

**CHAPTER 1****GENERAL OVERVIEW**0101 PURPOSE AND SCOPE

010101. This volume provides the concepts, the goals, and an overview of the system of resource alignment referred to as Planning, Programming, Budgeting, and Execution (PPBE) and establishes guidance on the Programming and Budgeting Phases of the PPBE process that are critical to budget formulation at the National Aeronautics and Space Administration (NASA). The volume includes strategic budget planning and resources guidance, program review, budget development, budget presentation and justification of estimates to the Office of Management and Budget (OMB) and to Congress, and provides detailed descriptions of the roles and responsibilities for key players in each step of the process. It consolidates current legal, regulatory, and administrative policies and procedures applicable to NASA.

0102 INTRODUCTION TO PPBE

010201. NASA's policy is to utilize PPBE as an agency-wide methodology for aligning resources in a comprehensive, disciplined, top-down approach that supports the agency's vision and mission. It focuses on translating strategy into actionable programs and bringing together agency priorities and strategic outcomes within the agency's resource constraints.

010202. The PPBE process is designed to take an analytical approach to decision-making. The benefits of PPBE are:

- A. A focus on ensuring successful implementation of the strategic goals
- B. Strong emphasis on a high-level, multi-year structured analysis of alternatives and capabilities
- C. Clearly defined roles and responsibilities
- D. Complete and integrated budget process outputs
- E. Strong emphasis on performance and resource management
- F. Less repetitive calculation of budget details
- G. Timely, high-quality budget support of NASA's mission

H. A stable funding baseline plan to expedite and streamline funds distribution

010203. PPBE goes beyond the traditional budget approaches of the past and introduces an enhanced level of analysis to ensure that resource alignment supports the accomplishment of agency strategic goals and objectives in a resource-constrained environment. The process begins with senior management developing strategic planning guidelines, which are then translated into actionable programs by the analysis of resource requirements and development of budget documents, including justification data and supporting narratives, and followed by the implementation of fully executable Agency Operating and Agency Execution Plans. Most of this process is pre-decisional in nature, and confidentiality of the data must be maintained. It is not to be discussed outside the agency, either to the public, media, or Congress, unless specifically approved by OCFO and PA&E. The PPBE process at NASA is jointly governed by the Office of Program Analysis and Evaluation (PA&E) and the Office of the Chief Financial Officer (OCFO). PA&E has primary responsibility for the Planning and Programming Phases, while OCFO has primary responsibility for the Budgeting and Execution Phases. This volume identifies the specific roles and responsibilities throughout the agency for those PPBE steps critical to budget formulation.

#### 0103 DEFINITIONS

010301. Key terms and concepts used in the PPBE process are defined below to provide a better understanding of their use in PPBE and to aid individuals in carrying out the responsibilities set forth in this volume. Some terms included are not unique to the PPBE process but are used frequently when discussing budget formulation. For additional reference, a list of the acronyms used in this volume is provided in Appendix A.

A. Amendment. A proposed action that revises the President's budget request and is transmitted prior to completion of action on the budget request by the Appropriations Committees of both Houses of Congress.

B. Agency Execution Plan. A detailed financial plan used to determine how funds will be allocated. It is based on the Agency Operating Plan and is typically time phased.

C. Agency Operating Plan. The plan that sets forth the specific amount of appropriated dollars that will be spent in the fiscal year to fulfill NASA's mission and the specific purposes for which the funds will be used. NASA's operating plans are approved by OMB provided to and Congress for a 15-day review period before being executed.

D. Appeal. An application to a recognized authority for reconsideration of a prior or proposed decision. The term is used during NASA's PPBE process when appeals are made to PA&E for changes to issue recommendations. The term is also used when NASA appeals decisions included in the OMB passback.

E. Apportionment. A distribution made by OMB of amounts available for obligation in an appropriation or fund account into amounts available for specified time periods, programs, activities, projects, objects, or any combination of these. The apportioned amount limits the obligations that may be incurred.

F. Appropriation. A provision of law authorizing the expenditure of funds for a given purpose. Usually, but not always, an appropriation provides budget authority.

G. Budget Authority. The authority provided by law to incur financial obligations that will result in outlays. Specific forms of budget authority include appropriations, borrowing authority, contract authority, and spending authority from offsetting collections.

H. Budget Resolution. A concurrent resolution passed by both the House and Senate that sets forth a revenue and spending plan for the budget year and at least four outyears. The plan consists of revenue and spending targets with which subsequent appropriation acts and authorization acts are expected to comply.

I. Budget Year. The fiscal year for which the budget is being developed.

J. Capital Assets. Property; plant; equipment; and software developed, manufactured, transferred, or acquired that meet NASA's capitalization criteria, also known as the capitalization threshold. NASA capitalization policy is contained in the Financial Management Requirements (FMR), Volume 6, *Accounting*.

K. Center Management and Operations (CM&O). A cost category that captures all of the general and administrative (G&A) activities required to operate and maintain a Center.

L. Construction of Facilities (CoF). A cost category that provides funding for revitalization projects (repair, rehabilitation, and modification of existing facilities); construction of new facilities; acquisition of related collateral equipment; environmental compliance and restoration activities; design of facilities projects; and advanced planning related to future facility needs.

M. Continuing Resolution. Legislation in the form of a joint resolution enacted by Congress to provide budget authority for Federal agencies and programs to continue in operation until regular appropriations acts are enacted.

N. Control Account. A major budgetary account identified in the Strategic Planning Guidance (SPG). These accounts typically include Mission Directorates, Cross-cutting agency Programs, and Institutional accounts.

O. Control Account Managers (CAMs). Senior agency officials who manage major budgetary accounts and are responsible for development and execution of the budget content for those accounts. Specific CAMs are identified by title in the SPG.

P. Control Totals. Dollar amounts that are initially included in the SPG and represent the direct budget available to each CAM. CAMs must ensure that these dollar amounts are not exceeded in Program Analysis and Alignment (PAA) Reports submitted to PA&E. Adjusted control totals for dollar amounts and control totals for FTE are identified in the Program Decision Memorandum (PDM) and Programmatic and Institutional Guidance (PAIG).

Q. Corporate General & Administrative (G&A). A cost category for Headquarters activities such as the Administrator and his or her immediate staff, Mission Directorate management, Headquarters operations management, and functional management that is managed through a common cost pool and allocated to individual projects.

R. Cost. The price or cash value of the resources used to produce a program, project, or activity. OMB Circulars providing instructions on estimating specific types of cost are listed in the terms section of OMB Circular No. A-11. FMR Volume 7 provides NASA-specific policy on cost. Costs may be directly associated with a specific program or project or they may be indirect and assessed to programs and projects based on predetermined criteria.

S. Direct Programs. Programs that are covered by appropriated funds and that can be directly linked to a NASA theme. Overhead and administrative costs that may be managed as a program (e.g., CM&O activities are not considered direct programs).

T. Fiscal Year. The Government's accounting period. It begins on October 1 and ends on September 30, and is designated by the calendar year in which it ends.

U. Full Cost. The total cost to the agency to conduct a program or project. Full cost includes costs directly attributable to the program or project, such as program contracts, an appropriate share of Center and agency-wide overhead costs, and the costs of any shared services that the program or project utilizes.

V. Full-Time Equivalent (FTE). The basic measure of the levels of employment used in the budget. It is the total number of hours worked divided by the number of compensable hours applicable to each fiscal year. The number of compensable hours in the relevant fiscal years is provided in OMB Circular No. A-11.

W. Integrated Budget and Performance Document (IBPD). The annual NASA budget document that includes budget estimates at the program and project level detail, descriptive and justification narratives, performance data, and technical descriptions. Information in the IBPD matches that included in the President's Budget.

X. Knowledge Information Center (KIC). The on-line NASA warehouse for budget information and guidance, accessible only by authorized NASA employees. This is a secured document repository system that does not interface with other systems. For access to the KIC system, contact OCFO-RPD.

Y. Life-Cycle Cost. The total of direct, indirect, recurring, non-recurring, and other related expenses incurred, or estimated to be incurred, in the operations, sustainment, and disposal related to a project. Life-cycle cost of a project or system can also be defined as the total cost of ownership over the project's system life cycle from formulation through implementation. Additional information may be found in NPR 7120.5, NASA Program and Project Management Processes and Requirements, and the NASA Cost Estimating Handbook.

Z. MAX. The OMB information system that is used to collect and process much of the information required from each agency for preparing the Federal budget. MAX consists of a series of schedules that are sets of data within the MAX database. Each schedule describes a view or slice of the President's budget.

AA. Mission. A major function or operation of the agency and the highest activity level of the NASA budget framework. Missions are required to accomplish an agency goal or effectively pursue a scientific, technological, or engineering opportunity directly related to an agency goal. In a broader context, mission refers to the purpose of the agency. NASA's Mission Statement is: "To pioneer the future in space exploration, scientific discovery, and aeronautics research."

BB. New Obligational Authority (NOA). Budget authority contained in NASA's current fiscal year appropriations act.

CC. Obligation. A binding agreement that will result in outlays, immediately or in the future. Budgetary resources must be available before obligations can be incurred legally.

DD. Outlay. A payment to liquidate an obligation. Outlays generally are equal to cash disbursements but also are recorded for cash-equivalent transactions, such as Federal employee salaries and debt instruments. Outlays are the measure of Government spending.

EE. Outyears. The fiscal years following the budget year. Budget development typically includes four outyears.

FF. Passback. OMB's notification to agencies of budget, management, and policy decisions following its analysis and review of all agency budget submissions. Passback data is pre-decisional in nature and confidentiality must be maintained.

GG. Pre-decisional Data. Data developed during the Programming and Budgeting Phases, including the nature and amounts of the President's decisions and underlying materials. This data is confidential. It may not be released outside of the agency until transmitted to Congress, and the material underlying those decisions should not be released at any time except in accordance with OMB Circular No. A-11, Section 22.1. Outyear discretionary data is also considered pre-decisional and may not be released without prior OMB approval. OMB Memorandum [M-01-17](#), dated April 25, 2001, emphasizes the need for confidentiality of pre-decisional information.

HH. Program. A strategic investment by a Mission Directorate or Mission Support Office that has defined goals, objectives, architecture, funding level, and a management structure that supports one or more projects. Additional information on programs may be found in NPR 7120.5.

II. Project. A specific investment identified in a Program Plan having defined goals, objectives, requirements, lifecycle cost, a beginning, and an end. A project yields new or revised products or services that directly address NASA's strategic needs. They may be performed wholly in-house, by government, industry, academia partnerships, or through contracts with private industry. Additional information on projects may be found in NPR 7120.5.

JJ. Service Pool. An accumulation of similar costs and cost types that are distributed to projects by an assignment or allocation methodology that best represents the types of costs in the pool. The costs included in service pools cannot be specifically and immediately identified to a project, but can subsequently be traced or linked to a project and assigned based on usage or consumption. Service pool costs are assigned to a project based on project-controlled use of the service.

KK. Supplemental. An appropriation enacted subsequent to a regular annual appropriations act, when the need for funds is too urgent to be postponed until the next regular annual appropriations act.

LL. Theme. An element of the NASA budget structure that divides the NASA Mission into strategic categories of one or more programs (e.g., Earth Science, , Heliophysics, Planetary Science, and Astrophysics are NASA themes that fall under its Science Mission Directorate).

#### 0104 PPBE COMPONENTS

010401. There are four phases in the PPBE process. The first steps of PPBE occur separately from the analysis of the program resource requirements and

culminate in the publication of NASA’s Strategic Planning Guidance (SPG), which is then used as the basis for all decisions made during the Programming, Budgeting, and Execution Phases. The Strategic Planning Guidance and all programming and budgeting data developed and discussed prior to submission of the President’s Budget/IBPD are pre-decisional and are not to be shared outside the agency. Figure 1-1 depicts the PPBE process and is followed by a description of each phase. All of the steps have actions performed on an annual basis, but some steps will be dealing with different fiscal years than others at any given time during the process.

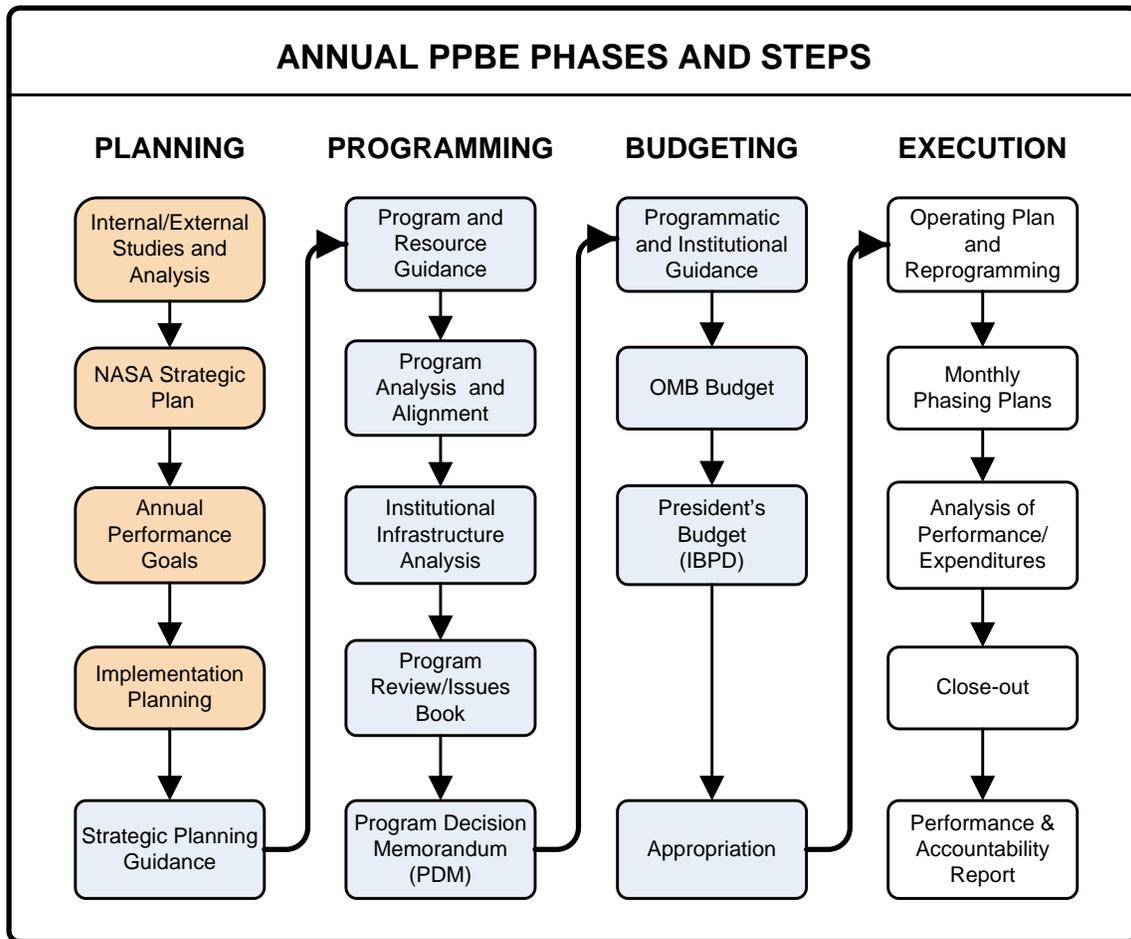


Figure 1-1, Annual PPBE Phases and Steps

010402. Planning Phase. The agency’s planning activities include analyzing changing internal and external conditions, trends, threats, and technologies that will affect NASA; examining alternative strategies for adjusting to these changes and conditions; and defining long-term strategic goals, multi-year outcomes, and short-term performance goals that will challenge and enable the agency to achieve its mission. Planning activities also include developing NASA’s performance measurement strategy and specific metrics that will be used to monitor, assess, and report on the agency’s progress toward achieving these goals. The current NASA Strategic Plan, NASA’s Strategic Management and Governance Handbook (to be replaced by Governance and

Strategic Management Requirements), the Government Performance and Results Act (GPRA) of 1993, and other internal and external requirements provide policy for the Planning Phase activities. Those steps that will not have process details included in the FMR are shaded in tan on Figure 1-1, and links to the referenced policy documents are provided in Chapter 2 of this volume. The Planning Phase produces the NASA Strategic Plan, implementation plans, and updates to the Governance Handbook/Requirements every three years. This phase also produces NASA's annual and strategic performance, program, and project goals, and a description of desired outcomes. NASA uses these products to create the annual SPG for development of the agency's annual budget request. Agency planning does not occur on the same schedule as the annual budget formulation activities. However, the PPBE Programming and Budgeting Phases use the products developed in the Planning Phase to develop the priorities and content of NASA's annual budget request. The steps included in the Planning Phase are listed below. The policy in this volume begins with the final step, Strategic Planning Guidance.

- A. Internal/External Studies and Analyses
- B. NASA Strategic Plan
- C. Annual Performance Goals
- D. Implementation Planning
- E. Strategic Planning Guidance

010403. Programming Phase. The Programming Phase encompasses the definition and analysis of programs and projects, together with their multi-year resource implications, and the evaluation of possible alternatives, including a risk assessment of each option. Programming also serves to balance and integrate resources among the various programs according to identified priorities. Policy for the Programming Phase is included in this volume of the FMR. The steps in this phase are listed below.

- A. Program and Resources Guidance
- B. Program Analyses and Alignment
- C. Institutional Infrastructure Analyses
- D. Program Review/Issues Book
- E. Program Decision Memorandum

010404. Budgeting Phase. The Budgeting Phase includes formulation and justification of the budget to OMB and Congress. The steps of the Budgeting Phase are listed below. Policy for the first three steps are included in Chapter 3 of this volume, but details for the final Budgeting step, Appropriation, will be added in a later revision.

- A. Programmatic and Institutional Guidance
- B. OMB Budget
- C. President's Budget
- D. Appropriation

010405. Execution Phase. The Execution Phase is the process by which financial resources are made available to agency components and managed to achieve the

purposes and objectives for which the budget was approved. Policy for the Execution Phase is provided in FMR Volume 5, *Budget Execution*. The steps in this phase are listed below.

- A. Operating Plan and Reprogramming
- B. Monthly Phasing Plan
- C. Analyses of Performance/Expenditures
- D. Close-out
- E. Performance and Accountability Report (PAR)

## 0105 OVERVIEW OF THE FEDERAL BUDGET PROCESS

010501. Federal Budget Formulation. Title 31, United States Code (U.S.C.), requires that the President prepare a budget for the United States Government on an annual basis and submit it to Congress. During the Federal budget formulation process, the Executive Branch prepares the President's Budget. OMB officially starts the budgeting process by sending planning guidance to Executive Branch agencies in the spring, and the President completes the formulation phase by sending the budget to Congress on the first Monday in February.

010502. Congressional Action. Title 2, U.S.C., requires that Congress adopt a concurrent resolution on the budget each year, setting forth appropriate funding levels for Federal government operations. Beginning in late January or February, Congress reviews the President's Budget. It considers the President's Budget proposals, passes a revenue and spending plan for the Federal government called a budget resolution, and enacts the thirteen regular appropriations acts and other laws that control spending and receipts. Appropriations acts are to be enacted by September 30, prior to the beginning of each fiscal year. If Congress does not pass regular appropriations acts by September 30, they pass a temporary appropriations act, called a continuing resolution, which provides the authority to fund government operations for a specific period of time, usually expressed in days or weeks. More than one continuing resolution may be passed in a fiscal year if delays in passing the regular appropriations continue. This enables government operations to continue while Congress continues to draft the regular appropriations act(s).

010503. Execution. OMB Circular No. A-11 sets forth procedures for execution of the budget, or directing and controlling funds to achieve the purposes and objectives for which they were approved. Execution lasts for seven fiscal years (two years in which appropriations are current and available for new obligations and five in which they are expired and available only for within scope adjustments) and includes two components.

A. The apportionment component pertains to funds appropriated for the fiscal year and to balances of appropriations made in prior years that remain available for obligation. Agencies submit apportionment requests for each budget account to OMB

by August 21 each year or within 10 calendar days of approval of the appropriation. At the beginning of each fiscal year, OMB apportions funds—that is, it specifies the amount of funds that an agency may use by time period, program, project, or activity. Throughout the year, agencies obligate and expend the apportioned funds to carry out their approved programs, projects, and activities. An agency may request reapportionment during a fiscal year if its business needs require an adjustment in how it will use funds.

B. The reporting and outlay component lasts until funds are cancelled (one- and multiple-year funds are canceled at the end of the fifth year after the funds expire for new obligations) or until funds are totally expended (for no-year funds). Agencies must record obligations and outlays pursuant to administrative control of funds procedures contained in Appendix H of OMB Circular No. A-11, *Preparation, Submission, and Execution of the Budget*; report to Treasury; and prepare financial statements.

010504. The following tables highlight the major events during formulation of the Federal budget and subsequent Congressional action. Execution is covered in FMR Volume 5.

**Table 1-1, Major Steps in Federal Budget Formulation**

<b>What Happens?</b>	<b>When?</b>
OMB issues Spring planning guidance to Executive Branch agencies for the upcoming budget. The OMB Director issues a letter to the head of each agency providing policy guidance for the agency's budget request. Absent more specific guidance, the outyear estimates included in the previous budget serve as a starting point for the next budget. This begins the process of formulating the budget the President will submit the following February.	Spring
OMB and the Executive Branch agencies discuss budget issues and options. OMB works with the agencies to: Identify major issues for the upcoming budget; Develop and analyze options for the upcoming Fall review; and Plan for the analysis of issues that will need decisions in the future.	Spring and Summer
OMB issues Circular No. A-11 to all Federal agencies. This Circular provides detailed instructions for submitting budget data and materials.	July
Executive Branch agencies (except those not subject to Executive Branch review) make budget submissions. See section 25.	Early September
Fiscal year begins.	October 1
OMB conducts its Fall review. OMB staff analyzes agency budget proposals in light of presidential priorities, program performance, and budget constraints. They raise issues and present options to the Director and other OMB policy officials for their decisions.	October to November
OMB briefs the President and senior advisors on proposed budget policies. After OMB has reviewed all agency requests and considered overall budget policies, the OMB Director recommends a complete set of budget proposals to the President.	Late November
Passback. OMB usually informs all Executive Branch agencies at the same time about the decisions on their budget requests.	Late November

All agencies, including the Legislative and Judicial Branch, enter MAX computer data and submit print materials and additional data. This process begins immediately after passback and continues until OMB locks agencies out of the database in order to meet the printing deadline. Executive Branch agencies may appeal passback decisions to OMB and the President. An agency head may ask OMB to reverse or modify certain decisions. In most cases, OMB and the agency head resolve such issues and, if not, work together to present them to the President for a decision.	Late November to early January
Agencies prepare and OMB reviews congressional budget justification materials. Agencies prepare the budget justification materials they need to explain their budget requests to the responsible congressional subcommittees.	January
Congressional Budget Office (CBO) reports to Budget Committees on the economic and budget outlook.	January

**Table 1-2, Major Steps in Congressional Action**

<b>What Happens?</b>	<b>When?</b>
President submits the budget to Congress.	First Monday in February
CBO re-estimates the President's Budget based on their economic and technical assumptions.	February
Other committees submit "views and estimates" to House and Senate Budget Committees. Committees indicate their preferences regarding budgetary matters for which they are responsible.	Within 6 weeks of budget transmittal
The Congress completes action on the concurrent resolution on the budget. The Congress commits itself to broad spending and revenue levels by passing a budget resolution.	April 15
The Congress enacts regular appropriations bills or provides continuing resolutions for the upcoming fiscal year.	September 30

**0106 RELATIONSHIP OF PPBE TO OTHER NASA MANAGEMENT PROCESSES**

010601. Performance Plan. GPRA requires that agencies develop budgets that fully integrate the annual performance Plan with other elements of the budget request. The NASA Performance Plan, issued annually in the Integrated Budget and Performance Document, establishes annual performance goals for the year for each program included in the agency's annual budget request and identifies objective and measurable performance goals; discusses the processes, skills, and resources needed to meet the performance goals; and identifies the performance indicators that will be used to measure progress toward achieving the goals. The Performance Plan is one of the inputs used in the PPBE process for budget formulation. NASA's performance is compared to the Plan, and the results are reported annually as part of the Performance and Accountability Report in accordance with GPRA.

010602. Full Cost Management. FMR Volume 7, *Cost*, describes NASA's full cost policy for integrating accounting, budgeting, and management concepts to manage programs and projects from a full cost perspective. The full cost concept is

consistent with sound business practice and legal and administrative guidance, including the Chief Financial Officers Act, the Government Performance and Results Act, and the Federal Financial Management Improvement Act. Budget formulation and execution under the PPBE process will comply with the full-cost management policy.

010604. Internal Controls. FMR Volume 9, *Internal Management Controls*, describes NASA policy for establishing and maintaining an agency system of internal controls that provide reasonable assurance that Government resources are protected against fraud, waste, mismanagement and misappropriation. All NASA financial management community personnel must ensure that controls are in place, resources are appropriately used to support NASA's mission, laws and regulations are followed, and data is reliable and timely. NASA managers with responsibility for budget activities must evaluate the internal controls associated with the budget process on a regular basis in accordance with the NASA Internal Control Program. Internal controls for any financial system used to support the PPBE process must also be in place and regularly evaluated for sufficiency.

010605. Information Technology. FMR Volume 2, *Information Systems*, describes policy for the development, operation, evaluation, and reporting of all NASA financial systems. The PPBE process is supported by multiple agency financial systems. Any financial information system being procured or used to support the PPBE process must comply with policy outlined in Volume 2 and all Federal requirements and regulations for financial information systems, including the Information Technology Reform Act of 1995 (also known as the Clinger-Cohen Act).

010606. Program and Project Management. NPR 7120.5, *NASA Program and Project Management Processes and Requirements*, defines the management requirements for formulating, approving, implementing, and evaluating the programs and projects that NASA will consider during the PPBE process.