Subject: Budget Formulation

Responsible Office: Office of the Chief Financial Officer
Chapter 1. Planning, Programming, Budgeting, and Execution (PPBE)

1.1 Overview

1.1.1 The development of NASA's budget plan and the application of budget authority to achieve the Agency's objectives is carried out through a four stage Planning, Programming, Budgeting, and Execution process, referred to as PPBE. The first three stages include considering and developing the Agency's budget requirements and request for appropriations. This NPR focuses on budget formulation, which begins with the development of Agency-wide Strategic Programming Guidance (SPG) and ends with justifying the budget request to Congress. The last stage, Execution, includes financial management practices necessary for spending, recording, tracking, and controlling budget authority in the conduct of NASA's work, including operating plans. Requirements for budget execution are included in NPR 9470.1. Figure 1-1 depicts the annual PPBE process.

1.1.2 During PPBE, budget formulation requires an enhanced level of analysis to ensure that resource alignment best supports the accomplishment of Agency strategic goals and objectives. The PPBE process includes reviewing and updating Agency performance plans, making programmatic decisions, and formulating an annual budget request that supports the plan. This information becomes a part of the Government-wide PBR. Accompanied by budget justifications, Congress uses this information as a basis for deliberations on direct budget authority (appropriations) to be enacted.

Figure 1-1, Annual PPBE Phases and Steps
1.1.3 Planning Phase. This phase includes review and consideration of internal and external factors that affect programming and budget decisions for the budget year in development, plus the next four outyears (often called a five-year budget). During the Planning Phase, Agency leaders establish Agency-wide policies and priorities, set initial budget controls and full-time equivalent (FTE) targets for all budget accounts, update strategic plans (when required), and provide the top-level guidance necessary for budget formulation. Agency leaders consider, among other factors: budget limits and programmatic guidance from the Administration and Office of Management and Budget (OMB); recent legislation, including authorization and appropriation acts; availability and costs of institutional capabilities; outstanding issues that arose during the prior cycle of budget formulation; and proposed future investment strategies. The SPG documents this guidance and establishes a starting point from which the Agency will formulate the budget.

1.1.4 Programming Phase. In the Programming Phase, Agency leaders use the SPG as a framework for subsequent analysis of programs, resource requirements, and issues. The Control Account Managers (CAMs) submit their budget proposals and issues in a Program Analysis and Alignment (PAA) report. The CAMs present their proposal and issues to senior management. Managers and independent analysts assess issues, risks, and impacts and provide options to the Executive Council (EC). Pursuant to NPD 1000.0, the EC acts as the decision body for major PPBE issues.

1.1.5 Budgeting Phase. In this phase, NASA finalizes its budget request to Congress. During this part of budget formulation, the Office of the Chief Financial Officer (OCFO) provides to OMB the initial budget request (developed during planning and programming) and other required budget and performance deliverables that help inform OMB planning. CAMs develop and present to OMB detailed budget briefings that support the Agency's request. Through an iterative passback process, OMB finalizes budget controls for the PBR (settlement). NASA develops its supporting report, the Congressional Justification (CJ), and sends it to Congress. The Budgeting Phase includes presentation and defense of budget estimates for Congress.

1.1.6 Execution Phase. This phase includes developing and maintaining Agency budget operating plans and spending/funding controls, executing the programmatic plans approved by Congress, and managing financial and accounting activities, including reporting. The phase also includes analyzing and assessing performance and reporting, per the Government Performance and Results Modernization Act of 2010 (GPRAMA), Pub. L. 111-352. The Execution Phase of PPBE is fully addressed in NPR 9470.1.

1.2 Agency Requirements

1.2.1 NASA uses the PPBE methodology, as defined in this NPR, to align Agency resources in accordance with legal and regulatory requirements and the Agency's vision and mission.

1.2.2 The OCFO Strategic Investment Division (OCFO SID) and OCFO Budget Division (OCFO BD), shall manage major processes of NASA's budget formulation. PPBE materials are pre-decisional and are embargoed against external release. NASA will release and make public final budget materials in accordance with OMB Circular A-11 Sec. 22 and other requirements.

1.3 Roles and Responsibilities

1.3.1 Office of the Chief Financial Officer (OCFO). The OCFO shall lead all PPBE activities to include budget formulation, performance monitoring and assessment, budget execution, and financial reporting.

1.3.1.1 The Chief Financial Officer (CFO) and Deputy CFO (DCFO) for Budget and Performance provide oversight of all budget development processes.

1.3.1.2 The DCFO for Appropriations leads all appropriations-related communications with Congress, including transmitting the budget, receiving and providing responses to Congressional questions, and clarifying Agency direction from Congress. The DCFO for Appropriations also consults with senior leaders on budget strategies, so the Agency can meet known and anticipated requirements from Congress.

1.3.1.3 OCFO SID leads the Planning and Programming Phases of PPBE and provides independent, objective, transparent, and multi-disciplinary assessments necessary to support EC decision making. OCFO SID develops the SPG and leads the development of initial Agency budget requirements and resolution of competing priorities. Through a separate but parallel process, OCFO SID conducts strategic reviews and prepares performance plans and reports that support budget development and respond to Congressional requirements.

1.3.1.4 OCFO BD leads the Budgeting phase by overseeing the OMB Submit and negotiations through passback and settlement. OCFO BD leads development and production of the CJ, ensuring that budget justifications are clear and address Congressional requirements. OCFO BD also consolidates and provides Agency input to the PBR. Throughout budget formulation, OCFO BD monitors top-level budget controls and serves as the interface to OMB.

1.3.2 Control Account Managers (CAMs). These managers shall formulate and manage NASA's budget accounts
throughout PPBE. CAMs are identified in the SPG, and in most cases, the account Resources Management Officer (RMO) leads the PPBE process for that account. In Planning, Programming, and Budgeting Phases, CAMs develop Program Resource Guidance (PRG) for Center institution and program/project managers within affected accounts. CAMs consolidate program/project and Center requirements and conduct an internal Program Analysis and Alignment (PAA) to identify and resolve within-account or cross-cutting conflicts. CAMs present budget proposals to OMB and provide materials for the CJ.

Note: Some CAMs manage Agency budgets for cross-cutting investments (e.g., construction). Throughout this NPR, any described CAM responsibility is meant to encompass any prerequisite steps necessary to develop the Agency-level budget managed by that CAM. Such steps may include data calls to other CAMs and Centers, issuing guidance, conducting reviews, prioritizing work, preparing reports, or other activities to support the budget process.

1.3.2.1 Mission Directorate Associate Administrators.


e. Mission Support Directorate - Safety, Security, and Mission Services (SSMS) and Construction and Environmental Compliance and Restoration (CECR) account budgets.

1.3.2.2 Assistant Administrator for Education - Education account budget.

1.3.2.3 Centers. Centers provide resource requirements to CAMs.

Note: In formulating and executing operations portions of the budget, NASA Headquarters is managed as a Center. The Executive Director of Headquarters Operations provides budget requirements to CAMs in the same way as any Center.

1.3.2.4 Inspector General - Office of the Inspector General (OIG) account budget.

1.3.3 Office of the General Counsel (OGC). The OGC shall advise the OCFO in interpreting and proposing appropriations language.

1.3.4 Office of the Chief Human Capital Officer (OCHCO). OHCM shall lead the workforce planning activities and analyses (published in the SPG) necessary for budget development.

1.3.5 Office of Communications. The Office of Communications shall coordinate and lead budget rollout activities.

1.3.6 Office of Legislative and Intergovernmental Affairs (OLIA). OLIA shall lead non-appropriations-related Agency interactions with Congress, including activities supporting authorization, programmatic and operational issues, confirmations, and outreach. OLIA leads budget briefings for Congressional Members of Authorizing committees and Members not on NASA's Appropriations Committees.

1.3.7 Administrator, Senior Leaders, Executive Council, and Agency Management Councils. Senior leaders and leadership teams shall conduct reviews of cross-cutting issues that drive budget decisions (e.g., institutional capabilities and workforce requirements). They establish Agency priorities that align to Administration policy, resolve resource conflicts, and finalize decisions necessary for formulating the budget request. Senior leaders also approve budget and external reports and provide testimony to Congress to support budget requests.

1.4 The Federal Budget Process

1.4.1 The Federal budget process is a multi-year activity that occurs over three main phases: Formulation of the PBR, Congressional Actions, and Execution of the Budget (to include audit and review). This NPR focuses on the Formulation phase, although the other phases are briefly described here in order to establish the entire context of Federal budgeting. A short description of Authorization is also included, as NASA's mission is typically also authorized for activity by Congress. An overview of the Federal budgeting process and major products and deliverables are described in OMB Circular A-11, Part 1.

1.4.2.1 The Subcommittees conduct analyses, reviews, and studies of NASA's investments and consider them in the context of national priorities. The Subcommittees generally formulate recommendations along lines of the intent and intended outcomes of research and development; operational strategies to improve success (e.g., reviews risk mitigation and controls); specific programmatic approaches to missions and research disciplines of interest to the committees; and reporting requirements. Each Subcommittee prepares and approves a draft authorization bill, which is then considered by the larger Committee. The Committees conference, mark up the bill, and propose it to the full House of Congress. If passed, it is referred to the other chamber for consideration. Once enacted, the Authorization Act authorizes NASA to conduct its missions, generally for two or more years. An Authorization Act is typically accompanied by a Conference Committee report. Frequently the Authorization Act will include amendments to NASA's organic legislation, The National Aeronautics and Space Act, 51 U.S.C. §20101 et seq.

1.4.2.2 The Authorization Act does not provide budget authority, but frequently contains restrictions or limitations on the use of appropriated funds. However, actual appropriations may confirm or override authorization language. If the two laws conflict, special guidance will be provided, but in general, NASA leaders will try to harmonize the intent of the two laws. When in doubt, the CFO, OLIA, OGC, and the DCFO for Appropriations will provide guidance, based on legislative history or other relevant guidance, such as interpretations of the Government Accountability Office (GAO).

1.4.3 Formulation. United States Code Title 31 requires that each year the President prepare and submit to Congress a budget for the United States Government. OMB initiates this process by sending planning guidance to Executive Branch agencies in the spring. Formulation concludes when the President sends the budget and required performance reports and plans to Congress.

1.4.3.1 OMB provides Agencies with an initial budget guidance memorandum each year. This memorandum provides preliminary guidance on spending limits and Administration priorities. Federal agencies present their budget plans in the OMB Submit and through the cross-Government budget formulation system, MAX A-11, and other data collection systems. Submission details and instructions are detailed in OMB Circular A-11, Part 2.

1.4.3.2 OMB considers initial budget submissions from both an individual agency and a Government-wide perspective. OMB assesses national needs, economic conditions, and how each agency contributes to Administration goals. OMB provides agency-specific programmatic and budgetary guidance, including decisions on budget proposals that exceed initial controls (typically called overguide requests), in a process called passback. Agencies may submit an appeal (often termed a reclama) and provide justification materials. After negotiations, OMB finalizes its agency direction in a “settlement” document.

1.4.3.3 Agencies revise their budget estimates to reflect settlement decisions. Agencies update budget estimates in MAX A-11 and cross-Government data collection systems. Managers develop detailed budgets and justifications as presented in the CJ. Before release, OMB will review and approve all materials.

1.4.3.4 OMB Circular A-11 includes an estimated schedule of budget formulation deadlines and milestones, including a release date. Agencies deliver CJs to Congress on the same day that the President releases the PBR, typically the first Monday in February. Any dates are subject to change, and agencies will coordinate release of budget materials with OMB. Agency leaders may receive updated schedule information from OMB budget examiners or through the Budget Officers Advisory Committee (BOAC).

1.4.4 Congressional Actions. Each year, Congress adopts a concurrent resolution on the budget, setting forth appropriate funding levels for Federal Government operations. This process and resulting budget authority is referred to as appropriation.

1.4.4.1 The House and Senate discuss and pass a revenue and spending plan for the Federal Government (called a Congressional Budget Resolution), which determines total funds available for mandatory and discretionary spending. This leads to a cap on discretionary spending within each House and Senate Appropriations Subcommittee. The Committees on Appropriations then divide the total discretionary allocation by subcommittee (called 302(b) allocations), which are effectively caps on the total funds available to each subcommittee in formulating bills.

   Note: NASA’s budget is considered by the Senate and House Appropriations Subcommittees on Commerce, Justice, Science, and Related Agencies, each often referred to as the “CJS Subcommittee” for the respective Appropriations Committee.

1.4.4.2 The House and Senate CJS Subcommittees work independently to mark up the budget for all agencies under their jurisdiction and are directed to remain within their established budget limits. During the markup phase, agencies may be called upon to give testimony and/or provide responses to questions for the record. Committee members review and analyze the PBR and agency CJs. Each subcommittee votes and approves a bill which then moves to the next level of consideration, the Senate Appropriations Committee or the House Committee on Appropriations. The full Senate and House committees each follow a similar process to review, mark up, and pass an appropriation resolution.

1.4.4.3 The House and Senate appropriations bills typically differ and Congress reconciles them in order to determine a final Conference Agreement spending plan for the budget year. In a process called conferencing,
representatives from both sides of Congress engage in negotiations to determine final appropriations. Major programmatic discussion points, comments to the agencies on operations and activities, and recommended detailed funding guidelines are recorded in a Conference Report.

1.4.4.4 Upon conference agreement, the full Congress votes on and passes the budget and sends the appropriation bills to the President for signature. The goal each year is that Congress will pass and the President will sign appropriations acts by September 30, prior to the beginning of each fiscal year.

1.4.4.5 If Congress does not pass regular appropriations acts by September 30, it usually passes a temporary appropriations act, called a Continuing Resolution (CR). A CR provides budget authority to fund Government operations for a specific period of time, usually expressed in days or weeks, while Congress continues its appropriations deliberations. See NPR 9470.1 for additional information.

1.4.4.6 When Congress neither passes a regular appropriation nor a CR, a lapse in appropriation occurs, and all but "essential" operations of the Federal Government will shut down. The Government resumes operations only when an appropriation or CR is enacted. OMB will issue guidance should a lapse in appropriations seem likely.

Note: Within NASA, the CFO will work with other Agency senior leaders to publish and manage a contingency plan for a lapse in appropriations. See OMB Circular A-11, Sec. 124.

1.4.5 Execution. OMB Circular A-11 sets forth procedures for execution of the budget. This means the directing and controlling of funds to achieve the purposes and objectives for which they were approved. In executing the budget, agencies will follow specific Federal regulations with respect to planning and management, procurement, accounting, and reporting. Agency requirements for execution are addressed in NPR 9470.1. During budget execution, agencies provide to OMB and Congress reports on budget and financial status, performance, and on other topics as required. See NPR 9310.1 and NPR 9311.1.

1.5 The Relationship of the Federal Budget Process and PPBE to Other NASA Management Processes

1.5.1 Strategic Plan. Each year, NASA demonstrates a clear connection between the budget requested for the upcoming fiscal year and the achievement of goals set forth in the strategic plan. NASA is required to update its strategic plan every four years (effectively, one year into each Presidential administration). The Strategic Plan (NPD 1001.0) establishes top-level goals and objectives for the Agency and describes key strategies for achieving results. For details on roles and responsibilities, content, and review requirements, see NPD 1000.0.

1.5.2 Agency Management. NPD 1000.0 outlines the general strategy, authorities, roles, and top-level governance and decision processes for the Agency.

1.5.3 Performance Planning. A performance plan establishes both near-term (1 year) and longer-term (3-5 years) goals for each program included in the Agency's budget request. The plan identifies objective and measurable performance goals; describes the processes, skills, and resources needed to meet the performance goals; and records performance indicators for measuring progress toward achieving the goals. Regular performance assessments and an annual report of actual progress are feedback tools that help the EC make key management decisions during budget formulation. Performance plans and reports also help inform OMB priorities and Congressional deliberations on appropriations. See Pub. L. 111-352 and OMB Circular A-11, Part 6.

1.5.3.1 With respect to budget development, NASA manages the development and approval of the performance reports and plans as parallel, but tightly coordinated, processes. The linkage between budget and performance, particularly for annual performance plans for the budget year in development, is reinforced in this NPR, but requirements for most performance-related assessments, planning, and reports are documented separately. See NPD 1000.0 and NPR 9311.1.

1.5.3.2 NASA embeds within project and program budget justifications any Congressionally required performance data and issues related to major investments. Including this information addresses the Major Programs Annual Report (MPAR) requirement (51 U.S.C. § 30104) and provides all required programmatic management information in one location.

1.5.4 Internal Controls. NPR 9010.3 describes NASA's policy for establishing and maintaining an Agency system of financial management internal controls that provide reasonable assurance that Government resources are protected against fraud, waste, mismanagement, and misappropriation. NASA personnel with financial management responsibilities shall 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. In accordance with the NASA Internal Control Program, NASA managers with responsibility for budget activities will evaluate on a regular basis the internal controls associated with the budget process.

1.5.5 Acquisition. NPD 1000.3 guides the efficient and effective use of the resources entrusted to the Agency, in particular, considerations in "make versus buy" situations.
1.5.6 **Program and Project Management.** NPR 7120.5 defines the management requirements for formulating, approving, implementing, and evaluating the programs and projects that NASA considers during the PPBE process. See also NPD 1000.0 for governance principles and strategic management.

1.5.6.1 Managers also use tools, such as the Agency Mission Planning Model (AMPM), to assess resource requirements for major missions and investments. Multi-year projects have budget implications in both the near and long-term, which should be considered during each budget planning cycle.

1.5.7 **Information Technology.** Multiple Agency financial systems support the PPBE process. Any financial information system being procured or used to support the PPBE process will comply with Agency policy regarding financial management and budget systems and with Federal requirements and regulations for financial information systems, including U.S.C. 31 chapter 9 and the 40 U.S.C. §11101 et seq.