatives but alignment is not demonstrated.
- This is not a collaborative project and it is difficult to ascertain support for the AI. If steady state project, no E-Gov strategy was performed or is planned.
- 1 There does not seem to be any link to the AI and no E-Gov strategy.

#### Acquisition Strategy (AS) (Part I, Section I.G)

- 5 Strong Acquisition Strategy that mitigates risk to the Federal Government, accommodates Section 508 as needed, and contracts and statements of work (SOWs) are performance based. Implementation of the Acquisition Strategy is clearly defined.
- 4 Contracts and SOWs are performance based with very few weak points that agency is strengthening and implementation of the AS is clearly defined.
- 3 Much work remains to solidify and quantify the AS.
- 2 Some parts of the AS are present but no clear implementation strategy.
- 1 There is no evidence of an AS.

**Score** Definition

#### Program Management (PM) (Part I, Sections I.D and I.H)

- 5 Program is very strong and has resources in place to manage it.
- 4 Program has some weak points in the area of PM and agency is working to strengthen PM.
- 3 Much work remains in order for PM to manage the risks for this project.
- 2 There is some understanding of PM for this project but it is very rudimentary.
- 1 There is no evidence of PM.

#### Enterprise Architecture (EA) (Part II, Section II.A) for IT Only.

- 5 This project is included in the Agency EA and CPIC process. BC demonstrates business, data, and application, and technology layers of the EA in relationship to this project.
- This project is included in the Agency EA and CPIC process. BC demonstrates weaknesses in the business, data, application, and technology layers of the EA in relationship to this project.
- This project is not included in the Agency EA and CPIC process. BC demonstrates a lack of understanding on the layers of the EA (business, data, application, and technology).
- While the agency has an EA Framework, it is not implemented in the agency and does not include this project.
- 1 There is no evidence of a comprehensive EA in the agency.

#### Alternatives Analysis (AA) (Part I, Section I.E)

- AA includes three viable alternatives, alternatives were compared consistently, and alternative chosen provides benefits and reasons.
- 4 AA includes three viable alternatives, however work needs to continue in terms of the alternative chosen and the accompanying analysis.
- 3 AA includes fewer than three alternatives and overall analysis needs strengthening.
- 2 AA includes weak AA information overall, significant weaknesses exist.
- 1 There is no evidence that an AA was performed.

#### Risk Management (RM) (Part I, Section I.F)

Risk Assessment was performed for all mandatory elements and risk is managed throughout the project.

Score	Definition
4	Risk assessment addresses some of the Risk, but not all that should be addressed for this project.
3	Risk Management is very weak and does not seem to address or manage most of the risk associated with the project.
2	Risk Assessment was performed at the outset of the project but does not seem to be part of the program management.
1	There is no evidence of a Risk Assessment Plan or Strategy.
Perforn	nance Goals (PG) (Part I, Section I.C)
5	Performance Goals are provided for the agency, are linked to the annual performance plan, the project discusses the agency mission and strategic goals, and performance measures are provided.
4	Performance Goals are provided for the agency, are linked to the annual performance plan, the project discusses the agency mission and strategic goals, and performance measures are provided yet work remains to strengthen the PG.
3	Performance Goals exist but linkage to the agency mission and strategic goals is weak.
2	Performance Goals are in their initial stages and are not appropriate for the type of project. Much work remains to strengthen the PG.
1	There is no evidence of PG for this project.
Security	y and Privacy (SE) (Part II, Section II.B)
5	Security and privacy issues for the project and all questions are answered, detail is provided about the individual project throughout the life-cycle to include budgeting for SE.
4	Security and privacy information for the project is provided but there are weaknesses in the information that need to be corrected.
3	Security and privacy information for the project is provided but fails to answer the minimum requirements.
2	Security and privacy information points to an overall Agency Security Process with little to detail at this project level.
1	There is no security or privacy information provided for the project.

**Score Definition** 

#### Performance Based Management System (PB) (Part I, Section I.H)

- Agency will use, or uses an Earned Value Management System (EVMS) that meets ANSI/EIA Standard 748 and project is earning the value as planned for costs, schedule, and performance goals.
- Agency uses the required EVMS, is within the variance levels for two of the three criteria, and needs work on the third issue.
- Agency uses required EVMS but the process within the agency is very new and not fully implemented or there are weaknesses for this individual project's EVMS information.
- 2 Agency seems to re-baseline rather than report variances.
- 1 There is no evidence of PB.

#### **Life-Cycle Costs Formulation (LC) (Multiple Sections)**

- 5 Life-cycle costs seems to reflect formulation that includes all of the required resources and is risk adjusted to accommodate items addressed in the RM. It appears that the project is planned well enough to come in on budget.
- 4 Life-cycle costs seem to reflect formulation of some of the resources and some of the issues as included in the risk adjustment strategy but work remains in order to ensure that LC costs are accurately portrayed.
- 3 Life-cycle costs seem to reflect formulation of the resources but are not risk adjusted based upon the risk management plan.
- 2 Life-cycle costs seem to include some of the resource criteria and are not risk adjusted.
- 1 Life-cycle costs do not seem to reflect a planned formulation process.

Scoring Element	Score	Scoring Element	Score
Business Case (BC) Total			
Supports the President's Management Agenda Items (IA)		Risk Management (RM)	
Acquisition Strategy (AS)		Performance Goals (PG)	
Program Management (PM)		Security (SE)	
Enterprise Architecture (EA)		Performance Based Management System (PB)	
Alternatives Analysis (AA)		Life Cycle Costs Formulation (LC)	

#### 300.11 What additional information should I know?

You are encouraged, but not required, to provide additional information on the following or other topics related to improving planning, budgeting, and acquisition of capital assets. These topics may be included in the OMB budget review process on capital assets, which may affect policy decisions on asset acquisition. You are encouraged to raise any issues you consider relevant.

#### (a) Lumpiness or spikes.

Lumpiness or spikes (i.e., large, one-time increases in year-to-year appropriations) may create bias against acquiring assets. Give special attention to these spikes for justified, cost-beneficial acquisitions, keeping in mind that the budget authority and outlay limits under the government-wide discretionary caps will continue to constrain resources. This issue is addressed in Appendix 300A, "C. Principles of Financing."

#### (b) Account structure.

Certain types of accounts may be preferred to help ensure there is no bias against the acquisition of capital assets. You are encouraged to review the account structure to ensure that the most appropriate accounts are being used for the acquisition of capital assets. This issue also is addressed in Appendix 300A, "C. Principles of Financing."

- (1) Mixed accounts. Mixed accounts have spending for both operating and capital asset acquisition in the same account, allowing for competition between the two. Demands for one may "crowd out" the other.
- (2) Asset acquisition accounts. These accounts are devoted exclusively to the acquisition of capital assets. This type of account may be one way of avoiding lumpiness, if there is a roughly similar level of fully-funded budget authority for asset acquisition each year.
- (3) Revolving funds. These accounts can also avoid lumpiness, depending on how they are structured. They purchase assets that are "rented" to other accounts, so that the accounts and programs using the assets have a roughly steady year-to-year payment.

#### (c) Multi-year availability of appropriations.

You should ensure that the availability of the requested appropriation allows enough time to complete the acquisition process. If the acquisition process requires more than one year, the appropriations should be made available for the number of years necessary (see part I, section 31.7).

#### (d) *Other observations*.

You are invited to suggest other methods to improve planning, budgeting, and acquisition of capital assets.

#### PART I: CAPITAL ASSET PLAN AND BUSINESS CASE (All Assets)

Agency		
Bureau		
Account Title Account Identification Code		
Program Activity		
Name of Project		
Unique Project Identifier:		
(IT only)(See section <u>53</u> )		
Project Initiation Date		
Project Planned Completion Date This Project is: Initial Concept Planning Full Acquisition Mixed Life Cycle	on Steady Sta	ate
Project/useful segment is funded:	Incrementally	Fully
Was this project approved by OMB for previous Year Budget Cycle?	Yes	No
Did the Executive/Investment Review Committee approve funding for this project this year?	Yes	No
Did the CFO review the cost goal?	Yes	No
Did the Procurement Executive review the acquisition strategy?	Yes	No
Is this investment included in your agency's annual performance plan or multiple agency annual performance plans?	Yes	No
Does the project support homeland security goals and objectives, i.e., 1) improve border and transportation security, 2) combat bioterrorism, 3) enhance first responder programs; 4) improve information sharing to decrease response times for actions and improve the quality of decision making?	Yes	No
Is this project information technology? (See section 300.4 for definition)	Yes	No
For information technology projects only:		
a. Is this Project a Financial Management System? (see section		
53.3 for a definition)	Yes	No
If so, does this project address a FFMIA compliance area?	Yes	No
If yes, which compliance area?		
b. Does this project implement electronic transactions or record keeping that is covered by the Government Paperwork Elimination Act (GPEA)?	Yes	No
If so, is it included in your GPEA plan (and does not yet provide an electronic option)?	Yes	No
Does the project already provide an electronic option?	Yes	No
c. Was a privacy impact assessment performed for this project?	Yes	No
d. Was this project reviewed as part of the FY 2002 Government Information Security Reform Act review process?	Yes	No

<ul><li>d.1 If yes, were any weaknesses found?</li><li>d.2. Have the weaknesses been incorporated into the agency's corrective action plans?</li></ul>	Yes Yes	No
e. Has this project been identified as a national critical operation or asset by a Project Matrix review or other agency determination?	Yes	No
e.1 If no, is this an agency mission critical or essential service, system, operation, or asset (such as those documented in the agency's COOP Plan), other than those identified above as national critical infrastructures?	Yes	No
SUMMARY OF SPENDING FOR PRO (In Millions)	OJECT STAGES	

### (Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

P.	Y-1 and	PY	CY	BY	BY+1	BY+2	BY+3	BY+4&	Total
E	arlier	2002	2003	2004	2005	2006	2007	Beyond	

Planning:

**Budgetary Resources** 

Outlays

Acquisition:

**Budgetary Resources** 

Outlays

Total, sum of stages:

**Budgetary Resources** 

Outlays

Maintenance:

**Budgetary Resources** 

Outlays

Total, All Stages:

**Budgetary Resources** 

Outlays

#### I. A. **Project Description**

- 1. Provide a brief description of this project and its status through your capital planning and investment control (CPIC) or capital programming "control" review for the current cycle.
- 2. What assumptions are made about this project and why?
- 3. Provide any other supporting information derived from research, interviews, and other documentation.

#### I.B. Justification (All Assets)

- 1. How does this investment support your agency's mission and strategic goals and objectives?
- 2. How does it support the strategic goals from the President's Management Agenda?
- 3. Are there any alternative sources in the public or private sectors that could perform this function?
- 4. If so, explain why your agency did not select one of these alternatives.
- 5. Who are the customers for this project?
- 6. Who are the stakeholders of this project?
- 7. If this is a multi-agency initiative, identify the agencies and organizations affected by this initiative.
- 8. How will this investment reduce costs or improve efficiencies?
- 9. List all other assets that interface with this asset\_\_\_\_\_. Have these assets been reenigineered as part of this project? Yes\_\_\_\_, No\_\_\_\_.

#### I.C. Performance Goals and Measures (All Assets)

Fiscal Year	Strategic Goal(s) Supported	Existing Baseline	Planned Performance Improvement Goal	Actual Performance Improvement Results	Planned Performance Metric	Actual Performance Metric Results
2002						
2003						
2004						
2005						
2006						
2007						

#### I.D. Program Management [All Assets]

1. Is there a program manager assigned to the project? If so, what is his/her name?	Yes	No
2. Is there a contracting officer assigned to the project? If so, what is his/her name?	Yes	No
3. Is there an Integrated Project Team?	Yes	No
3.A. If so, list the skill set represented.		
4. Is there a sponsor/owner?	Yes	No

#### I.E. Alternatives Analysis [All Assets]

1. Describe the alternative solutions you considered for accomplishing the agency strategic goals that this project was expected to address. Describe the results of the feasibility/performance/benefits analysis. Provide comparisons of the returns (financial and other) for each alternative.

Alternative	Description
Alternative 1 –	
Alternative 2 –	
Alternative 3 –	

2. Summarize the results of your life-cycle cost analysis performed for each investment and the underlying assumptions.

Cost Elements	Alternative 1	Alternative 2	Alternative 3
Element 1			
Element 2			
Element 3			
Element 4			
Element 5			
Total			

- 3. Which alternative was chosen and why? Define the Return on Investment (ROI).
- 3. A. Are there any quantitative benefits that will be achieved through this investment (e.g., systems savings, cost avoidance, stakeholder benefits, etc)?
- 3. B. For alternative selected, provide financial summary, including Net Present Value by Year and Payback Period Calculations:

YEAR =	FY								

4. What is the date of your cost benefit analysis?

#### I. F. Risk Inventory and Assessment (All Assets)

In this section, describe the results of your risk assessment for this project and discuss your plans to eliminate, mitigate, or manage identified risks. Risk assessments should be performed at the initial concept stage and then monitored and controlled throughout the life-cycle of the project, and should include risk information from all stakeholders. Risk assessments for all projects must include schedule, costs (both initial and life cycle), technical

obsolescence, feasibility, reliability of systems, dependencies and interoperability between this project and others, surety (asset protection) considerations, risk of creating a monopoly for future procurements, capability of agency to manage the project, and overall risk of project failure.

In addition, for IT projects risk must be discussed in the following categories 1) Organizational and Change Management, 2) Business, 3) Data/Info, 4) Technology, 5) Strategic, 6) Security, 7) Privacy, and 8) Project Resources. (Agencies may include others for IT, and may define the core set for other assets). For security risks, identify under the description column the level of risk as high, medium, or basic. What aspect of security determines the level of risk, i.e., the need for confidentiality of information, availability of information or the system, reliability of the information or system?

Date Identified	Area of Risk	Description	Probability of Occurrence	Strategy for Mitigation	Current Status as of the date of this exhibit

1. What is the date of your risk management plan?

#### I.G. Acquisition Strategy

- 1. Will you use a single contract or several contracts to accomplish this project?
- 1.A. If multiple contracts are planned, explain how they are related to each other, and how each supports the project performance goals.
- 2. What type(s) of contract(s) will you use (e.g. cost reimbursement, fixed-price, etc.)?
- 2.A. For cost reimbursement contracts, define risk not sufficiently covered by the risk mitigation plan to require this type of contract.
- 3. Will you use financial incentives to motivate contractor performance (e.g. incentive fee, award fee, etc.)?
- 4. Will you use competition to select suppliers?
- 5. Will you use commercially available or COTS products, or custom-designed products?
- 6. What is the date of your acquisition plan?
- 7. How will you ensure Section 508 compliance?

#### I.H. Project and Funding Plan

The information required by this section will be provided by your earned value management system (EVMS) and the EVMS software program you use that meets the ANSI/EIA Standard 748 (see section 300.4 (earned value management)). Information on earned value management systems is available at http://www.acq.osd.mil/pm.

#### I.H.1. Description of performance-based management system (PBMS):

Name the software program that meets ANSI/EIA Standard 748 that you will use, or are using, to monitor and manage contract and project performance. If the project is operational (steady state), define the operational analysis system that will be used. If this is a mixed life-cycle project with both operational and development/modernization/enhancement (DME) system improvement aspects, EVMS must be used on the system improvement aspects of the contract and operational analysis on the operations aspects. Using information consistent with the work breakdown structure (WBS), provide the information requested in all parts of this section.

#### I.H.2. Original baseline (OMB-approved at project outset):

What are the cost and schedule goals for this phase or segment/module of the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a multi-agency project or one of the President's E-Gov initiatives, use the detailed project plan with milestones on the critical path, to identify agency funding for each module or milestone. (This baseline must be included in all subsequent reports, even when there are OMB-approved baseline changes shown in I.H.3).

Cost and Schedule Goals: Original Baseline for a Phase/Segment/Module of Project							
	Schedule						
Description of Milestone	Start Date	End Date	Duration (in days)	Planned Cost	Funding Agency		
1.							
2.							
3.							
Completion date:				Total cost estimate at com	npletion:		

#### I.H.3. Proposed baseline/current baseline (applicable *only* if OMB-approved the changes):

Identify in this section a proposed change to the original or current baseline or an OMB-approved baseline change. What are the new cost and schedule goals for the project (e.g., what are the major project milestones or events; when will each occur; and what is the estimated cost to accomplish each one)? Also identify the funding agency for each milestone or event if this is a multi-agency project. If this is a new project in the FY 2004 budget year, this section will be blank for your initial submission.

Cost and Schedule Goals: Proposed or Current (OMB-Approved) Baseline for a Phase/Segment/Module of Project								
	Schedule							
Description of Milestone	Start Date	End Date	Duration (in days)	Planned Cost	Funding Agency			
1.								
2.								
3.								
Completion date:				Total cost estimate at co	ompletion:			

#### I.H.4 Actual performance and variance from OMB-approved baseline (original or current):

A. Show for each major project the milestones or events you planned (scheduled) to accomplish and the cost and what work was actually done and the cost. If this is a new project in the FY 2004 budget year, this section will be blank for your initial submission. OMB may ask for the latest information during the budget review process.

Comparison of OMB-Approved Baseline and Actual Outcome for Phase/Segment/Module of a Project									
		ON	ЛВ-Арргоve	d Baseline	Actual Outcome				
		Schedule				Schedule			
Description of Milestone	Start Date	End Date	Duration (in days)	Planned Cost	Funding Agency	Start Date	End Date	Percent Complete	Actual Cost
1.									
2.									
3.									
Completion date: OMB-approved baseline:						Estimate	d comple	tion date:	
Total cost: OMB-approved baseline:							at compl	etion:	

B.	Provide the following project summary information from your E	VMS software: As of: (date)
B.1.	Show the budgeted (planned) cost of work scheduled (BCWS):	\$
B.2.	Show budgeted (planned) cost of work performed (BCWP):	\$
B.3.	Show the actual cost of work performed (ACWP):	\$

B.4. Provide a cost curve graph plotting BCWS, BCWP and ACWP on a monthly basis from inception of this phase or segment/module through the latest report. In addition, plot the ACWP curve to the estimated cost at completion (EAC) value, and provide the following EVMS variance analysis.

PROJECT SUMMARY (CUMULATIVE)				
	Value			
Cost Variance = (BCWP-ACWP) =				
Cost Variance % = (CV/BCWP) x 100% =				
Cost Performance Index (CPI) = (BCWP/ACWP) =				
Schedule Variance = (BCWP-BCWS) =				
Schedule Variance % = (SV/BCWS) x 100% =				
Schedule Performance Index (SPI) = (BCWP/BCWS) =				
Two independent Estimates at Completion (EAC) = (ACWPcum + Performance Factor (PF) X(BAC - BCWPcum) where $PF_1 = 1/CPI$ , and $PF_2 = 1/CPI$ x SPI =				
Variance at Completion (VAC) = (BAC - EAC) for both EACs above =				
Variance at Completion % = (VAC/BAC) x 100% for both EACs above =				
Expected Funds to Completion (ETC) =				
Expected Completion Date =				

#### **Definitions for Earned Value Management System:**

ACWP - Actual Cost for Work Performed - What you paid.

BAC – Budget At Completion – The baseline (planned) budget for the project.

BCWP - Budgeted Cost for Work Performed - The earned value.
BCWS - Budgeted Cost for Work Scheduled - The planned costs.

CPI - Cost Performance Index - The ratio of the budgeted to actual cost of work performed.

CV – Cost Variance – The difference between planned and actual cost of work performed.

EAC – Estimate At Completion – The latest estimated cost at completion.

ETC – Estimate to Completion – Funds needed to complete the project.

PF – Performance Factor – The cost to earn a dollar of value, or ACWP/BCWP, or 1/CPI.

SPI – Schedule Performance Index – The percent of the project that has been completed.

SV – Schedule Variance – The variance between the actual and planned schedules.

VAC – Variance at Completion – The variance between the baseline and actual budget at completion.

- C. If cost and/or schedule variance are a negative 10 percent or more, explain the reason(s) for the variance(s):
- D. Provide performance variance. Explain whether, based on work accomplished to date, you still expect to achieve your performance goals. If not, explain the reasons for the variance.
- E. Discuss the contractor, government, and at least the two EAC index formulas in I.H.4.B, current estimates at completion. Explain the differences and the IPTs selected EAC for budgeting purposes.

F.	Discuss the corrective actions that will be taken to correct the variances, the risk associated with the actions,
	and how close the planned actions will bring the project to the original baseline. Define proposed baseline
	changes, if necessary.

G.	Has the Agency	Head concurred	d in the need	to continue the	e program at	the new base	line?
		3.7					

Yes\_\_\_\_ No\_\_\_\_

#### Part II: Additional Business Case Criteria for Information Technology

#### II. A. Enterprise Architecture

#### **II.A.1 Business**

- A. Is this project identified in your agency's enterprise architecture? If not, why?
- B. Explain how this project conforms to your departmental (entire agency) enterprise architecture.
- C. Identify the Lines of Business and Sub-Functions within the Federal Enterprise Architecture Business Reference Model that will be supported by this initiative.
- D. Briefly describe how this initiative supports the identified Lines of Business and Sub-Functions of the Federal Business Architecture.
- E. Was this project approved through the EA Review committee at your agency?
- F. What are the major process simplification/reengineering/design projects that are required as part of this initiative?
- G. What are the major organization restructuring, training, and change management projects that are required?
- H. What are the Agency lines of business involved in this project?
- I. What are the implications for the agency business architecture?

#### II.A.2 Data

- A. What types of data will be used in this project?
- B. Does the data needed for this project already exist at the Federal, State, or Local level? If so, what are your plans to gain access to that data?
- C. Are there legal reasons why this data cannot be transferred? If so, what are they and did you address them in the barriers and risk sections above?
- D. If this initiative processes spatial data, identify planned investments for spatial data and demonstrate how the agency ensures compliance with the Federal Geographic Data Committee standards required by OMB Circular A–16.

#### **II.A.3** Application and Technology

- A. Discuss this initiative/project in relationship to the application and technology layers of the EA. Include a discussion of hardware, applications, infrastructure, etc.
- B. Are all of the hardware, applications, and infrastructure requirements for this project included in the EA Technical Reference Model? If not, please explain.

#### II. B. Security and Privacy

- NOTE: Each category below must be addressed at the project (system/application) level, not at a program or agency level. Referring to security plans or other documents is not an acceptable response.
- II.B.1. How is security provided and funded for this project (e.g., by program office or by the CIO through the general support system/network)?
- A. What is the total dollar amount allocated to security for this project in FY 2004?
- II.B.2 Does the project (system/application) meet the following security requirements of the Government Information Security Reform Act, OMB policy, and NIST guidance?
- A. Does the project (system/application) have an up-to-date security plan that meets the requirements of OMB policy and NIST guidance? What is the date of the plan?
- B. Has the project undergone an approved certification and accreditation process? Specify the C&A methodology used (e.g., NIST guidance) and the date of the last review.
- C. Have the management, operational, and technical security controls been tested for effectiveness? When were most recent tests performed?
- D. Have all system users been appropriately trained in the past year, including rules of behavior and consequences for violating the rules?
- E. How has incident handling capability been incorporated into the system, including intrusion detection monitoring and audit log reviews? Are incidents reported to GSA's FedCIRC?
- F. Is the system operated by contractors either on-site or at a contractor facility? If yes, does any such contract include specific security requirements required by law and policy? How are contractor security procedures monitored, verified, and validated by the agency?"
- II.B.3 How does the agency ensure the effective use of security controls and authentication tools to protect privacy for those systems that promote or permit public access?
- II.B.4 How does the agency ensure that the handling of personal information is consistent with relevant government-wide and agency policies.
- II.B.5 If a Privacy Impact Assessment was conducted, please provide a copy to OMB.

#### II. C. Government Paperwork Elimination Act (GPEA)

- II.C.1 If this project supports electronic transactions or record-keeping that is covered by GPEA, briefly describe the transaction or record-keeping functions and how this investment relates to your agency's GPEA plan.
- II.C.2 What is the date of your GPEA plan?
- II.C.3 Identify any OMB Paperwork Reduction Act (PRA) control numbers from information collections that are tied to this investment.

#### APPENDIX 300A—PRINCIPLES OF BUDGETING FOR CAPITAL ASSET ACQUISITIONS

#### **Introduction and Summary**

The Administration plans to use the following principles in budgeting for capital asset acquisitions. These principles address planning, costs and benefits, financing, and risk management requirements that should be satisfied before a proposal for the acquisition of capital assets can be included in the Administration's budget. A Glossary describes key terms. OMB has also published the *Capital Programming Guide* (June 1997), a Supplement to this Circular. The *Guide* is a basic reference on principles and techniques for planning, budgeting, acquisition, and management of capital assets. Agencies should consult the *Guide* when preparing their capital plans and developing their budget requests from their capital plans.

The principles are organized in the following four sections:

- A. *Planning*. This section focuses on the need to ensure that capital assets support core/priority missions of the agency; the assets have demonstrated a projected return on investment that is clearly equal to or better than alternative uses of available public resources; the risk associated with the assets is understood and managed at all stages; and the acquisition is implemented in phased, successive segments, unless it can be demonstrated there are significant economies of scale at acceptable risk from funding more than one segment or there are multiple units that need to be acquired at the same time.
- B. Costs and Benefits. This section emphasizes that the asset should be justified primarily by benefit-cost analysis, including life-cycle costs; that all costs are understood in advance; and that cost, schedule, and performance goals are identified that can be measured using an earned value management system.
- C. Principles of Financing. This section stresses that useful segments are to be fully funded with regular or advance appropriations, or both; that as a general rule, planning segments should be financed separately from procurement of the asset; and that agencies are encouraged to aggregate assets in capital acquisition accounts and take other steps to accommodate lumpiness or "spikes" in funding for justified acquisitions.
- D. *Risk Management*. This section is to help ensure that risk is analyzed and managed carefully in the acquisition of the asset. Strategies can include separate accounts for capital asset acquisitions, the use of apportionment to encourage sound management, and the selection of efficient types of contracts and pricing mechanisms in order to allocate risk appropriately between the contractor and the Government. In addition, cost, schedule, and performance goals are to be controlled and monitored by using an earned value management system; and if progress toward these goals is not met, there is a formal review process to evaluate whether the acquisition should continue or be terminated.

As defined here, capital assets are generally land, structures, equipment, and intellectual property (including software) that are used by the Federal Government, including weapon systems. Not included are grants to States or others for their acquisition of capital assets. A complete definition is provided in section 300.4.

#### A. Planning

Investments in major capital assets proposed for funding in the Administration's budget should:

1. Support core/priority mission functions that need to be performed by the Federal Government;

- 2. Be undertaken by the requesting agency because no alternative private sector or governmental source can support the function more efficiently;
- 3. Support work processes that have been simplified or otherwise redesigned to reduce costs, improve effectiveness, and make maximum use of commercial, off-the-shelf technology;
- 4. Demonstrate a projected return on the investment that is clearly equal to or better than alternative uses of available public resources. Return may include: improved mission performance in accordance with measures developed pursuant to the Government Performance and Results Act; reduced cost; increased quality, speed, or flexibility; and increased customer and employee satisfaction. Return should be adjusted for such risk factors as the project's technical complexity, the agency's management capacity, the likelihood of cost overruns, and the consequences of under- or non-performance.
- 5. For information technology investments, be consistent with Federal and agency enterprise architectures, which: integrate agency work processes and information flows with technology to achieve the agency's strategic goals; reflect the agency's technology vision; specify standards that enable information exchange and resource sharing, while retaining flexibility in the choice of suppliers and in the design of local work processes; and ensure that security is built into and funded as part of the enterprise architecture in accordance with OMB Memorandum M–00–07: "Incorporating and Funding Security in Information Systems Investments (February 28, 2000)."
- 6. Reduce risk by: avoiding or isolating custom-designed components to minimize the potential adverse consequences on the overall project; using fully tested pilots, simulations, or prototype implementations when necessary before going to production; establishing clear measures and accountability for project progress; and, securing substantial involvement and buy-in throughout the project from the program officials who will use the system;
- 7. Be implemented in phased, successive segments as narrow in scope and brief in duration as practicable, each of which solves a specific part of an overall mission problem and delivers a measurable net benefit independent of future segments, unless it can be demonstrated that there are significant economies of scale at acceptable risk from funding more than one segment or there are multiple units that need to be acquired at the same time; and
- 8. Employ an acquisition strategy that appropriately allocates risk between the Government and the contractor, effectively uses competition, ties contract payments to accomplishments, and takes maximum advantage of commercial technology.

Prototypes require the same justification as other capital assets.

As a general presumption, OMB will recommend new or continued funding only for those capital asset investments that satisfy these criteria. Funding for those projects will be recommended on a phased basis by segment, unless it can be demonstrated that there are significant economies of scale at acceptable risk from funding more than one segment or there are multiple units that need to be acquired at the same time.

OMB recognizes that many agencies are in the middle of ongoing projects, and they may not be able immediately to satisfy the criteria. For those projects that do not satisfy the criteria, OMB will consider requests to use FY 2003 and FY 2004 funds to finance additional planning, as necessary, to support the establishment of realistic cost, schedule, and performance goals for the completion of the project. This planning could include: the redesign of work processes, the evaluation of alternative solutions, the development of information system architectures, and, if necessary, the purchase and evaluation of

prototypes. Realistic goals are necessary for agency portfolio analysis to determine the viability of the project, to provide the basis for fully funding the project to completion, and setting the baseline for management accountability to deliver the project within goals.

Because OMB considers this information essential to agencies' long-term success, OMB will use this information both in preparing the Administration's budget and, in conjunction with cost, schedule, and performance data, as apportionments are made. Agencies are encouraged to work with their OMB representative to arrive at a mutually satisfactory process, format, and timetable for providing the requested information.

#### **B.** Costs and Benefits

The justification of the project should evaluate and discuss the extent to which the project meets the above criteria and should also include:

An analysis of the project's total life-cycle costs and benefits, including the total budget authority required for the asset, consistent with policies described in OMB Circular A–94: Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs (October 1992);

An analysis of the risk of the project including how risks will be isolated, minimized, monitored, and controlled, and, for major programs, an evaluation and estimate by the Chief Financial Officer of the probability of achieving the proposed cost goals;

If, after the planning phase, the procurement is proposed for funding in segments, an analysis showing that the proposed segment is economically and programmatically justified--that is, it is programmatically useful if no further investments are funded, and in this application its benefits exceed its costs; and

Cost, schedule, and performance goals for the project (or the planning segment or useful asset being proposed) that can be measured throughout the acquisition process using a performance-based management system, e.g., Earned Value Management.

#### C. Principles of Financing

#### **Principle 1: Full Funding**

Budget authority sufficient to complete a useful segment of a capital project (or the entire capital project, if it is not divisible into useful segments) must be appropriated before any obligations for the useful segment (or project) may be incurred.

Explanation: Good budgeting requires that appropriations for the full costs of asset acquisition be enacted in advance to help ensure that all costs and benefits are fully taken into account at the time decisions are made to provide resources. Full funding with regular appropriations in the budget year also leads to tradeoffs within the budget year with spending for other capital assets and with spending for purposes other than capital assets. Full funding increases the opportunity to use performance-based fixed price contracts, allows for more efficient work planning and management of the capital project, and increases the accountability for the achievement of the baseline goals.

When full funding is not followed and capital projects or useful segments are funded in increments, without certainty if or when future funding will be available, the result is sometimes poor planning, acquisition of assets not fully justified, higher acquisition costs, cancellation of major projects, the loss of sunk costs, or inadequate funding to maintain and operate the assets.

#### **Principle 2: Regular and Advance Appropriations**

Regular appropriations for the full funding of a capital project or a useful segment of a capital project in the budget year are preferred. If this results in spikes that, in the judgment of OMB, cannot be accommodated by the agency or the Congress, a combination of regular and advance appropriations that together provide full funding for a capital project or a useful segment should be proposed in the budget.

Explanation: Principle 1 (Full Funding) is met as long as a combination of regular and advance appropriations provide budget authority sufficient to complete the capital project or useful segment. Full funding in the budget year with regular appropriations alone is preferred because it leads to tradeoffs within the budget year with spending for other capital assets and with spending for purposes other than capital assets. In contrast, full funding for a capital project over several years with regular appropriations for the first year and advance appropriations for subsequent years may bias tradeoffs in the budget year in favor of the proposed asset because with advance appropriations the full cost of the asset is not included in the budget year. Advance appropriations, because they are scored in the year they become available for obligation, may constrain the budget authority and outlays available for regular appropriations of that year.

If, however, the lumpiness caused by regular appropriations cannot be accommodated within an agency or Appropriations Subcommittee, advance appropriations can ameliorate that problem while still providing that all of the budget authority is enacted in advance for the capital project or useful segment. The latter helps ensure that agencies develop appropriate plans and budgets and that all costs and benefits are identified prior to providing resources. In addition, amounts of advance appropriations can be matched to funding requirements for completing natural components of the useful segment. Advance appropriations have the same benefits as regular appropriations for improved planning, management, and accountability of the project.

#### **Principle 3: Separate Funding of Planning Segments**

As a general rule, planning segments of a capital project should be financed separately from the procurement of a useful asset.

Explanation: The agency must have information that allows it to plan the capital project, develop the design, and assess the benefits, costs, and risks before proceeding to procurement of the useful asset. This is especially important for high risk acquisitions. This information comes from activities, or planning segments, that include but are not limited to market research of available solutions, architectural drawings, geological studies, engineering and design studies, and prototypes. The construction of a prototype that is a capital asset, because of its cost and risk, should be justified and planned as carefully as the project itself. The process of gathering information for a capital project may consist of one or more planning segments, depending on the nature of the asset. Funding these segments separately will help ensure that the necessary information is available to establish cost, schedule, and performance goals before proceeding to procurement.

If budget authority for planning segments and procurement of the useful asset are enacted together, OMB may wish to apportion budget authority for one or several planning segments separately from procurement of the useful asset.

#### Principle 4: Accommodation of Lumpiness or "Spikes" and Separate Capital Acquisition Accounts

To accommodate lumpiness or "spikes" in funding justified capital acquisitions, agencies, working with OMB, are encouraged to aggregate financing for capital asset acquisitions in one or several separate

capital acquisition budget accounts within the agency, to the extent possible within the agency's total budget request.

*Explanation:* Large, temporary, year-to-year increases in budget authority, sometimes called lumps or spikes, may create a bias against the acquisition of justified capital assets. Agencies, working with OMB, should seek ways to avoid this bias and accommodate such spikes for justified acquisitions. Aggregation of capital acquisitions in separate accounts may:

- Reduce spikes within an agency or bureau by providing roughly the same level of spending for acquisitions each year;
- Help to identify the source of spikes and to explain them. Capital acquisitions are more lumpy than operating expenses; and with a capital acquisition account, it can be seen that an increase in operating expenses is not being hidden and attributed to one-time asset purchases;
- Reduce the pressure for capital spikes to crowd out operating expenses; and
- Improve justification and make proposals easier to evaluate, since capital acquisitions are generally analyzed in a different manner than operating expenses (e.g., capital acquisitions have a longer time horizon of benefits and life-cycle costs).

#### D. Risk Management

Risk management should be central to the planning, budgeting, and acquisition process. Failure to analyze and manage the inherent risk in all capital asset acquisitions may contribute to cost overruns, schedule shortfalls, and acquisitions that fail to perform as expected. For each major capital project, a risk analysis that includes how risks will be isolated, minimized, monitored, and controlled may help prevent these problems.

The project cost, schedule and performance goals established through the planning phase of the project are the basis for approval to procure the asset and the basis for assessing risk. During the procurement phase, performance-based management systems (earned value or similar system) must be used to provide contractor and Government management visibility on the achievement of, or deviation from, goals until the asset is accepted and operational. If goals are not being met, performance-based management systems allow for early identification of problems, potential corrective actions, and changes to the original goals needed to complete the project and necessary for agency portfolio analysis decisions. These systems also allow for Administration decisions to recommend meaningful modifications for increased funding to the Congress, or termination of the project, based on its revised expected return on investment in comparison to alternative uses of the funds. Agencies must ensure that the necessary acquisition strategies are implemented to reduce the risk of cost escalation and the risk of failure to achieve schedule and performance goals. These strategies may include:

- 1. Having budgetary resources appropriated in separate capital asset acquisition accounts;
- 2. Apportioning budget authority for a useful segment;
- 3. Establishing thresholds for cost, schedule, and performance goals of the acquisition, including return on investment, which if not met may result in cancellation of the acquisition;
- 4. Selecting types of contracts and pricing mechanisms that are efficient and that provide incentives to contractors in order to allocate risk appropriately between the contractor and the Government;

- 5. Monitoring cost, schedule, and performance goals for the project (or the planning segment or useful asset being proposed) using a performance-based management system, e.g., Earned Value Management System.
- 6. If progress is not within 90 percent of goals, or if new information is available that would indicate a greater return on investment from alternative uses of funds, instituting senior management review of the project through portfolio analysis to determine the continued viability of the project with modifications, or the termination of the project, and the start of exploration for alternative solutions if it is necessary to fill a gap in agency strategic goals and objectives.

#### E. Glossary

**Appropriations, regular annual or advance,** provide budget authority that permits Government officials to incur obligations that result in immediate or future outlays of Government funds.

#### Regular annual appropriations are:

- Enacted normally in the current year;
- Scored entirely in the budget year; and
- Available for obligation in the budget year and subsequent years if specified in the language. (See "*Availability*," below)

*Advance appropriations* may be accompanied by regular annual appropriations to provide funds available for obligation in the budget year as well as subsequent years. Advance appropriations are:

- Enacted normally in the current year;
- Scored after the budget year (e.g., in each of one, two, or more later years, depending on the language); and
- Available for obligation in the year scored and subsequent years if specified in the language. (See "Availability," below.)

Availability refers to the period during which appropriations may be legally obligated. Appropriations made in appropriations acts are available for obligation only in the budget year, unless the language specifies that an appropriation is available for a longer period. If the language specifies that the funds are to remain available until the end of a certain year beyond the budget year, the availability is said to be "multi-year." If the language specifies that the funds are to remain available until expended, the availability is said to be "no-year." Appropriations for major procurements and construction projects are typically made available for multiple years or until expended.

# APPENDIX 300B - SELECTED OMB GUIDANCE AND OTHER REFERENCES REGARDING CAPITAL ASSETS

#### **EXECUTIVE ORDERS**

Executive Order No. 12893, "Principles for Federal Infrastructure Investments," provides principles for the systematic economic analysis of infrastructure investments and their management. OMB Bulletin No. 94–16, Guidance on Executive Order No. 12893, "Principles for Federal Infrastructure Investments" (March 7, 1994), provides guidance for implementing this Order and appends the Order itself.

#### OMB CIRCULARS AND MEMORANDA

OMB Circular No. A–11, Preparing and Submitting Budget Estimates (June 2002):

Part 2: Preparation and Submission of Budget Estimates

- Section 31.4, Full funding, requires that the agency request include full funding for procurement and construction. See section 300.6 for more discussion of this policy.
- Section 33.22, Systems acquisitions, states that agencies should develop their estimates of major systems acquisitions, including information technology systems, consistent with guidance in the *Capital Programming Guide*, the requirements of Title V of the Federal Acquisition Streamlining Act of 1994 (FASA), and the Clinger-Cohen Act of 1996
- Section 52, Information on financial management, requires agencies to submit data on financial management plans, systems and resources.
- Section 53, Information technology, requires agencies to submit data on information technology projects.
- Section 84, Character classification, requires information on different kinds of investment and grants to State and local governments.

Part 6: Preparation and Submission of Strategic Plans, Annual Performance Plans, and Annual Program Performance Reports

Part 7: Planning, Budgeting, Acquisition, and Management of Capital Assets

Capital Programming Guide (June 1997). The Guide is a Supplement to this Circular.

OMB Circular No. A–94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs (October 1992), with periodic revisions of the discount rate benefit-cost, cost-effectiveness, and lease-purchase analysis for you to use in evaluating Federal activities including capital asset acquisition. It includes guidelines on the discount rate to use in calculating the present value of future benefits and costs, the measurement of benefits and costs, the treatment of uncertainty, and other issues. This guidance must be followed in all analyses you submit to OMB in support of legislative and budget programs.

OMB Circular No. A–127, Financial Management Systems (revised July 23, 1993), prescribes policies and standards for you to follow in developing, operating, evaluating, and reporting on financial management systems. Revised further in Transmittal Memorandum #2 (June 10, 1999).

OMB Circular No. A–130, Management of Federal Information Resources (revised November 20, 2000), provides principles for internal management and planning practices of information systems and technology.

OMB Memorandum M-00-10, OMB Procedures and Guidance on Implementing the Government Paperwork Elimination Act (April 25, 2000). This memorandum provides guidance implementing on the Government Paperwork Elimination Act (GPEA), which requires agencies, by October 21, 2003, to provide for the (1) option of electronic maintenance, submission, or disclosure of information, when practicable as a substitute for paper; and (2) use and acceptance of electronic signatures, when practicable.

OMB Memorandum M-00-13, *Privacy Policies and Data Collection on Federal Websites* (June 22, 2000). This memorandum reminds agencies that they are required by law and policy to establish clear privacy policies for its web activities and to comply with those policies.

OMB Memorandum M-01-08, Guidance on Implementing the Government Information Security Reform Act (January 16, 2001). This memorandum provides guidance on the management and evaluation aspects of security for unclassified and national security systems.

OMB Memorandum M-02-03, 2002 Discount Rates for OMB Circular A-94 (January 29, 2002). This memorandum provides the annual update of discount rates in Appendix C of OMB Circular A-94. These rates will be in effect February 2002 through the end of January 2003.

#### **PUBLICATIONS**

American National Standard Institute, *Earned Value Management Systems*, ANSI/EIA–748–1998, (approved May 19, 1998). Electronic Industries Alliance. Arlington, VA 22201.

Best Practices Committee, Federal Chief Information Officers Council, three separate documents: 1) *Smart Practices in Capital Planning* (October 2000), and 2) *First Practices in Portfolio Management* (February 2002), 3) *ROI and the Value Puzzle* (April 1999) (see <a href="www.cio.gov">www.cio.gov</a>).

Office of Management and Budget, Office of Information and Regulatory Affairs, *Evaluating Information Technology Investments: A Practical Guide* (Version 1.0) (November 1995).

U.S. General Accounting Office, Assessing Risks and Returns: A Guide for Evaluating Federal Agencies' IT Investment Decision-Making, GAO/AIMD-10.1.13 (February 1997).