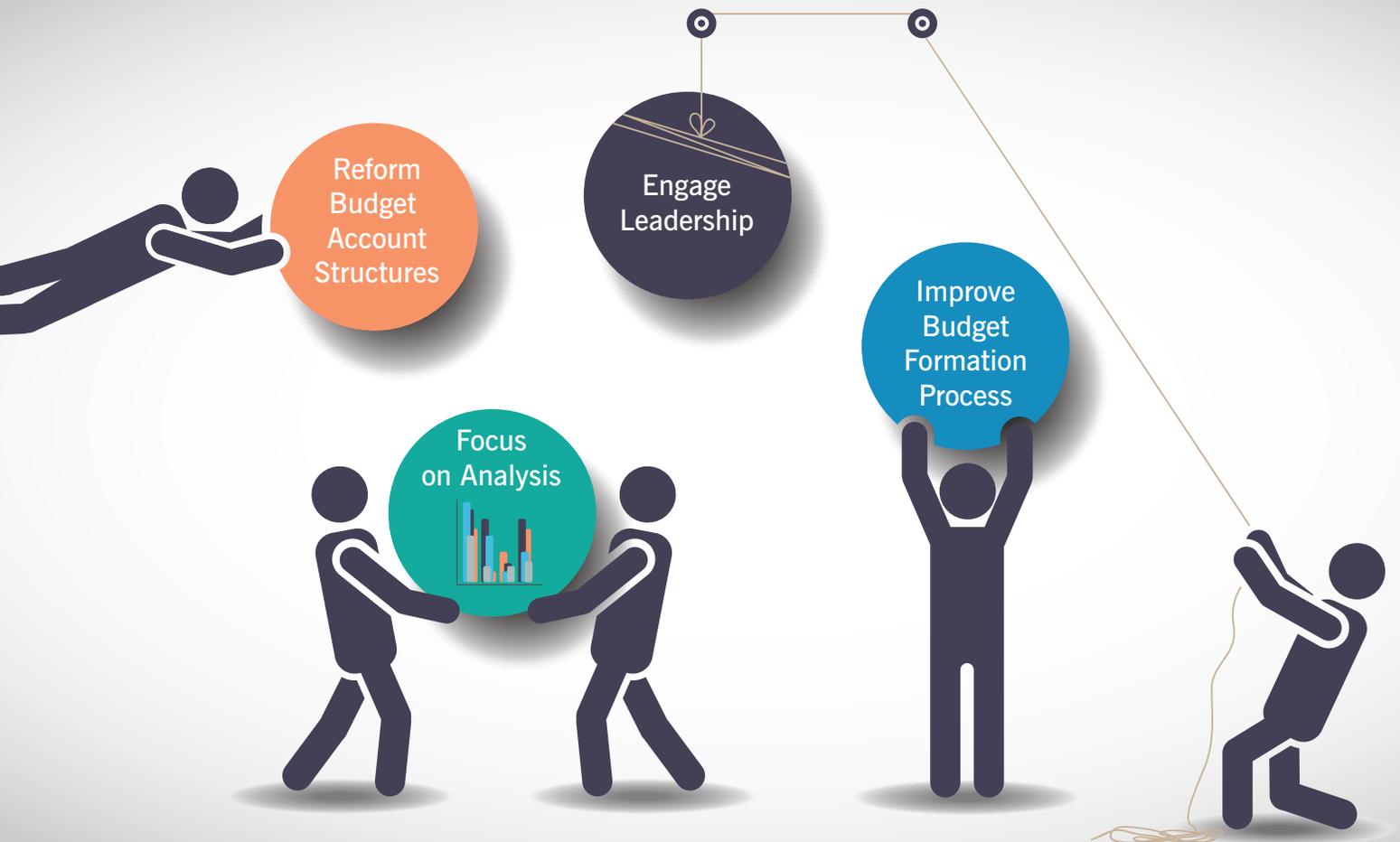




Four Actions to Integrate Performance Information with Budget Formulation



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Foreword

On behalf of the IBM Center for The Business of Government, we are pleased to present this report, *Four Actions to Integrate Performance Information with Budget Formulation*, by John Whitley, Institute for Defense Analyses.

For years, good government observers have called for the use of performance information to better inform budgeting decisions. This report offers specific steps that can be taken by government leaders—without legislation—to make this a reality. Dr. Whitley focuses his attention on how best to address performance as part of the budget formulation process that occurs in agencies, departments, and the Office of Management and Budget, which leads to the president's annual budget submission to Congress.

Dr. Whitley offers insights and specific actions based on his years of experience working in and with federal agencies. He says that the budgeting community typically does not see itself as having the discretion to make necessary process changes, and the performance community often does not understand how best to account for the information and timing pressures on decision-makers in the budget process.

Dr. Whitley says the goal is having a budget process that is focused on making resource allocation decisions and a performance function that provides data on the results of alternatives when they are needed for decision-making. And to achieve this, “both communities must adapt their own processes and data products to the needs of the other.”

To do this, Dr. Whitley offers a series of recommendations to engage agency leaders, conduct better analyses, improve the budget formulation process, and reform agency budget accounts and cost-estimating approaches. For example, he encourages agency leaders to treat performance measurement as a key component of an agency's internal analysis function, not just a collection and reporting function for external accountability.



Daniel J. Chenok



Gregory J. Greben

By better leveraging the use of performance data in budget decisions, agencies could realize significant improvements in difficult trade-offs. We hope this and other findings from Dr. Whitley's insightful report will help guide actions by leaders of both the budget and performance communities in federal agencies.



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Executive Summary

Performance-budget integration is essential for the sound stewardship of taxpayer resources. But it has been difficult to achieve, despite extensive effort across the government. This report provides concrete actions that can be taken to help performance-budget integration initiatives succeed. The recommendations within each action provide a checklist of important considerations when designing and implementing an integration initiative. They are summarized here:

Action	Recommendation	
Engage Leadership	1.1	Focus performance-budget integration initiatives on leadership's priorities.
	1.2	Use self-interest to motivate the performance-budget integration initiative.
	1.3	Dispel misconceptions.
	1.4	Understand the leadership's fiscal environment.
Focus on Analysis	2.1	Staff the performance office with analysts.
	2.2	Treat performance measurement as an analytic function.
	2.3	Focus analysis on developing alternatives.
	2.4	Ensure objectivity.
	2.5	Ensure transparency.
	2.6	Set realistic analytic objectives at the start of the cycle.
	2.7	Develop a sustainable division of labor.
Improve Budget Formulation Process	3.1	Provide top-down guidance at the start of the budget cycle.
	3.2	Focus process on decisions and push technical tasks downward.
	3.3	If needed, develop a separate analytic staff.
	3.4	Engage in multi-year budgeting.
	3.5	Push decision making earlier in the process.
	3.6	Effectively integrate other elements of the decision support process.
Reform Budget Account Structures	4.1	Ensure capability to construct accurate cost estimates.
	4.2	Review account structure and revise if necessary.

Introduction to Performance-Budget Integration

Overview

Informing budget decisions with performance information is an important element of sound government management. For example, without knowing how building another 350 miles of fence along the U.S./Mexico border will impact border security, policy makers cannot assess whether it is a wise investment. It may be relatively easy to estimate the building cost and whether the fence can be built in the time frame provided, but that information alone is not enough to make a decision. The performance results must also be projected and compared against the likely performance results from alternative uses of those scarce taxpayer resources. It is only through understanding benefits (that is, performance) and costs together that informed budget decisions can be made.

The federal government has spent considerable time and energy to improve performance-budget integration. Joyce (2003) reviews many of the major 20th-century initiatives. The Hoover Commission formally introduced the performance-budget concept to the federal government in 1949 (Schick 1966).¹ Major initiatives of the following decades included the Planning, Programming, and Budgeting System (PPBS), management by objectives, and zero-based budgeting. This trend has continued in the last 20 years with major pieces of performance legislation, including the Government Performance and Results Act (GPRA) of 1993 and the GPRA Modernization Act (GPRAMA) of 2010, and executive branch initiatives, including the Bush administration's Program Assessment Rating Tool and the Budget and Performance Integration element of the President's Management Agenda as well as the Obama administration initiative of creating agency priority goals.

But integration of performance and budget has been hard to achieve. The U.S. Government Accountability Office (GAO) stated in their 2013 report, *Managing for Results*, that the percentage of federal managers reporting that they use performance information to a "great" or "very great" extent in allocating resources actually fell between 1997 and 2013.² A 2011 survey of agency performance improvement officers (PIOs) by the Partnership for Public Service found similar challenges. In that survey, PIOs said outcome performance measures, which are necessary for performance-budget integration, were their weakest measurement area. Measures of compliance, process, outputs, and milestones all scored higher. Specific PIO comments included, "GPRA needs to be linked to the budget process" and "Right now, performance data is just extra information. If we could change the way we budget, it would be fixed." (Partnership for Public Service, 2011.)

As the PIO comments reveal, one reason for limited progress has been the federal government's recent focus on improving performance information *without* substantively addressing budgeting

1. Although, as Schick (1966) also points out, the Hoover Commission's use of the term performance-budget is different from the performance-budget integration discussed in this report, which is closer to what was historically called *program budgeting*.

2. The decline was approximately five percent, but was not reported to be statistically significant.

processes. With the exception of the Budget Performance Initiative in the George W. Bush Administration President's Management Agenda, none of the legislation or initiatives of the last 20 years focused on budget processes. With respect to performance-budget integration, this has effectively resulted in a one-sided "build it and they will come" approach—if sufficient quantity and quality of performance information became available, the budgeting process would presumably begin using it. There are two problems with this approach:

- The pressures and constraints on the budgeting community often lead to the perception within the community that it does not have the resources or discretion to make the large changes necessary to achieve meaningful performance-budget integration.
- The performance community, with limited direct knowledge of and participation in budgeting processes, does not know what the requirements are for the performance information it develops—what to develop, when it is needed, and how it should be presented.

Part of the explanation for the current approach ("build it and they will come") is that the above legislation and executive branch initiatives have had a broader focus than just performance-budget integration. These initiatives were also meant to promote integration of performance information into strategic planning and program management decisions. To achieve meaningful performance-budget integration, both communities must adapt their own processes and data products to the needs of the other.

The purpose of this report is to provide concrete examples of, and recommendations for, how meaningful performance-budget integration (in budget formulation) can be achieved. These examples and recommendations contain changes to the nature and timing of performance information produced, as well as specific changes to budgeting processes so that they are more receptive to and better able to use the performance information. They will be useful to advocates of performance-budget integration who have the opportunity to implement reform initiatives within their programs and agencies. They may also be useful to individuals in oversight roles, such as Congress, and in other organizations both within and outside of government that are responsible for supporting complicated resource allocation decisions.

Defining Performance-Budget Integration

To identify concrete steps that can be taken to improve the use of performance information in budgeting decisions, it is first useful to clearly define what budgeting decisions are and how performance information informs them. Key elements follow:

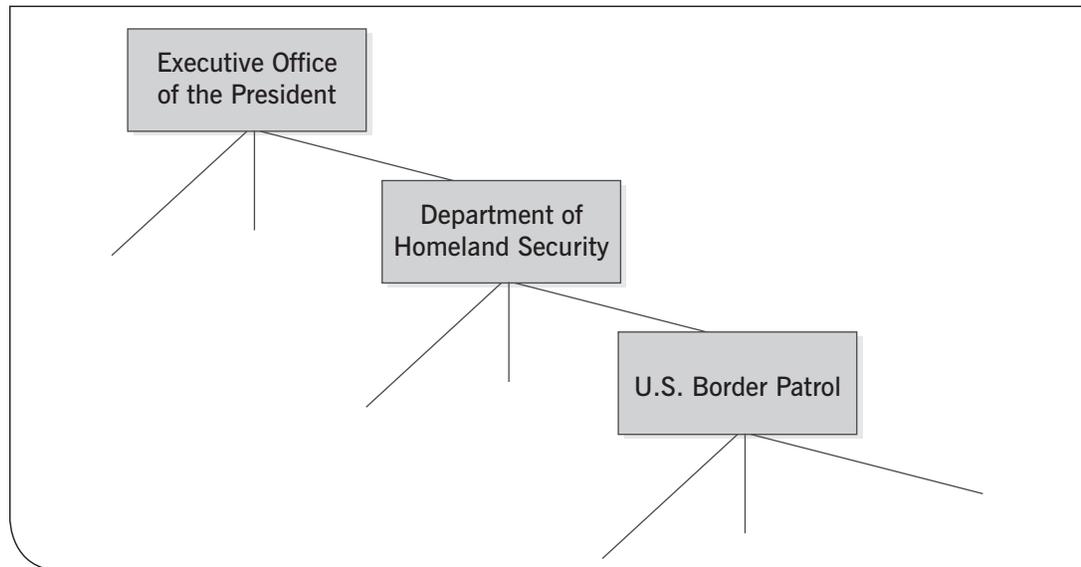
- Budget formulation is the allocation of scarce resources among competing investment options. It is choosing between alternatives.
- Performance information's role in budget formulation is to provide decision-makers with estimates of the benefits (the outcome-oriented performance measure targets that can be realized) for alternative resource allocation options—it is the analytic relationship between performance and cost, and the ability to forecast this relationship into the future, which make the performance function relevant to budget formulation.

In summary, performance-budget integration is informing resource allocation decisions with quantitative performance measures of benefit. The performance function provides data on the results of alternatives, while the budget process is focused on resource allocation. The overall objective of integration is to improve mission accomplishment for the program, agency, or administration by ensuring that resources are allocated as efficiently as possible. It does this by replacing, not completely but as much as possible, politics, parochial interest, subjective judgment, and other criteria for decision-making with quantitative measurement and analysis of results.

Performance-Budget Integration Example—Border Security

To provide a concrete illustration of performance-budget integration, this section examines the issue of border security along the southwest U.S. land border with Mexico.³ For illustrative purposes, consider three levels of decision-making: U.S. Border Patrol (USBP), the Department of Homeland Security (DHS), and the Executive Office of the President (EOP).⁴ Figure 1 illustrates these decision-making levels.

Figure 1: Border Security Decision-Making Levels



USBP has primary responsibility for border security on the southwest land border. To fulfill its mission, USBP uses inputs such as border patrol agents, tactical infrastructure (for example, vehicle and pedestrian fencing), technology (for example, ground sensors and radar towers), and consequence programs for repeat offenders. A primary responsibility of USBP leadership is to combine these—the leadership’s “trade-space”—to produce maximum border security given available resources.⁵ The objective of USBP’s budget formulation process should be to help the USBP leadership in producing this optimal allocation of its resources for the next five years.⁶ Figure 2 illustrates USBP’s budget formulation trade-space.

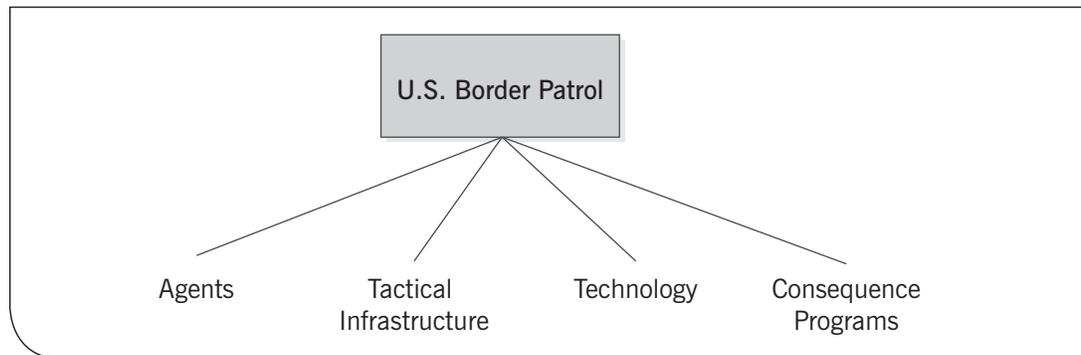
Within this context, identifying the performance information required for effective USBP budget formulation is straightforward. First, USBP must measure the outcome(s) it is trying to achieve. As a law enforcement organization, this outcome is the rate at which the laws under its jurisdiction are violated; that is, the rate at which illegal migrants and contraband cross the border. USBP affects this outcome by using inputs like agents and technology to produce outputs like situational awareness and apprehensions. Second, USBP’s performance measurement requirement is to measure its inputs and outputs.

3. The security of the southwest land border with Mexico can be divided into security at the ports of entry (where legal crossing occurs) and between the ports of entry. The focus in this example is between the ports of entry.

4. Under current practice, there is a fourth organizational level of decision-making—Customs and Border Protection (CBP), the DHS component responsible for USBP. This fourth level, positioned between DHS and USBP, is ignored throughout this report for simplicity—the recommendations of this report apply largely unchanged at this level as well.

5. This report uses the term “trade-space” to refer to the set of resource allocations options available to agency leadership.

6. DHS, like most agencies in the security arena, uses a five-year profile of resources in budget formulation, not just a single-year budget.

Figure 2: U.S. Border Patrol Budget Formulation Trade-Space

Measuring inputs, outputs, and outcomes is not enough to make the performance community useful in budget formulation decision-making. The USBP leadership's budget formulation problem is to allocate available resources so as to maximize outcomes (i.e., border security measured as the lowest rate of illegal immigration and contraband smuggled). To decide if the number of agents should be reduced in order to free additional resources for increased investment in technology, the chief of the USBP needs to know:

- How much is saved by cutting agents?
- How much additional investment in technology this savings will allow?
- How much border security is produced with fewer agents and more technology (that is, the incremental or marginal effect of each of the inputs on outputs and outcomes)?

Tables of various input, output, and outcome performance measures in an annual performance report do not necessarily assist budget decision-making. Budget decision-making is about choosing between alternatives: Should the organization buy more of one input (technology) and less of another input (agents)? To inform them, the performance community needs to:

- Know the analytic relationships between performance measures and costs.
- Have the ability to forecast that relationship into the future

For the performance community to be relevant to the budgeting community, it must be focused on:

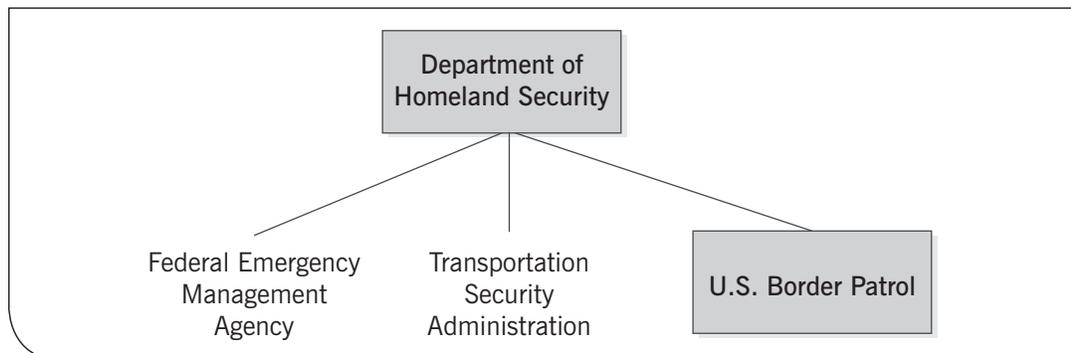
- Measuring inputs and outputs
- Analyzing how these factors contribute to outcomes
- Forecasting the level of outcomes achieved at different combinations of inputs/outputs

Once the chief of the USBP has formulated a USBP budget proposal, it is sent to DHS headquarters for DHS-level budget formulation.⁷ DHS produces the outcome of homeland security. At the DHS level, USBP's outcome of border security becomes an input. DHS combines this input with others, such as disaster management from the Federal Emergency Management Agency (FEMA) and air transportation security from the Transportation Security Administration (TSA), to produce its outcome of homeland security. A primary responsibility of DHS leadership is to combine these inputs to produce the most homeland security possible, given its available resources. The DHS budget formulation objective should be to aid the DHS leadership in

7. As noted in Footnote 4, there is actually a layer between USBP and DHS headquarters, the DHS component CBP. This fourth level of decision-making is left out for the sake of simplicity.

producing this optimal allocation of its resources for the next five years. Figure 3 illustrates DHS's budget formulation trade-space.⁸

Figure 3: Department of Homeland Security Budget Formulation Trade-Space



At the USBP level, the use of performance information to inform budgeting is focused on measuring the contributions of agents, technology, and other inputs to border security. At the DHS level, the performance measurement challenge is to identify the costs of different levels of border security and how these different levels of border security contribute to homeland security. The DHS secretary must decide if additional risk in border security to free resources for increased investment in air transportation security is a good trade. For the performance community to be relevant to this decision, it must be focused on measuring border security and air transportation security, analyzing the contribution of these to homeland security (e.g., homeland security risk reduction) and forecasting the level of risk reduction achieved at different combinations of inputs/outputs.

This level of budget formulation also provides a good example of some related challenges that arise in performance-budget integration:

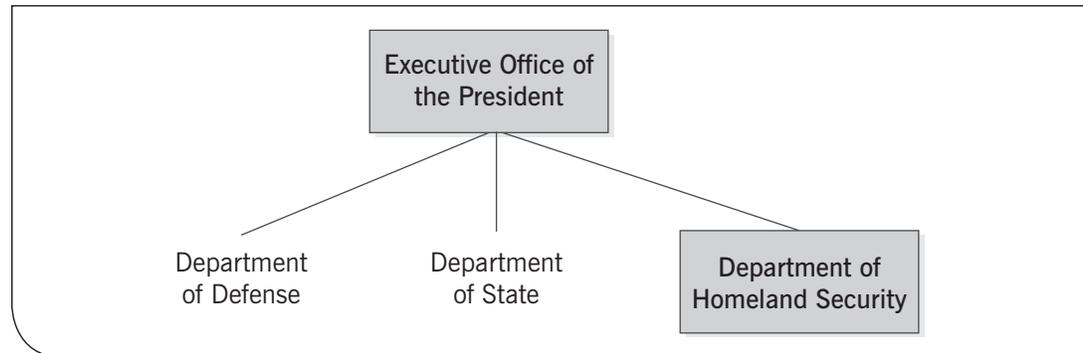
- **Many budget formulation decisions are cross-cutting.** For example, although USBP is the primary organization in DHS responsible for border security, it is not the only one. One of the largest non-USBP contributors is the DHS component, Immigration and Customs Enforcement (ICE). Two important inputs ICE provides to the security of the southwest land border are the investigative law enforcement function (e.g., drug smuggling investigations) and detention and removal services for illegal immigrants who cannot be immediately returned. Thus, DHS-level budget decision-making includes coordination of input investments across USBP and ICE to ensure that border security is being produced most efficiently.
- **Priorities differ among performance offices at different levels in an organization.** The USBP performance office may be more focused on the impacts of agents and technology on border security, while the DHS-level performance office may be more focused on how the contributions of USBP and ICE combine with each other. It can be challenging to coordinate these activities—ensuring the full set of analyses are conducted, but without unnecessary duplication and overlap.

Once the secretary of homeland security has formulated a DHS budget proposal, it is sent to the Office of Management and Budget (OMB) within the EOP. The EOP is concerned about the outcome of national security (along with economic and social outcomes). The government

8. There are many inputs used by DHS to produce homeland security, in addition to disaster management from FEMA, air transportation security from TSA, and border security from USBP. These are being used to illustrate the trade-space of DHS senior leadership.

uses homeland security, now considered an input from DHS; military force, an input from the Department of Defense (DoD), and diplomacy (Department of State), among other things, to produce national security. A primary responsibility of an administration is to combine these inputs in the most effective way to produce as much national security as possible, given available resources. An objective of the budget formulation process should be to aid the president and senior administration decision-makers in producing this optimal resource allocation. Figure 4 illustrates the EOP's budget formulation trade-space.

Figure 4: Executive Office of the President Budget Formulation Trade-Space



As at the lower levels of decision-making, annual performance report tables are not enough to inform budget decisions. OMB and the National Security Council (NSC) must determine whether taking additional risk in homeland security to free resources for increased investment in diplomacy is a good trade. In other words, as at the lower levels, budget decision-making is choosing between alternatives and, for performance information to be useful, it must illuminate the relative merits of the options. It must be about measuring the impact of changes in investments on outcomes.

This EOP-level of decision-making provides a good example of another set of decisions that have to be made—inter- as well as intra-portfolio resource allocation decisions. An administration is not only responsible for deciding how to allocate resources across DoD, State, and DHS to produce national security (an intra-portfolio decision); it must also decide how much to invest in national security versus economic and social outcomes (an inter-portfolio decision). This represents a particular challenge to the performance community because, as elements of a trade-space become more distant and diverse, comparing relative contributions becomes harder.

Performance-Budget Integration in Context

As indicated by the definition and example above, the primary focus of this report is on integration of performance information into budget decisions at the program office, agency or department, and OMB. This limits the report's scope in two specific ways:

- Government leaders make a variety of decisions that should be informed by performance information, but this paper is focused specifically on budgeting decisions.
- Budgeting extends well beyond executive branch formulation to include congressional authorization and appropriation and the execution of a budget, but this paper is focused on executive branch formulation.

This section reviews this broader range of leadership decision-making to provide a precise understanding of the report's focus.

Leaders of large government organizations (at the program, agency, department, and administration levels) make a wide range of decisions that can and should be informed by performance information. Key governance questions these leaders must routinely answer include:

Key Governance Questions	Decision Support Processes	Organization Typically Overseeing the Process
What are the outcomes the organization is trying to achieve and the best strategies for achieving them?	Strategic Planning	Office of Policy
What capabilities are required to execute those strategies?	Requirements Determination or Validation	A Joint Staff or an Operations Directorate
How can the organization best obtain and employ those capabilities?	Acquisition and Operational Program Management and Oversight	Program Management Office or Acquisition Office
How should the organization's resources be allocated across competing priorities?	Budget Formulation (and Budget Execution)	Office of Budget or Program Analysis and Evaluation
Were acceptable performance results achieved when the programs were executed?	Performance Reporting and Program Evaluation	Office of Budget or Program Analysis and Evaluation

Although the above questions are interrelated, as organizations grow in size (for example, moving from a small department to a large department or moving from the program office level to the department and administration level) it becomes harder to address them together. As a result, the decisions and the processes used to support them tend to become disconnected. The leadership and execution of these decision-support processes become divided across different headquarters organizations supporting the decision-maker. The decision support processes that often emerge in response to these questions are also illustrated in the table.

Performance information should be used to support all of these decision-making processes and, in organizations with separated decision support processes, integrated across them. The United States Coast Guard (see page 23) is an example of successful integration. The primary focus of this report, however, is on budget formulation and its implications. For example, the following types of questions frequently emerge when performance-budget integration is being discussed:

- Should a poorly performing program be “killed”?
- Should a poorly performing program have its budget cut (in recognition of the poor performance)?
- Should a poorly performing program have its budget increased (in case insufficient funds cause the poor performance)?

These three questions are, at least in part, beyond the scope of this report. Whether a program should be “killed” or not is primarily a requirements question. If the program is required for mission accomplishment, and the mission is to be accomplished, the program should not be killed. If alternative programs can lead to mission accomplishment, and are less costly, the program should be terminated and replaced.⁹ Likewise, how to improve a poorly performing program is a program-management question, not directly a budget-formulation question. Budget

9. An illustration of this point is available from the USBP example used at the beginning of the chapter. Producing border security requires border patrol agents, and it is unlikely that the program will be “killed.” The more relevant question for DHS leadership is how many border patrol agents are needed. One focus of this report is on using performance information to inform these “how much is enough?” questions.

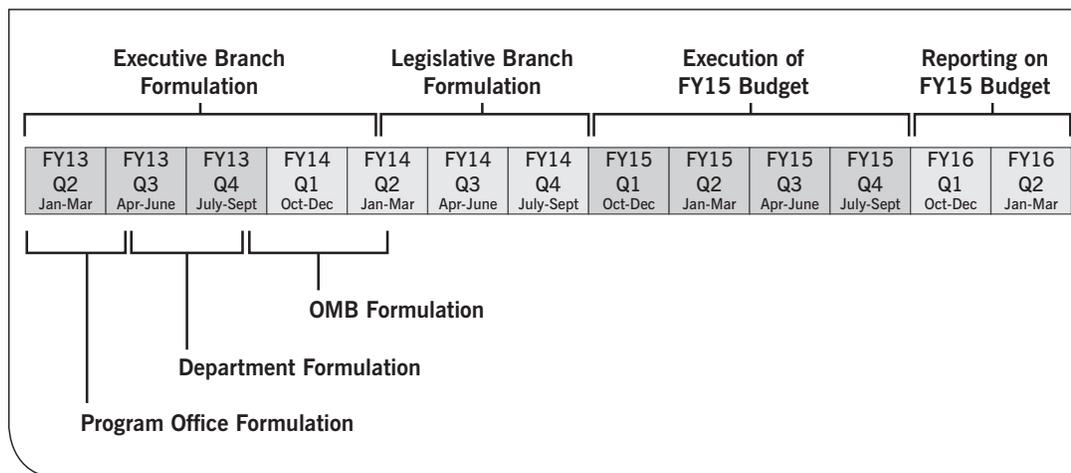
formulation is primarily concerned with the actual relationship between cost and performance, not with what that relationship may become under new and improved management.¹⁰

Specific decisions concerning program termination or the savings that can be achieved through improving program management may be implemented (or, at least, enforced) in the budget-formulation process, but this does not make them budget-formulation decisions. Similarly, displays of performance information during preparation of budget submission material are not an example of performance-budget integration; performance-budget integration is the *use* of the performance information to inform budget-formulation decisions.

These are not just semantic differences. A typical federal department has about four months to formulate its entire budget (May to August) and OMB has about two months (mid-September to mid-November) to formulate the entire federal budget. Those are very short time periods for wide ranges of important decisions. If performance-budget integration initiatives become attempts to resolve strategic planning, requirements, and program management challenges through the budget process, they not only will likely fail but may actually harm budget formulation. Leadership and staff time are scarce and achieving performance-budget integration requires using that limited time in a focused way.¹¹ Requirements and program management decisions can be made at any time during the year; they do not need to be unnecessarily forced into the short windows available for budget formulation to compete for the scarce staff and leadership time available.

Again, this report focuses on executive branch formulation. Resource allocation or budgeting occurs long after executive branch formulation is complete; and performance information should be used to inform decisions in these phases as well. Figure 5 illustrates a typical budget cycle using Fiscal Year (FY) 2015 as an example.

Figure 5: Fiscal Year (FY) 2015 Budget Cycle



10. In economics jargon, budget formulation is more concerned with the “positive” question of what the actual relationship is and less concerned with the “normative” question of what the relationship should be; that is the focus of program management and oversight activities.

11. In later sections, this report does include some recommendations for improving the integration of these decisions and the use of performance information to inform them, but that is not the report’s primary focus.

As illustrated, the three major phases of budgeting in which resource allocation decisions are made are executive branch formulation, legislative branch formulation, and budget execution. Within executive branch formulation, three (largely sequential) steps are illustrated:

- Program office formulation
- Department or agency formulation
- OMB or Administration formulation¹²

The focus of this report is on these three levels within the executive branch. In the box, *OMB's New Annual Strategic Reviews*, John Kamensky discusses recent initiatives by the Obama Administration that will create the foundation to better link performance to budgeting in future years.

OMB's New Annual Strategic Reviews

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A provision of the Government Performance and Results Modernization Act of 2010 requires the Office of Management and Budget (OMB) to “determine whether the agency programs or activities meet performance goals and objectives outlined in the agency performance plans.” If not, then OMB has to prepare a report to the Congress on unmet goals.

To meet this requirement program-by-program would be virtually impossible, given the scale of the government, so OMB decided to instead assess “buckets” of programs, using agency strategic objectives—a subset of agency strategic plans—as the unit of analysis. Agency strategic plans were released along with the president’s fiscal year 2015 budget proposal in early March. OMB staff estimate that there are about 400 strategic objectives across the government. It plans to post this list on the Performance.gov website in the summer of 2014.

The significance of the strategic review will extend beyond its use for accountability. According to OMB director Sylvia Burwell’s budget guidance to agencies: “The results of these reviews will inform the formulation of the 2016 Budget and efforts to improve the impact of agency programs.” In other words, it will be a first step of tying performance to budget decisions.

What is a strategic review? OMB says that the annual strategic review is “designed to inform strategic and budget decision-making, improve longer-term program outcomes, and identify opportunities for performance improvement.” It also notes that “this policy may in some cases represent a significant change to agencies operations” so it encourages agencies to develop a maturity model to chart out future improvements.

OMB has encouraged agencies to integrate these reviews “into existing agency management processes, such as the budget development process.” Agencies were also encouraged to design their own strategic review processes and define elements in the process to include timing, roles, responsibilities, sources of evidence to be used, etc.

Conducting the reviews. OMB says agencies began their baseline strategic review cycle shortly after their fiscal year 2014—2018 strategic plans were released in early March 2014. In doing this, OMB says that agencies should start by making relative assessments of progress for each of their strategic

12. For many federal departments, there are actually four stages: program office, component, department headquarters, and OMB. The component level is left out of this report for simplicity. The report’s recommendations apply to this level as well.

objectives, using “multiple perspectives and sources of evidence, both qualitative and quantitative,” and that “agency leaders must use their judgment when determining relative levels of progress.” Nevertheless, agencies must place 10 to 20 percent of their strategic objectives into each of two categories—those that demonstrate “noteworthy progress” and those that have “significant challenges.”

After their initial assessments, agencies must provide OMB a Summary of Findings for each strategic objective reviewed, by May 16, 2014. Agencies are given the flexibility to define the format for their Summary of Findings. However, agencies will be expected to “identify areas of significant progress and challenges for each strategic objective.”

Several agencies already began to design and pilot their strategic review processes in 2013. For example, the Department of Housing and Urban Development conducted 20 “topic reviews”—12 were policy-oriented (such as reducing homelessness) and eight were management-oriented (such as reducing improper payments).

Using the results of the reviews. According to OMB, the Summary of Findings will not be publicly released, but rather will be used as an input into both the budget process and the agency annual report process. OMB will provide feedback to agencies on their Summary of Findings in June, and agencies will provide progress updates for each strategic objective back to OMB in September along with their draft budget and annual performance plan for fiscal year 2016.

Key Actions to Improve Performance-Budget Integration

Performance-budget integration requires a concerted effort by participants in both budget formulation and performance. This section's recommendations are organized into four specific action areas. These recommendations apply to both budget directors and performance improvement officers (PIOs) (or their equivalents at the program office and administration levels), although recommendations for which there is a clear lead are indicated as such.

Action One: Engage Leadership

The single most important element of any strategy to improve performance-budget integration is the decision-maker's interest and constructive engagement. Without engaged leadership, it is difficult to significantly improve performance-budget integration even if all the other recommendations are undertaken. Conversely, with constructive, competent, and sustained leadership engagement, significant improvements can be achieved even if other shortcomings remain. The reasons for this are manifold, but central ones focus on the major participants' motivations and include:

- **Generating leadership interest.** The decision-maker has to want to use the data in making their decisions. If the leadership is already planning on making the decisions based on alternative criteria (some of which are described in more detail in *Why Leaders May be Unenthusiastic*), presenting them with information they do not want will waste their time and may even undermine the standing of the performance-budget integration advocates.
- **Motivating headquarters.** The offices and individuals that support the program, agency, department, or administration leadership generally try to stay aligned with their leadership's interests. Performance-budget integration takes time and energy from a range of headquarters offices. These necessary partners will only make this investment if they perceive it to be something the boss wants them to do.
- **Motivating stakeholders.** Generally speaking, the primary question with respect to the budget-formulation process of the activities of a program, the programs and components of an agency, and the Cabinet secretaries in an administration is whether they will be getting more resources or less. If these stakeholders believe that making budgeting decisions in other ways will provide them with greater resources, performance-budget integration is threatening. For performance-informed budgeting to succeed, these stakeholders will have to be willing to exert significant effort to define and measure results and conduct new analyses—the results of which may not always be flattering. One of the best ways to motivate these stakeholders is to make it in their self-interest to participate, i.e., for the leadership to inform them that performance information will be used to inform decisions and that they risk losing resources if they cannot analytically measure their results.

Given the importance of leadership interest and engagement, it is vital for advocates of improved performance-budget integration to ensure this leadership support exists before undertaking reform efforts. The best case is, of course, when the leadership themselves are

Why Leaders May be Unenthusiastic

To understand how to constructively engage with leadership to encourage investments in improved performance-budget integration, it is useful to examine why the leadership may not be enthusiastic about it in the first place. Three of the most common reasons include:

- **Political risk.** Making decisions and taking ownership of them is risky. The decision may prove to be wrong over time and, even in the short run, there will be “losers” who will object to the decisions (particularly in resource allocation). Even though choosing not to adjust resources from one year to the next is just as much of a decision as making specific adjustments, the political risk of the status quo option may be perceived as lower. Even if a change is clearly warranted, passing that decision to a higher level may be the best political move for the immediate decision-maker.
- **Alternative priorities.** One common view of stakeholders in a budgeting process is that their role is not to help leadership make balanced, performance-informed resource allocation decisions, but to compete for resources by whatever means available. A common corollary is that the best way to obtain more resources is to ask for more—the more you ask for, the more you receive. If the decision-maker holds this view and seeks to present the largest possible request to the next higher level, they may not be interested in making performance-informed trade-off decisions in their own budget formulation process. They may choose to build as big a budget as possible and let the next level make trade-offs if necessary.
- **Lack of awareness.** Although the advocates of improved performance-budget integration are often analysts for whom it is second nature to think of informing trade-off decisions with analytic measurement of expected results, this may not be the case for the leadership. An “up-through-the-ranks” operator who has never participated in, let alone been in charge of, a senior management process at the headquarters level simply may not know what can be achieved through more rigorous decision-making processes. This may be particularly true for new leaders and may be a reason for advocating reform in times of leadership turnover.

driving the reform and it is a top-down initiative. Even without leadership initiation, however, it is still often possible to engage with the leadership and develop interest in reform. Recommendations for how to enlist leadership engagement follow.

Recommendation 1.1: Focus performance-budget integration initiatives on leadership’s priorities. Absent an aggressive and comprehensive top-down initiative, most attempts to improve performance-budget integration will have to be limited in scope—not a transformation of all budget formulation decision-making, but targeted improvements within specific mission areas. Fortunately, this is a wise tactic for a reform initiative anyway. Although every element of a program, agency, department, and administration budget does have to be properly priced, not every element needs a major decision about its direction and performance expectations every budget cycle. Given the scarcity of time and analytic resources in the budget formulation process, only a few issues can and should be taken on in a cycle. Trying to take on too much too quickly can be a cause of failure.

A clear, narrowly defined set of issues should be selected early as the focus of a performance-budget integration initiative. The most obvious candidates for initial focus are areas in which the leadership is directly interested (but for which they do not already know the precise solution). Getting the leadership enthusiastically engaged in a reform initiative by making it a mechanism for advancing their mission priorities is often effective. Other criteria for selection include:

- **Feasibility.** Can the issues be credibly analyzed and presented for decision in the time available, e.g., are there existing analyses that can be drawn upon?

- **Political lift.** Can the decision-maker actually make a decision on the issues, and does he or she believe they can make a decision?
- **External interest.** Is there external pressure for a decision that can be leveraged to force action internally?
- **Quick wins.** Are there issues that can be resolved relatively quickly that will demonstrate the value of the reform initiatives?
- **Incremental steps.** Are there specific issues that are feasible to solve that may also set the stage for larger, more aggressive decisions in the future? Smaller decisions can begin the process of bringing larger, more complicated issues into the realm of feasibility.

Recommendation 1.2: Use self-interest to motivate the performance-budget integration initiative. Arguing that performance-budget integration is a “best practice” and a necessary condition for being a good steward of taxpayer resources is important, but may not be enough. Fortunately, good management practice is also in the self-interest of managers, and this can become part of the argument for reform. Some specific examples include:

- **Performance-budget integration reforms are a way to improve outcomes in the leadership’s priority mission areas** (see Recommendation 1.1).
- **Performance-budget integration is a way for leaders to enhance their control over their organization.** Although government organizations are generally hierarchical, government’s complexity and political realities often make the leadership’s control tenuous. Basing discussions with subordinates on objectives and outcomes produced is a way to (partially) neutralize other factors (parochial interest, institutional politics, etc.) and take control. Perhaps the most dramatic example of this was then-Secretary of Defense Robert McNamara’s use of a performance-budget integration initiative as part of his concerted 1961 strategy to unify the Department of Defense and exert his control over the military departments. (For a more detailed discussion of the DoD experience with performance-budget integration, see page 32.)
- **Performance-budget integration is a way for a leader to more constructively engage (and influence) external decision-makers at higher tiers in the executive branch and Congress.** A budget based on political calculation and parochial or institutional interests is not easy to defend. An analytically informed budget with transparent, reproducible justifications for why that particular allocation of resources maximizes societal outcomes may be easier to explain in a congressional hearing. A notable example is available from DHS and DoD. DHS has long lamented its lack of ability to adjust the number of border patrol agents used to secure the border because this has become a congressionally directed variable (having more to do with congressional desire to show “seriousness” in securing the border). But DHS has never made the investments required to measure border security outcomes and analyze the contribution of border patrol agents versus other border inputs. It is hard to argue against a non-analytical decision when one’s own argument is itself non-analytical. In contrast, there is significant political interest in many of DoD’s major decisions concerning weapon systems, but DoD is routinely able to influence contentious congressional decisions, partially because it presents rigorous performance-based rationales for why an alternative decision is better.

Recommendation 1.3: Dispel misconceptions. Many elements of the conventional wisdom that sometimes make leadership suspicious of performance-budget integration are not always true. If these misconceptions are causing reluctance to accept decision-making improvements, work to dispel them. Some examples:

- **It may be just as politically risky to not measure results as it is to measure them.** Border security from DHS again offers an example. As stated above, DHS has chosen not to

measure border security outcomes. One reason for this has been that it was viewed as too politically risky. But in 2007 and 2013, major efforts to pass comprehensive immigration reform failed in the Congress. In summarizing why these efforts failed (speaking specifically of the 2007 effort, although it applies equally well to the 2013 debate), then-Senator Jon Kyl remarked that the American people want a more secure border first and don't trust that DHS is delivering, or will deliver, this. Measuring results and getting them into public discussion (no matter how painful in the short run) is usually the best strategy for making progress on an issue—the real political risk may be in not doing this.

- **It is not always true that in federal budget processes an organization gets some fraction of its requested amount and that the optimal strategy is to simply ask for as much as possible.** In reality, the quality of the budget submission and how well-grounded its justification is should, and frequently do, have more impact on ultimate funding allocation. In one case, the argument was made in a large agency that the trick to “winning” in their submission to OMB was to submit as large a request as possible. To refute this, the author compared the previous five years of request levels and funding decisions (a period when the agency had consistently submitted budgets to OMB in excess of their fiscal guidance). There was no substantive correlation between them.

Recommendation 1.4: Understand the leadership's fiscal environment. To effectively engage the leadership and motivate a performance-budget integration improvement initiative, the reform advocate must understand the environment within which the leadership is making decisions. One of the most important elements of this environment for resource allocation decision-making is the fiscal one. Understanding the fiscal environment and how it will affect decision-making is essential for designing a performance-budget integration initiative. At the highest level, the three basic conditions that may be present are:

- **When funding is decreasing.** One advantage of a tight funding environment can be that it often focuses leadership's attention on resource allocation decisions. This may increase the demand for and responsiveness to a performance-budget integration initiative. A disadvantage is that there are fewer resources available for new analyses and expanding performance measurement.
- **When funding is stable.** With a “flat” funding level, new initiatives have to be funded through offsets in other areas. This makes examination of both enhancements and offsets important elements of a performance-budget integration initiative.
- **When funding is increasing.** Determining where to apply additional resources is just as much a resource allocation decision as where to cut resources, but the operating environment and focus of leadership can be very different in this situation—in particular, there may be less demand for rigorous decision-making tools. An advantage, however, is that there are more resources available for new analyses and expanding performance measurement.

Performance-budget integration advocates must understand the organization's fiscal environment and the leadership's perception of that fiscal environment. This understanding should be used when designing the objectives and key elements of the performance-budget integration initiative. Some specific examples of ways in which the fiscal environment may be taken into account:

- **When funding is decreasing.** The focus in this environment will likely be on what can be done quickly with the analysis and data on hand. Consider focusing on well-studied issues—those for which the best options may be well known but for which progress was too hard to make politically before the budget decline. It may not be advisable to include large structural process changes, such as account structure changes, in this environment—the focus is on making decisions with what is available. There is neither the time nor resources for new process investments.

- **When funding is increasing.** In this environment, do not focus on “killing” or restructuring those inefficient programs that have concerned the analytic community for a long time—the leadership may have a limited appetite for politically contentious decisions when they do not appear necessary. Instead, it may be preferable to focus on prioritizing which activities and programs get increases. Do not try to make the process one of telling stakeholders no; make it one of refining and prioritizing the yeses. This may also be a good time to focus on process investments. If large new programs are being started, focus on getting rigorous performance measurement and program evaluation plans (with dedicated funding) in place as part of the initial program design.

Action Two: Focus on Analysis

Performance-budget integration is the use of analytic forecasts of results to inform resource allocation decisions. The performance function is fundamentally an analytic function. In the border security example, the fundamental challenge is forecasting the level of border security using different combinations of resources (border patrol agents, technology, and fencing) to determine a preferred resource allocation. For this particular problem, this forecasting requires empirical estimation of the relationship between different resource levels and border security in the past, empirical estimation of the impact of outside influences such as unemployment rates in the United States and Mexico, projections of the outside influences through the budgeting period (for example, economic model forecasts of U.S. and Mexican unemployment rates for the five-year budget period), and simulation models that allow the projection of performance levels over the five-year budget period with different combinations of resources. Building this level of analytical understanding of DHS missions would be required to achieve performance-budget integration in this mission area.

- The *performance* office (e.g., the office of the agency performance improvement officer) does not necessarily have to be the sole, or even the primary, producer of these analyses, but it will likely be the focal point where the multiple analyses required are combined, integrated with budget-level resource data, and packaged for presentation to leadership.
- The *budget* office will likely be an essential partner in this process, but is unlikely to have the time or technical expertise to accomplish these tasks. A successful performance-budget integration initiative will usually require a highly capable performance office that is capable of conducting, integrating, and presenting quantitative analysis.

The importance of a highly capable performance office has wide-ranging implications for development of a performance-budget integration initiative. Specific recommendations relating to this are:

Recommendation 2.1: Staff the performance office with analysts. A performance office capable of conducting, integrating, and presenting quantitative analysis must have staff that is capable of performing those tasks. Career program analysts (job series 0343) often provide a wealth of experience about programs and processes, but they may not be ideal for the core staff of a performance office. Operations research analysts (job series 1515), statisticians (job series 1530), economists (job series 0110), and individuals with research experience in the technical fields of the missions of the organization may build a stronger organization, ready to face the challenges that will accompany a performance-budget integration initiative.

Recommendation 2.2: Treat performance measurement as an analytic function. The performance function is not about capturing data to produce an annual performance report and will not be effective if its IT system is a data capturing and document production tool. The performance function should be focused on capturing data that can be used to inform analyses and conducting analyses. Reporting static displays of forward-looking targets and backward-looking

results is easy and can be a derivative function of databases designed to capture useful data for analysis.

This analysis takes time to conduct, particularly in areas where methods and data have to be developed from scratch. This is generally the longest lead item required for the success of a performance-budget integration initiative and is often the primary obstacle that defeats initiatives. The studies and analyses that will be required to support budget decisions once the performance-budget integration initiative has begun may have to be started well before the initiative. In other words, the performance-budget integration advocate should have two concerns at the outset:

- How to develop a performance-budget integration initiative
- What long lead studies must be started now in order to be ready once the performance-budget initiative is launched

The importance of analysis also affects other aspects of performance-budget integration initiative design, such as selection of early priorities—ones that have already been studied or for which the analysis can be conducted in the time available.

Recommendation 2.3: Focus analysis on developing alternatives. When developing analyses, remember that decisions are, by definition, choosing among alternatives. GPRAMA and OMB Circular A-11 require the reporting of realized performance and development of one-year forward projected targets for the submitted budget proposal. These are necessary for resource allocation decision-making, but not sufficient. Resource allocation decision-making requires understanding the relationship between funding levels and out-year targets so that the projected future results can be evaluated at different funding levels and combinations. A performance community that is not providing a range of performance options at different resource allocations at the point in time when budget decisions are being made (e.g., June and July for domestic agencies) is not relevant to the budgeting community.

In practice, of course, there is wide variety in the range of alternatives that need to be considered in a particular budget formulation cycle in a particular mission area. Although it may be analytically possible to identify every major input used in producing border security, assess the impact of each on outcomes, and construct comprehensive forecast models of outcomes that rely on all of these inputs (and this would be a worthwhile investment for USBP to make), this is not necessary (or feasible) in practice every year. This makes the selection of alternatives important—the choice of alternatives can have a major impact on the usefulness of the analyses.

The usual convention in developing alternatives is that the first alternative will be to remain with the current program(s) scope and the current or proposed funding. Additional alternatives provide the decision-maker with options for changing the program(s) scope and funding. There should be a limited number of alternatives, and each alternative must be a legitimate and feasible option that could be implemented. Including too few alternatives will limit the options from which decision-makers can choose, but too many options can overload a meeting and detract from the value of the analysis in informing the decision.

The first step in selecting alternatives should be defining the objective—what are the performance results to be achieved? Given the objective, the logical alternatives will often become readily apparent. In addition, there may be obvious alternatives that the leadership has directed or that the budget or performance office knows the leadership wants to consider. It is also important to ensure that alternatives have clear demarcations between them; if not, they are not really alternatives.

Performance Management in the United States Coast Guard

The United States Coast Guard (USCG) has a diverse set of missions including search and rescue, navigation aids, migrant and drug interdiction, environmental protection, fishery law enforcement, and direct military operation support to DoD. It performs these missions with capital-intensive, long-lived air and marine assets that make resource allocation decisions particularly long-term and complex. In dealing with these challenges, USCG has developed a rigorous suite of data products and performance measures and integrated them into the full range of governance decision-making processes, including its budget formulation.

USCG performance function starts with capturing extensive data on its mission outcomes:

- **Search and rescue.** The number of people saved and not saved by circumstances, location, and time
- **Migrant and drug interdiction.** The number of migrants and drugs interdicted by type, location, and time
- **Environmental protection.** Environmental incidents by type, location, and time

From these databases, USCG can generate a variety of outcome and output performance measures, such as

- Percent of people in imminent danger saved in the maritime environment
- Average number of commercial mariner deaths and injuries
- Percent of undocumented migrants attempting to enter the United States by maritime routes who are interdicted
- Average number of oil spills in the maritime environment

There are three key features of the USCG performance function. The first is that by maintaining comprehensive data in unified databases, the performance function can modify these measures (including developing whole new measures with complete historical trends) as needed to meet specific decision-making needs. This flexibility is valuable in the fast-paced, dynamic world of budget decision-making.

A second feature of the performance function is that USCG has developed models to forecast each of these performance measures under different scenarios. For example, USCG can use past trends in distress calls and search and rescue events, along with other factors, to project the likely distribution and frequency of such events in the future. This allows USCG to use its performance measures to directly support the full range of governance decision-making. For example:

- **Strategic planning and requirements determination.** USCG can project different sizes and compositions of its maritime fleet and then evaluate these alternatives against its suite of performance measures. With its forecast of distress calls, USCG can simulate its ability to respond under different configurations of its fleet (e.g., a small number of bigger boats and a larger number of smaller boats) and rigorously project target values for this performance measure for each alternative. Replicating this across its suite of measures, USCG can rigorously and quantitatively evaluate the fleet mix alternatives across its full range of missions.
- **Budget formulation.** USCG can assess alternative resource allocations (e.g., different levels of resources as well as different allocations, such as funding more steaming hours in prime fishery areas or prime recreational boating areas) and make performance-informed judgments about the merits of each alternative.

A third feature is that in addition to measuring realized performance at the close of each year, USCG has an integrated cost accounting system (e.g., log books on boats) that enables actual expenditure estimates for each mission area. This allows precise comparison of actual spending and performance results, which can be used for both management accountability and to refine the forecast models for future cycles.

In summary, USCG's performance function exemplifies how performance information can be structured and used as a decision-making aid. It is collected and stored as a flexible data product. Investments have been made to develop forecast models for the performance measures. And it can be integrated directly with resource data. These features illustrate that the performance function should be first and foremost an analytical function:

- The key use of performance data is to compare alternatives (point estimates are not enough)
- Performance data can be developed and delivered on a timeline that meets the needs of the budget formulation process (and other governance processes)

Once the set of alternatives is established, the performance function's task becomes comparing the alternatives in a quantitative, even-handed, consistent manner. Apply the measure(s) that are implied by the objective. To support senior leadership with a useful analysis to inform decision-making, the alternatives should be presented in a neutral, fact-based way with an unbiased evaluation and comparison.

Best practices in developing alternatives for decision-makers in a performance-informed budgeting process include:

- **Constrain the decision space.** The issue being decided must be constrained and well-defined; defining the issue too broadly can make it unwieldy. It should be within a specified mission space concerning a program or portfolio of programs.¹³ There may also be a need for inter-portfolio balancing during a cycle, but focus a decision within portfolios when possible to ensure manageable decision spaces.
- **Select effective alternatives.** Make the first alternative the status quo. Target two to four total alternatives that are qualitatively (not just quantitatively) distinct. Ensure feasibility of alternatives and that they span the space of possible decision-making.
- **Use common measures.** Ensure that the performance outcomes are measured in a common way across alternatives. Measuring the lives saved by one alternative and the environmental damage prevented by another will hinder systematic consideration between them without a method of comparing these outcomes.

Recommendation 2.4: Ensure objectivity. A fundamental purpose of performance-budget integration is to improve the efficiency and effectiveness of resource allocation decisions by basing them as much as possible on analytic forecasts of performance results instead of political, parochial, and other interests. This places the performance function in the role of an honest broker, providing the decision-maker with an objective analysis free from conflict of interest.

The initiative will be undermined if the performance element is viewed as an advocate for specific outcomes rather than an objective, honest broker presenting alternatives even-handedly. Objectivity is a key to the long-term success of a performance-budget integration initiative. Important elements of ensuring objectivity include:

- **Protect against conflict of interest.** Although specific elements of the required analyses may be best conducted by stakeholding organizations, the performance function leadership (e.g., the headquarters performance office) should not have any stake in the decisions to be made and should not report to a stakeholding organization. A headquarters office that does not gain or lose resources regardless of the decision is often the best option.
- **Protect against advocacy.** Performance function leadership must instill in staff the importance of objectivity and presenting neutral, fact-based alternatives to the leadership. Even if the analysis overwhelmingly supports one alternative over the others, the performance function's role is to simply report the facts and not advocate for an alternative.
- **Use a non-stakeholder as presenter.** Although for the sake of transparency stakeholders should be present (when leadership is comfortable with this approach) when decisions are made (e.g., to ensure their views are considered and to have the decision clearly communicated to them), the stakeholders should not be the briefers. The briefers should be the analysts who did the analytic work or the analysts' supervisor. The briefer's role is to objectively present the issues, alternatives, and evidence. The stakeholders should be in attendance and afforded every opportunity to argue their cases, but the presentation of the core material should be by a non-stakeholder who does not engage in advocacy.

13. See Peterson-Pew (2011) for a discussion of portfolio decision-making in the context of performance-budget integration.

Recommendation 2.5: Ensure transparency. Resource allocation decisions are inherently contentious—some organizations gain resources and some lose resources. There is generally no way for the budget office or the performance office to make losing organizations happy about a decision that may result in them losing resources, but the decision will be easier to bear (and more likely to survive the subsequent battles as it progresses to appropriation) if the stakeholders view the decision-making process that led to it as fair and transparent. If the decision was made on analytic projections of future performance results, this transparency must include the data, analyses, and analytic results used to inform the decision. In short, a key element to the long-term success of a performance-budget integration initiative is transparency—open and explicit analysis, available to all parties, forms the basis for resource decisions.

To help ensure this transparency, ground rules like the following should guide the analytic and decision-making phases of a performance-budget integration initiative:

- **Regular meetings.** The analysis will generally be conducted in teams and these teams should meet periodically during the evaluation process to discuss progress and review draft products. Final products, e.g., the decision brief that will be presented to the leadership, should be provided to the team members with sufficient time to review before its consideration by senior leadership.
- **No surprises.** There should not be surprise announcements at the end of the process. Withholding information until the end can be a tactic by stakeholders to undermine the success of a performance-based decision brief. It should be made clear to stakeholders that last-minute alternatives will not be assessed, and will also be called out as such to the leadership. This rule also applies to the performance lead; surprising the stakeholders with analytic or process changes at the last minute will undermine the initiative's credibility.
- **Agreement on facts.** Every organization is entitled to its own opinion; no organization is entitled to its own facts. Basic data and facts should be presented and agreed on as early as possible in the process. Objections must be raised formally to senior personnel administering the process (petty staff-level complaints can be a delaying tactic). Once there has been agreement on the facts, participants cannot re-litigate at the end if they do not like the results.
- **Include stakeholders in the discussion.** Every leader has a different style and a different preference for when and how they will make decisions. Some are comfortable making decisions in public forums and some prefer to have only a small circle of advisors present. Some even prefer to make them in private and communicate the decisions in writing. Regardless of the leader's style, the stakeholders should be part of the decision-making process and believe they had the chance to make their views known. If leadership is comfortable with public decision-making, the decisions should be made in meetings that contain all of the key stakeholders. If not, consultative meetings should be held with the stakeholders prior to the private decision-making. Decisions should be communicated clearly to stakeholders in a timely fashion and stakeholders should have an opportunity for appeal.
- **Document decisions.** Decisions should be clearly documented, coordinated with all stakeholders, and archived for the record.

Recommendation 2.6: Set realistic analytic objectives at the start of the cycle. Doing comprehensive analyses on a wide range of issues may not be possible in the first years of a performance-budget integration initiative. Instead, set realistic analytic objectives at the start of the cycle and meet or exceed them, rather than attempt more ambitious analyses and fail to deliver a useful result. And setting realistic objectives helps ensure relevance—producing a timely, high-level strategic analysis that provides at least some insights into the decisions that have to be made is better than trying to provide a detailed and comprehensive analysis and failing to deliver it.

Recommendation 2.7: Develop a sustainable division of labor. It takes a great deal of work to successfully inform resource allocation decisions with performance information. It is unlikely that the performance office could undertake, or even coordinate, all of this work itself. Attempting to do so can increase risk for the performance-budget integration initiative. It will generally be wise to divide up the analytic tasks required and try to leverage subject matter expertise, access to data, and self-interest to ensure it gets done.

One obvious organizing principle for this division of labor considers the organization levels. Using the border security example from DHS, if Border Patrol is able to measure border security and the contribution of its major inputs to achieving it, the DHS performance office is probably better off focusing on higher-level questions such as the non-Border Patrol contributors to border security (e.g., ICE investigations) and the relationship of border security to homeland security. This leverages Border Patrol subject matter expertise and access to Border Patrol data.

The use of self-interest is often more complicated. Whether it is in Border Patrol's self-interest to measure border security (which, subsequently, determines their willingness to do so and may influence the quality and rigor of their effort) depends on factors such as the likelihood of a positive result and the interest of leadership (i.e., whether they think there will be negative repercussions from leadership if they refuse to do it). One factor that may play a role is the recognition that organizations are seldom homogeneous and there may be parts of the organization more willing to participate than others. One obvious place to consider is the performance office (or whatever other name it may go by, such as policy and planning). Often, subordinate performance offices are anxious to improve performance measurement and welcome outside pressure that provides them with "top cover" and credibility.

In summary, when considering the full range of tasks necessary for a performance-budget integration initiative to succeed, reform advocates should ensure that:

- The performance (and budget) offices do not assume too many tasks, becoming so overloaded they are not able to get the job done.
- The tasks are strategically assigned in ways that take maximum advantage of subject matter expertise, data access, and self-interest.

Action Three: Improve the Budget Formulation Process

With supportive leadership ready to make performance-informed resource allocation decisions and a genuine capability to do analysis, the next priority is to have a budget formulation process capable of isolating, analyzing, and constructively presenting issues for decisions to leadership. In the box, *Alan Schick on Budgeting*, Schick (2007) provides a comprehensive critique of the typical budget formulation process. He discusses why focusing the process on performance-informed decision-making on the allocation of resources can be such a challenge.

In the box, Schick discusses a number of specific issues common to the budget process, including:

- Asking for more than the organization expects to get
- Keeping options open until late in the process
- Basing future budgets on past ones or incremental budgeting
- Lack of staff availability for systematic, long-term budget planning
- The bottom-up structure of budgeting

Alan Schick on Budgeting

Preparation of the budget typically begins in spring (or earlier) each year—at least nine months before the president transmits it to Congress, about 18 months before the start of the fiscal year to which it pertains, and about 30 months before the close of that fiscal year...

The long lead times and the fact that appropriations have not yet been made for the next fiscal year mean that agency budgets are prepared with a great deal of uncertainty about economic conditions, presidential policies, and congressional actions. Agencies cope with uncertainty by keeping options open until late in the process, basing future budgets on past ones, and asking for more than they expect to get. Despite the lead times, few agencies do systematic, long-term budget planning because the same staffs that are preparing the next budget are also working on the current one. Budget preparation is a busy, deadline-driven activity, with many levels of review, enormous demands for data, and a compelling need to resolve intra- and interagency conflicts.

The length of the budget preparation cycle and the difficulty of using it as a means of establishing objectives and priorities are largely due to the bottom-up structure of budgeting. Departmental budgets usually are assembled in a decentralized manner, beginning at the lowest level of the organization capable of formulating its own request and progressing through successively higher echelons until all requests have been consolidated into a departmental budget ... most [agencies] wait until requests [from operating offices] have been assembled before making policy decisions. In most federal agencies, the divisions, branches, offices, and other administrative units prepare detailed estimates of expenditures for personnel, travel, supplies, equipment, and other items at each stage of the process. The details are reviewed, and usually modified, as the budget moves up the hierarchy. The result is that budget preparation is time-consuming and burdensome. Furthermore, budget preparation diverts management attention from other departmental concerns.

The bottom-up process, some argue, diminishes the use of budgeting as a means of establishing government policies and priorities ... [Recent performance-budget integration initiatives have sought] a more top-down, output-oriented process.

Source: Schick (2007).

The tendency to ask for more resources than the organization expects was discussed in Action One. Budget formulation operates on a specific schedule. By law, the president's budget is submitted in February. This requirement drives the schedule for each level of budget formulation decision-making (program office, agency, and administration) and is outside decision-makers' control. For the performance community to be relevant to budget formulation decision-makers, they (the performance community) must understand the budget formulation process and their products must be delivered in accordance with its schedule.

Although it varies across the government, the typical budget formulation schedule involves the following key periods (see also Figure 5 on page 14):

- Program office or component submissions to agency headquarters the previous spring (requiring prior decisions by program managers and component heads).
- Agency submissions to OMB in mid-September (requiring decisions by agency heads by early August).
- OMB review and pass back by late November (requiring earlier decisions by the administration prior).

The performance function at each level of the government must be aware of and operating on this schedule to be relevant to budget decision-making. The budget formulation process must have dedicated time included for decision briefings, and the performance function must execute its analytical process to ensure delivery of its results in time for these decision meetings.

But, as Schick points out, there is another, more subtle element of timing that is important to understand and is a serious consideration in designing a performance-budget integration initiative. There is no requirement that all major budget cycle decisions are held to the end of the cycle (the so-called “end game”), but in practice, that is what generally happens. The bureaucratic pressures of budget formulation push in that direction. Unless they are certain of an advantageous decision earlier, stakeholders will generally want to delay their leadership’s decision-making in order to keep their options open for as long as possible. For them, it is generally better to not have a decision made at all (implicitly supporting the status quo) or to have the decision made in a hurried manner along with a series of other decisions (so that their informational advantage from knowing their programs the best can be used to greatest advantage).

Decision-makers are often inclined to hold decisions to the end as well. For them, the interrelationships between decisions, the uncertainties that they would like resolved (e.g., perhaps the appropriations bills have not yet passed), and the pressure of competing demands on their time all push them to postpone decisions until the last possible minute. As discussed in the box, *The Challenges of Decision Timing*, holding major decisions until the end and making them in a less transparent and hurried way may not result in the best decisions for the organization or the taxpayer.

The Challenges of Decision Timing

- **Bureaucratic momentum:** As initiatives and program changes move through the budget formulation process (both within an organization and advancing from one level of decision-making to the next), they gain momentum. It is harder for an agency head to modify a major initiative from a program office in the eleventh hour of the agency’s “end game” than it is to change how the initiative is initially developed by the program office, just as it is harder for the EOP to significantly modify an agency proposal in pass back than it is to shape it in the early developmental stages.
- **Lack of time for deliberation:** The ability to make methodical decisions supported with performance information and careful analysis is limited when most major decisions are made in a compressed period at the very end of the process.

Schick also highlights the challenge of incremental budgeting, which generally starts from the premise that virtually all programs and activities in the current budget will be continued the following year. There may be modest adjustments as some programs’ growth rates are slowed while others are increased based on the issues and priorities of the day, but all stakeholders are assured of continuing their activities reasonably unfettered. This process may be appropriate for short periods of time in mission areas of the government that are reasonably stable, but, as Professor Schick points out, when it becomes the default process, it is detrimental to performance-budget integration.

A major aim of a performance-budget integration initiative is to convert the annual routine of preparing a budget into a conscious appraisal and formulation of future goals and targeted

performance results.¹⁴ Performance-budget integration is about using strategy and planning to drive the budget formulation process. Drawing further on Schick (1966):

A budgeting process which accepts the base and examines only the increments will produce decisions to transfer the present into the future with a few small variations. The curve of government activities will be continuous, with few zigzags or breaks. A budget-making process which begins with objectives will require the base to compete on an equal footing with new proposals. The decision will be more radical than those made under incremental conditions.

One factor that drives budget formulation toward an incremental approach is a general focus on a one-year perspective. Large government organizations are not particularly flexible. Rules for managing the civil service make large changes in personnel difficult to accomplish in short periods of time (i.e., one to two years). Large, complicated procurements such as aircraft, ships, and border fencing cannot be started or stopped on short notice. In short, when you are developing a budget to be executed in about a year there may not be much that can be changed. Drawing again on Schick (1966):

With a one-year perspective, almost all options have been foreclosed by previous commitments; analysis is effective only for the increments provided by self-generating revenue increases or to the extent that it is feasible to convert funds from one use to another. With a longer time span, however, many more options are open, and economic analysis can have a prominent part in determining which course of action to pursue.

Another factor that drives incremental budgeting is the lack of available time for budget staff to engage in “systematic, long-term budget planning.” As Professor Schick notes, the same budget staff that only have a few months, at most, to formulate large and complicated budgets are also engaged in execution of the current year’s budget and myriad other tasks. Analyzing complicated and contentious issues and developing them for decision demands real time commitment and often simply cannot be accomplished by the available staff. This leads to an incremental approach to budgeting and to bottom-up budgeting.

Bottom-up budgeting is the practice of beginning the budget build at the lowest level of the organization capable of formulating its own request, e.g., program office, and progressing through successively higher echelons until all requests have been consolidated into a departmental and then federal budget. The data requirements for a fully developed budget are enormous and it is simply not feasible for one central entity to independently generate them. Instead, the lowest levels, where the subject matter experts and owners of the data reside, generate the initial data, which are systematically reviewed and combined as the budget makes its way up the chain of command. But this gives a tremendous “first mover advantage” to the lower levels of government, limiting the ability of more senior decision-makers to make large changes.

However, since one major aim of performance-budget integration is to drive resource allocations by a conscious appraisal and formulation of future goals and targeted performance, a top-down element is required. Quoting Schick (1966):¹⁵

[A performance-budget integration initiative] reverses the informational and decision flow. Before the call for estimates is issued, top policy has to be made, and this policy

14. This is a paraphrase of Schick’s (1966) description of the aims of a planning, programming, and budgeting system (PPBS).

15. In the original passage, Schick was referring to planning, programming, and budgeting systems.

constrains the estimates prepared below. For each lower level, the relevant policy instructions are issued by the superior level prior to the preparation of estimates. Accordingly, the critical decisional process—that of deciding on purposes and plans—has a downward and disaggregative flow.

If the existing budget formulation process experiences these challenges, a performance-budget integration initiative will have to systematically address them in order to succeed. Many of the changes required are simply the application of best practices to budget formulation, but their conscious application as part of a performance-budget integration initiative may be an important factor in the initiative's success. The box, *Planning, Programming, Budgeting, and Execution (PPBE) in the Department of Defense*, describes DoD changes to the budget formulation process as part of their efforts to promote performance-budget integration.

Specific recommendations include:

Recommendation 3.1: Provide top-down guidance at the start of the budget cycle. Early in the budget process, the leadership should issue policy, fiscal, and process guidance to the subordinate organizations. A bottom-up process is the natural and most efficient way to conduct many of the required tasks to produce a budget, e.g., pricing current services and development of justification material. There is no need to modify these. But strategic guidance, identification of major decisions, development of decision alternatives, and identification of the key performance outcomes to be achieved should be top-down. Substantive and directive policy guidance should be issued at the start of the cycle to guide the bottom-up development of budget material.

This policy and planning guidance should be accompanied by fiscal guidance (and the two should be roughly consistent with each other). If there is significant uncertainty about top-line constraints, multiple guidance levels or excursion levels can be provided—but it is essential that credible (i.e., enforced) guidance is given early in the process to focus the attention of subordinates on realistic planning. Guidance on the detail of the process to be used, including the administration of study teams and the dates of decision meetings, should be provided at the start of the cycle.

Recommendation 3.2: Focus process on decisions and push technical tasks downward. The process must be focused on making decisions and not be overcome with bureaucratic requirements. If the OMB resource management offices are responsible for accurately pricing every line item of the budget, they will not be effective partners in a performance-budget integration initiative, simply because they will have no time for other tasks. Similarly, if an agency budget director is likewise (and duplicatively) responsible for the accurate pricing of every line item, they too will not be an effective partner in a performance-budget integration initiative. Decide what the priorities are, identify them to the organization, and then assign and hold accountable subordinate offices for producing their portions of the rest of the budget (and automate as much of the process as possible).

Recommendation 3.3: If needed, develop a separate analytic staff. Action Two addresses in more detail the role of analysis and how to organize and staff a performance office. In addition to relieving pressure by removing duplicative work and delegating tasks to the appropriate levels, it may be necessary to actively build a separate analytic staff. If a performance office exists and is capable of taking on an analytic role, this may provide a ready-made solution. If such an office does not exist or is too focused on GPRA reporting compliance to be effectively transformed into an objective, rigorous, quantitative analytic support office, one may need to be built.

Recommendation 3.4: Engage in multi-year budgeting. When making decisions about a desired performance result to be achieved five years in the future, just about everything is variable (e.g., staffing, building projects, and major acquisitions). If the decision-maker is limited to decisions about the next budget year (with most of the budget fixed), he or she is limited to incremental modifications. Budget formulation decisions should be about future end states and some (even most) of these end states will occur beyond the budget year. A multi-year force, financial and performance plan should be a standard part of resource data and the decision-making process.

Recommendation 3.5: Push decision-making earlier in the process. If all decisions are compressed into the end game, there will not be time to make deliberate decisions based on analysis and there won't be time to bring information to the leadership iteratively and respond to questions and concerns. This means that one objective of a performance-budget integration initiative is to make some decisions earlier. Some specific recommendations to ensure that problems with timing do not undermine a performance-budget integration initiative include:

- **Shape issues before a decision has to be made.** If the leadership wants to target a particular outcome, include direction for this in the policy guidance at the start of the cycle. Then the development process of the lower level organization will be guided by this objective in their formulation. This is easier than overruling or radically altering a submission once it has been developed.
- **Performance information must be on time.** The budget process schedule must explicitly allow time for performance-based decision-making briefings, the leadership of the performance function should be in the room with the leadership when the schedule is discussed and approved, and the performance function must deliver their products in accordance with the schedule. This includes resource allocation decisions during the deliberative process and performance inputs to the policy guidance issued to initiate the cycle.
- **Attempt to make decisions early.** The schedule should include opportunities for early decisions. Issues that have the potential for early resolution should be identified and targeted for the early meetings. Execution of the cycle should remain flexible so issues that mature early can be moved forward and taken to the leadership for decision. This includes early decisions within a phase (e.g., the headquarters review and decision on the budget) as well as making decisions in early phases (e.g., deciding something early and including it in the policy guidance issued to subordinate organizations as they begin their budget formulation process).
- **Have backup plans when early decision-making fails.** As stated earlier, bureaucratic pressures often result in frenetic end game decision-making. The performance function should have contingency plans for how performance information will be provided to the leadership and how a decision will be made (e.g., written decision papers) when the scheduled briefing times get delayed, canceled, or break down.

Recommendation 3.6: Effectively integrate other elements of the decision support process.

Budget formulation is only one part of the processes that can support senior leadership in managing their organizations. Other important elements include:

- Strategic planning
- Requirements determination or validation
- Acquisition and operational program management and oversight
- Performance reporting and program evaluation

Planning, Programming, Budgeting, and Execution (PPBE) in the Department of Defense

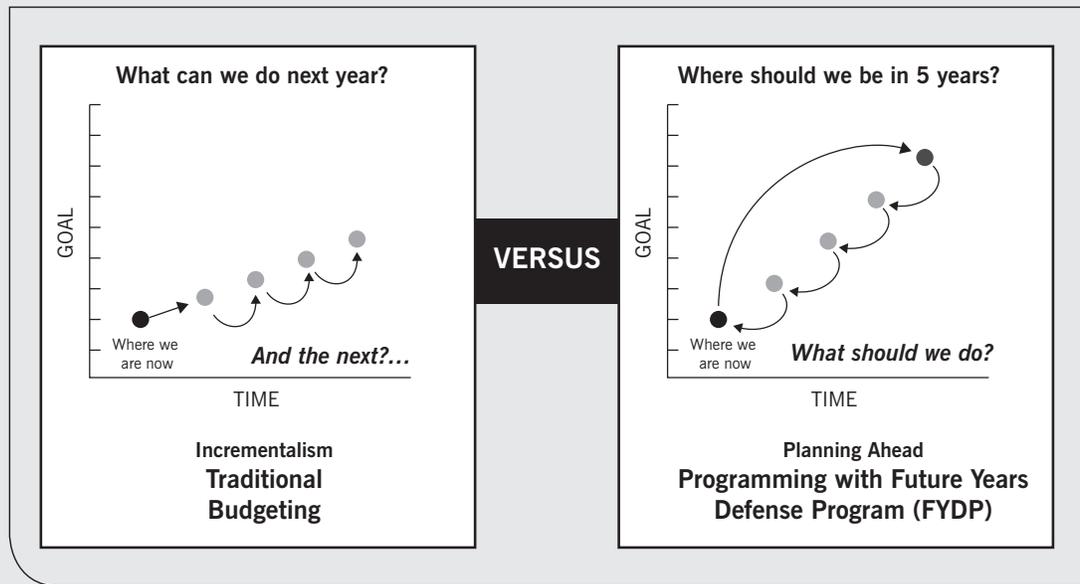
The PPBE system, or some variant of it, is the governing process for resource allocation in most federal security agencies, including the DoD, the intelligence community, and DHS (as well as the National Aeronautics and Space Administration). The PPBE system originated as the Planning, Programming, and Budgeting System (PPBS) in DoD in 1961 and represents perhaps the most significant change to the budget formulation process as part of a performance-budget integration initiative.

During the 1950s, support for the president's top-level policy direction for the defense program was provided largely by National Security Council staff and the Joint Staff. DoD-wide budgeting was done by the DoD comptroller and the Bureau of the Budget (BoB), now part of OMB. There was no direct process link from desired policy outcomes to budgets, and the two were largely disconnected. Each defense component (e.g., military services) built its own budget annually, and these budgets generally were far above the fiscal guidance the components had been given. Budgets were cut back to roughly fiscal guidance levels by the DoD comptroller and the BoB in the fall budget process, which was driven more by short-term factors than definitive statements of U.S. defense policy.

In introducing PPBS, DoD did not seek changes in the policy formulation or budgeting processes (narrowly defined). Rather, the intent of the changes was to ensure that top-level goals and objectives were *in fact* reflected appropriately in the budgets submitted to the Congress. The PPBS did this by introducing two new elements into the process:

- **The first was an analysis and decision process focused on outcomes placed between policy formulation and budgeting.** This new process encompassed both of the “Ps” in PPBS—planning and programming. It was intended to provide the secretary of defense with a means for making strategic and cost-effective decisions on force structure, major acquisition programs, and the funding and manpower these entailed.
- **The second new element was a detailed multi-year force and financial plan—the Future Years Defense Program (FYDP).** The FYDP arrayed these resources by program (output) as well as the traditional budget and appropriation categories of inputs. The combination of the two elements was to focus decision-making, where appropriate, on analytically based trade-offs about future performance results. Figure 6 illustrates the difference envisioned between traditional budgeting and programming with a FYDP. The focus on programming is meant to be a conscious choice between different performance end states.

The approach to issues examined within the PPBS rests on the principle that, given top-level goals and objectives, quantitative analysis of performance outcomes is essential to making rational trade-off decisions and capability investments. Agencies have multiple objectives, and a given capability typically can be produced in different ways. These facts generate alternative courses of action that differ in their costs, effectiveness, and risks. To support cost-effective decisions in the national interest, analysts must identify the reasonable alternative methods of providing a particular capability, including all of the units and systems that go into each alternative, as well as complementary systems. The effectiveness and cost of the alternatives also must be considered, because the resources made available to agencies are limited, so the more that is spent to provide one capability, the less that is available to provide others.

Figure 6: Traditional Budgeting vs. Programming

Quantitative analyses along the above lines draw on the tools of systems analysis or operations research, and are the foundation of PPBS and—more specifically—the programming phase. The idea is to define measurable goals and to use quantitative methods to determine the best way to accomplish them. For DoD, a systems analysis office was created to oversee the programming phase and the FYDP. Systems Analysis was subsequently renamed Program Analysis and Evaluation (PA&E), and is currently called Cost Assessment and Program Evaluation (CAPE). Many other agencies now have PA&E-type offices, and these are generally the owners of the GPRA performance function.

Although a PPBE system as implemented at DoD may not be the best approach in other departments or agencies dealing with their own specific challenges, the underlying principles apply to a wide range of government settings for integrating performance and budgeting. The 1961 introduction was a secretarial initiative; the senior leadership was driving the initiative and committed to seeing it succeed. It fundamentally changed the budget formulation process, explicitly adding a phase for analytical forecasts of performance to inform decision-making, and altered budget data, creating an output-oriented resource database for internal decision-making. It also started with a narrow set of priorities (DoD's strategic weapons and missions) and then expanded to encompass the entire DoD budget. The introduction of PPBE serves as a case study of one of the most dramatic, far-reaching performance-budget integration initiatives at the federal level.

Although these decision processes have implications beyond resource allocation, they are all intertwined with resource allocation decision-making. The links between these decisions and resource allocation are facts of life, not a matter of choice. For example, if top-level choices on goals and strategies do not determine resource allocation, the budget itself (however determined) ends up determining the actual goals and priorities of the department. Whether consciously and deliberately or through many unrelated decisions made for possibly conflicting reasons, resource allocation *is* the de facto most important answer to these questions, and performance measures are a key device for coordination.

Perhaps the most obvious connection is with strategic planning. Performance-budget integration is about bringing a measure of benefits into consideration to compare with costs in making resource allocation decisions. A key question is what the measure of benefit should be. The most direct answer is the societal outcome the program is intended to effect, which should be identified in the strategic planning process. In other words, performance-budget integration is a process for producing a strategy-driven budget.

Whether a poorly performing program can be eliminated and what the true relationship between performance and cost should be are both important questions that inform budget formulation. The connection with performance reporting is direct—were the projected performance measure targets used to inform budget decisions actually realized? The connection with program evaluation is also direct—does a rigorous program evaluation plan exist, is it being executed, and how do the results inform the projections of future performance used to inform the next cycle's budget decisions?

As organizations grow in size and complexity, the challenges in effectively addressing these questions grow as well. It also becomes harder to address related decisions together and, as a result, the decisions and processes used to support them tend to become more and more disconnected. Thus, in large organizations, leadership and execution of these processes is usually spread across different headquarters organizations supporting the senior leadership. At the agency level, this often includes a policy office, an acquisition office, the budget office, the performance office, and possibly others. At the administration level, this includes the policy councils (national security, domestic policy, economic), OMB's performance and personnel management office and its resource management offices.

But, as noted above, these decisions are fundamentally interrelated. When this specialization and division of labor occurs, a new challenge in coordinating these decisions emerges. This challenge can be exacerbated because the leaders and staffs of these organizations have their own cultures, are dealing with problems from their own perspective, and may not always appreciate or understand the challenges associated with the problems encountered in the other processes. To state the matter bluntly, how often do the policy office and the budget office even talk to each other in large federal agencies, let alone work hand-in-glove together for months at a time to closely coordinate their decisions to ensure a strategy-driven budget?

Because resources are scarce and never sufficient for an organization to accomplish all of its goals, resource allocation becomes a focal point where these decision processes come together. As a result, resource allocation becomes a key interface between the processes the senior leadership uses to coordinate decision-making. One key implication is that the success of a performance-budget integration initiative may be affected by weaknesses in these other decision support processes and/or their integration. In developing a performance-budget integration initiative and selecting early priority areas for the initiative, it will be important to understand the degree to which information and assistance will be required from these other processes, and the ability of these processes to deliver. For example, a mission space that

does not have a coherent strategy accepted across internal and external stakeholders may not be an ideal place to begin a performance-budget integration initiative.

In summary, actions for budget officers dealing with integration issues include:

- Identify critical dependencies of the performance-budget integration initiative on other senior management processes of the organizations and attempt to minimize dependencies on weak processes.
- When there are necessary dependencies and the processes or their coordination are not strong, develop risk mitigation strategies. For example, specifically assign an organization (likely the performance function) the responsibility of coordinating between the policy and budget offices.
- Ensure the performance-budget integration initiative is about performance-budget integration. If there is organizational confusion and the interest in the initiative is really being driven by attempts to solve problems in other areas of governance, confront the confusion head-on and develop clear objectives for the reform effort. Similarly, attempt to fend off attempts by others to use the performance-budget integration initiative to solve broader management challenges of the organization if it risks overloading the initiative and threatening its success.

Action Four: Reform Budget Account Structures

The basic budget formulation decision is to compare the benefit and cost of one alternative with the benefit and cost of other alternatives. Thus, for each alternative, the two key variables are:

- Benefit (forecasted performance outcome)
- Cost

While the performance community may be responsible for measuring benefits, the resource community will generally be responsible for measuring and forecasting costs—they have the best data and are ultimately the ones accountable for the validity of the estimates. However, these estimates must be complete and accurate enough for decision-making, and estimating cost completely and accurately in large government organizations is not easy.

Two major challenges are that:

- **The costs of an activity or program are frequently spread across multiple budget accounts.** This challenge is the program account structure, generally based on the appropriation account structure used by Congress. This is frequently a legacy structure that has evolved based on historical events and issues. It is often, although not exclusively, based on input categorizations of funding such as salaries, operating expenses, procurement, and construction. But performance-informed resource allocation decisions are generally made about which activities and programs (outputs) to increase or decrease. The costs of these programs may be spread across multiple appropriation-based accounts. Even in cases in which there is an account for a program, significant elements of program cost often reside outside the program account.¹⁶
- **Some costs may occur in different years so that they are not reflected in any budget account at the point at which a decision is being made.** This challenge is for cost elements

16. A striking, although slightly different, example of these challenges comes from the DoD military personnel budget account. Over half of the budgeted costs of military personnel reside outside of this budget account; examples include commissaries, health care, and veterans' disability and health care benefits. When the military personnel account is used to estimate the costs of a program that uses military personnel, this one (usually substantial) element of program cost can be understated by as much as 50 percent.

that do not even show up in the budget when the decision is made. This includes costs that will occur in the future, such as retiree health care. It also includes costs that occurred in the past, such as construction of a facility that is used by the program which could be used for some other purpose if not needed by the program.

One solution to these challenges is to create thorough analytic estimates of cost for use in performance-informed resource allocation decision-making. An advantage of this approach is that it makes the challenge primarily one of analysis and places it under the control of the resource community and/or the performance-budget advocate. This may be the best approach in early phases of a performance-budget integration improvement initiative. However, this approach also poses disadvantages and risks, including:

- **Accuracy.** Conducting a thorough analysis is difficult. If consistent and reliable records are not being kept on how resources are used (e.g., in a cost accounting system), assumptions have to be made that may reduce the quality of the estimate.
- **Credibility.** Operational managers respond to the incentives they face. Even if they understand that some costs of their operations are borne elsewhere, it is unlikely that they will seriously take those costs into consideration as long as they are not responsible for them. As a result, presenting them with analysis, no matter how correct, showing full cost to be higher than their recognized costs will suffer from credibility problems in a contentious decision-making process.
- **Cost.** Conducting extensive analyses to capture full cost is time-consuming and expensive. In a frenetic budget-formulation process in which many issues must be resolved in a short period of time, it is not possible to pause for detailed cost analyses every time the question changes or a new question arises.

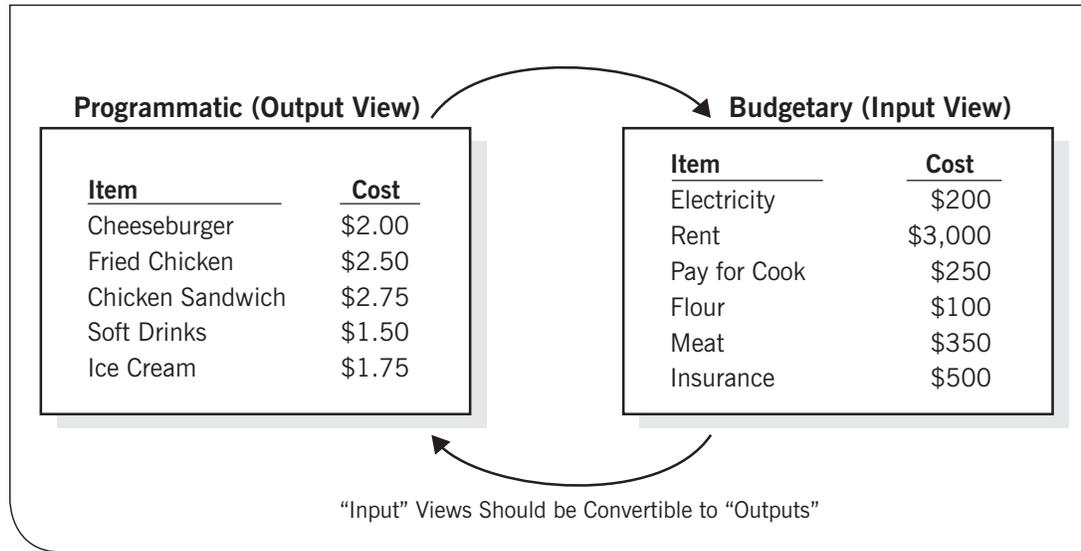
For these reasons, large performance-budget integration improvement initiatives often are combined with major changes to budgeting account structure. Examples include the Department of Defense in 1961 (discussed on page 32), New Zealand in 1989, and Australia in 1999. An unsuccessful example of what would have caused sweeping reforms of the U.S. budget accounting structure was the Managerial Flexibility Act of 2001. In a study of these issues, GAO (2000) described the interrelationship between management reform (including performance-budget integration) and account structure as follows:

Although budget decisions are inherently based on political choice, the method of budget reporting plays an important role by determining the information available and incentives provided to policymakers. Further, because the budget process serves as a key point of accountability, the way costs are measured in the budget can have significant consequences for managerial incentives. Therefore, choices about the method of budget reporting represent much more than technical decisions about how to measure cost; rather they reflect fundamental choices about the controls and incentives to be provided by the decision-making process.

Two basic reforms may be needed to address these challenges:

- **Programmatic accounts.** Creating an account structure based on systematic categorization of outputs (activities and programs) that serves as a replacement for, or exists in parallel with, the appropriation structure. Programmatic accounts are illustrated in Figure 7.
- **Accrual-based accounts.** Accrual-based budgeting records transactions in the period when the increase in liability or the consumption of the resource occurs, regardless of when cash payment is made. For example, a retiree health care liability occurs when the individual is employed and earns the retiree benefit, and the consumption of a large facility occurs when productive use is made of it.

Figure 7: Programmatic Accounts



Both tend to require large reforms and—to be fully implemented—congressional agreement. Given that congressional objectives may be more focused on the control of funds—e.g., whether a member’s priority received fenced or directed funding—and on priorities other than performance-informed resource allocation decision-making, this congressional agreement may be challenging to obtain. In practice, there are three general options available to performance-budget integration advocates:

- **Redefine appropriation accounts:** If the performance-budget integration initiative is large enough and if congressional agreement may be possible, this provides the most significant reform—locking in changes and ensuring the greatest rigor and transparency as the entire financial controls apparatus is adjusted to the new structure.
- **Maintain two sets of accounts:** A costly option for an agency or program, but often the most practical way forward. Many agencies do this, including the DoD, DHS, and the intelligence community. (GAO)
- **Ad hoc estimation of full cost on a case-by-case basis.** In other words, just estimating costs for programs one at a time as needed. (Blanchard)

The following recommendations focus on ensuring accurate cost information to support performance-budget integration:

Recommendation 4.1: Ensure capability to construct accurate cost estimates. Regardless of the long-term strategy adopted to promote efficient and credible cost estimating (see recommendation 4.2), a performance-budget integration initiative will need an immediate ability to estimate costs for the priority issues examined. Advocates should ensure that a capability exists or can be quickly developed to create these estimates.

Recommendation 4.2: Review account structure and revise if necessary. Although ad hoc estimation may be required in the early phase of a performance-budget integration initiative (see recommendation 4.1 above), this is probably not a sustainable approach for the long run. If the existing account structure used in budget formulation does not allow for accurate cost estimating of the program and activities that produce mission outcomes, a long-run strategy for improvement should be developed.

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