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Performance-Budget Integration: Practical Steps for Improvement

IBM Center for The Business of Government Improving Performance Series

John E. Whitley

August 2014

IDA Document NS D-5146
Log: H 14-000255

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Introduction

Informing budgetary decisions with performance information is an important element of sound government management. Without an estimate of the impact on border security of building another 350 miles of fence along the border between the United States and Mexico, policy makers cannot assess whether building the fence is a wise investment. It may be relatively easy to estimate the cost of building 350 miles of fence 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 (i.e., performance) and costs together that informed budgetary decisions can be made.

It is not surprising, then, that the federal government has spent considerable time and energy trying to improve this performance-budget integration. Joyce (2003) reviews many of the major initiatives of the 20th century. The Hoover Commission formally introduced the performance-budget 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 (MBO), and Zero-Based Budgeting (ZBB). The last twenty years have seen this trend continue with major pieces of performance legislation, including the Government Performance and Results Act (GPRA) and GPRA Modernization Act (GPRAMA), and executive branch initiatives, including the Bush Administration initiatives Program Assessment Rating Tool (PART) and the Budget and Performance Integration (BPI) element of the President's Management Agenda (PMA) as well as the Obama Administration initiative of High Priority Performance Goals (HPPG).

But integration has been hard to achieve. The 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 from 1997 to 2013.[2] A survey of Agency Performance Improvement Officers (PIOs) from the Partnership for Public Service and Grant Thornton in 2011 found similar challenges. In that survey, PIOs stated that their weakest area of measurement was outcome performance measures, which are necessary for performance-budget integration—measures of compliance, process, outputs, and milestones all scored higher. Specific PIO comments included "GPRA needs to be linked

[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 paper, 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.

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."

As the PIO comments reveal, one reason contributing to limited progress has been the focus of recent efforts in the federal government on improving performance information without substantively addressing budgeting processes. With the exception of the BPI element of the PMA, none of the legislation or initiatives identified above from the last twenty years directed changes to 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. Two problems with this approach are:

- The budgeting community has sufficient pressures and constraints on it that, absent modification, it generally perceives itself as not having the resources or discretion to make the type of large changes necessary to achieve meaningful performance-budget integration; and
- Without direct study of and participation in budgeting processes, the performance community often does not know what the requirements are for its performance information, e.g., what to develop, when it is needed, and how it should be presented.

Part of the explanation for this approach is that the above legislation and initiatives have had a broader focus than just performance-budget integration; e.g., they were also trying to promote integration of performance information into strategic planning and program management decisions. But 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 paper is to provide concrete examples of, and recommendations for, how meaningful performance-budget integration 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, e.g., the Congress, and in other organizations both within and outside of government that are responsible for supporting complicated resource allocation decisions.

Outline of this Paper

Following this introductory chapter, the second chapter further defines performance-budget integration and provides examples to make clear the specific actions that it encompasses. The following two chapters then develop the implications of this for budgeting processes and the performance function. This is followed by a chapter of examples from different government-wide initiatives and Agencies in practice today. The paper then provides concluding remarks.

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. This chapter does this in three ways. First, it illustrates performance-budget integration with an example. Second, it uses this example to develop a definition of performance-budget integration. Third, it places performance-budget integration into the larger context of strategic management decision making to define not only what performance-budget integration is, but also what it is not.

Performance-Budget Integration Example – Border Security

To provide a concrete illustration of performance-budget integration, examine border security along the southwest land border of the United States 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.

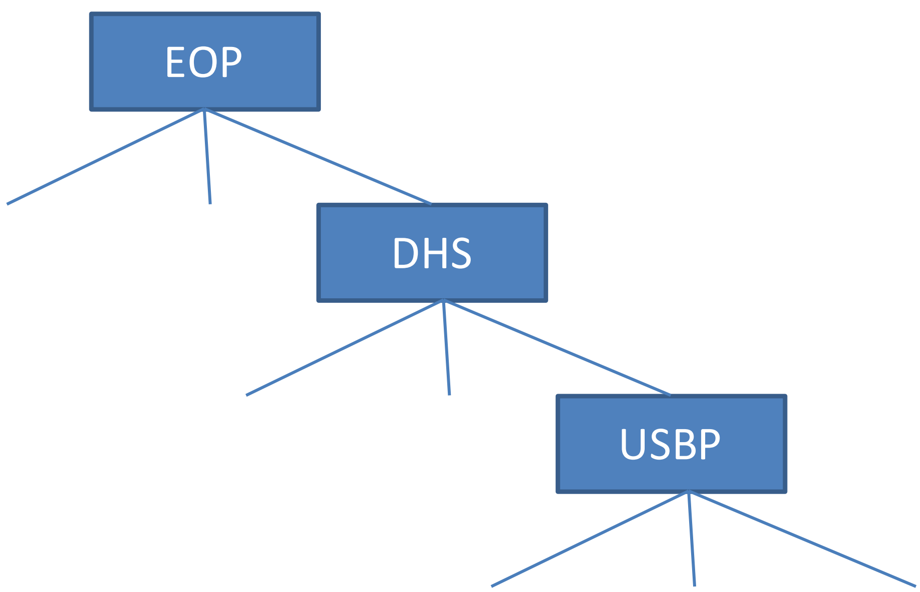

Figure 1. Border Security Decision-Making Levels

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 paper for simplicity—the recommendations of this paper apply largely unchanged at this level as well.

USBP is the program office with primary responsibility for producing the outcome of border security on the southwest land border. To produce its mission outcome, USBP uses inputs such as Border Patrol Agents, tactical infrastructure (e.g., vehicle and pedestrian fencing), technology (e.g., ground sensors and radar towers), and consequence programs for repeat offenders. A primary responsibility of USBP leadership is to combine these inputs—the leadership's "tradespace"—in the most effective way, to produce as much border security as possible given its available resources. The objective of the USBP budget formulation process should be to aid the USBP leadership in producing this optimal allocation of its resources for the next five years.[5] Figure 2 illustrates USBP's budget formulation tradespace.

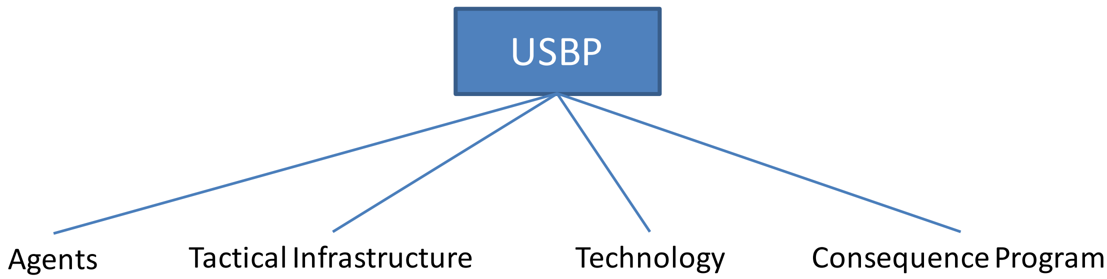

Figure 2. USBP Budget Formulation Tradespace

Within this context, it is straightforward to identify the performance information required for effective USBP budget formulation. 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, i.e., the rate at which illegal migrants and contraband cross the border. USBP affects this outcome by using inputs (e.g., agents and technology) to produce outputs such as situational awareness and apprehensions that influence the desired outcomes. Thus, USBP's second performance measurement requirement is to measure its inputs and outputs.

But measuring inputs, outputs, and outcomes is not sufficient for the performance community to be 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, and how much border security is produced with fewer

[5] DHS, like most Agencies in the security arena, uses a five-year profile of resources in budget formulation, not just a single year budget.

agents and more technology (i.e., 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 (APR) do not necessarily assist budget decision making. Budget decision making is about choices among alternatives, e.g., 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, and 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 the contribution of these factors to outcomes, and 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 then sent to DHS headquarters for DHS-level budget formulation.[6] DHS produces the outcome of homeland security. At the DHS level, the USBP outcome of border security is now 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 objective of the DHS budget formulation process should be to aid the DHS leadership in producing this optimal allocation of its resources for the next five years. Figure 3 illustrates DHS's budget formulation tradespace.[7]

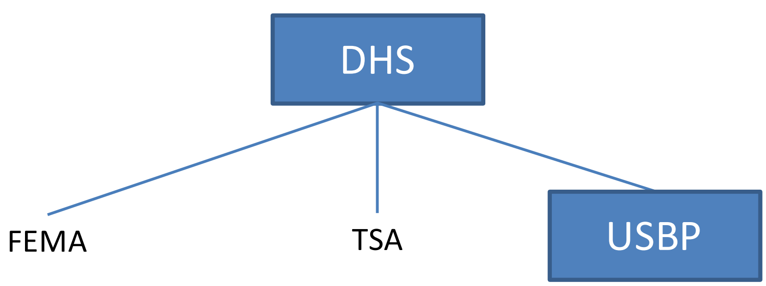

Figure 3. DHS Budget Formulation Tradespace

At the USBP level, the use of performance information to inform budgeting has been focused on measuring the contributions of agents, technology, and other inputs to

6 As noted above, there is actually a layer between USBP and DHS headquarters, the DHS Component CBP. This fourth level of decision making is being ignored for simplicity.

7 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 illustratively to represent the tradespace of DHS senior leadership.

border security. At the DHS level, the performance measurement challenge is now 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 taking additional risk in border security in order 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., risk reduction) and forecasting the level of outcomes achieved at different combinations of inputs/outputs.

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

- Many decisions that have to be made in budget formulation are cross-cutting decisions. 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 then 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 uses homeland security (now considered an input from DHS), military force (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 allocation of its resources. Figure 4 illustrates the EOP's budget formulation tradespace.

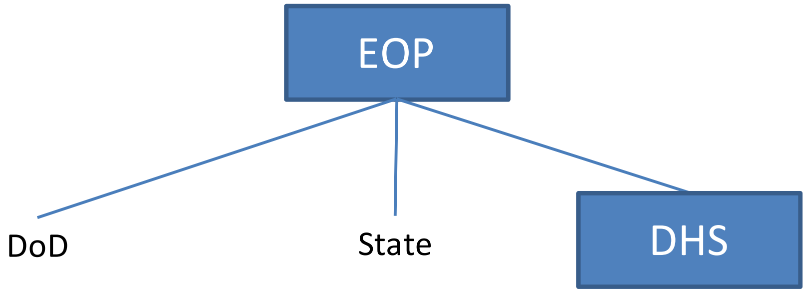

Figure 4. EOP Budget Formulation Tradespace

As at the lower levels of decision making, APR tables of measures are not necessarily helpful. OMB and the National Security Council (NSC) must determine whether taking additional risk in homeland security in order to free resources for increased investment in diplomacy is a good trade. In other words, as at the lower levels, budget decision making is about choices among 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 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 tradespace become more distant and diverse, comparing relative contributions becomes harder.

Once all of these steps are completed, a comprehensive federal budget has been developed and is ready for submission to the Congress. The next section draws on this example to define performance-budget integration.

Defining Performance-Budget Integration

The above example provided a concrete illustration of budget formulation challenges and the role of performance information in informing budget decisions. Key points that were made include:

- Budget formulation is the allocation of scarce resources among competing investment options—it is about choices between alternatives.
- The role of performance information 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, that makes the performance function relevant to budget formulation.

This supports the concept that performance-budget integration is about having a budget process that is focused on making resource allocation decisions and a performance information support function that provides data on alternatives when they are needed for decision making—performance-budget integration is the process of informing resource allocation decisions with quantitative measures of benefit. Its objective 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, as much as possible, political, parochial, and other criteria for decision making with quantitative measurement and analysis of results.

Performance-Budget Integration in Context

As indicated by the example and definition above, the primary focus of this paper is on integration of performance information into budget decisions at the program office, Agency or Department, and OMB levels. This limits the paper's scope in two specific ways: (a) government leaders make a variety of decisions that should be informed by performance information, but this paper is focused specifically on budgeting decisions; and (b) 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 briefly reviews this broader range of leadership decision making to provide a precise understanding of the focus of this paper.

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

1. What are the outcomes the organization is trying to achieve and what are the best strategies for achieving these outcomes?
2. What capabilities are required to execute those strategies?
3. How can the organization best obtain and employ those capabilities?
4. How should the organization's resources be allocated across competing priorities?
5. Were acceptable performance results achieved when the programs resulting from these decisions were executed?

Although these questions are inter-related, as organizations grow in size (e.g., 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 more 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 have emerged in response to these questions often include (using the same numbering):

1. Strategic Planning,
2. Requirements Determination or Validation,
3. Acquisition and Operational Program Management and Oversight,
4. Budget Formulation (and Budget Execution), and
5. Performance Reporting and Program Evaluation.

Performance information should be used to support all of these decision-making processes and, in organizations with separated decision support processes, integrated across them. Later in this paper, the United States Coast Guard (USCG) will be used as an example of where this integration is accomplished well. The primary focus of this paper, however, is on number four—budget formulation—which has important implications for what is and is not examined in this paper. For example, two frequent questions that emerge when performance-budget integration is being discussed are:

- Should a poorly performing program be "killed"?
- Should a poorly performing program have its budget cut (in recognition of the poor performance) or expanded (to improve performance if insufficient funds may be a cause of the poor performance)?

As stated, both of these questions are, at least in part, beyond the scope of this paper. 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 there are alternative programs that can lead to mission accomplishment and are less costly, the program should be terminated and replaced.[8] Likewise, how to improve a poorly performing program is a program-management question, and not directly a budget-formulation question. Budget formulation is primarily concerned with the actual relationship between cost and

[8] 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 of the focuses of this paper is on using performance information to inform these "how much is enough?" questions.

performance, not with what that relationship may become under new and improved management.[9]

Specific decisions concerning the termination of a program 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, the creation of displays of performance information during preparation of budget submission material is 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 periods of time to make incredibly 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 is scarce and achieving performance-budget integration requires using that limited time in a focused way.[10] Requirements and program management decisions can be made at any time during the year; they do not need to be forced into the short windows available for budget formulation to compete for the scarce staff and leadership time available.

The second major limitation on the scope of this paper is the focus 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.

9 In the jargon of economics, 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.

10 In later sections, this paper does include some recommendations for improving the integration of these decisions and the use of performance information to inform them in an integrated way, but that is not the primary focus of this paper.

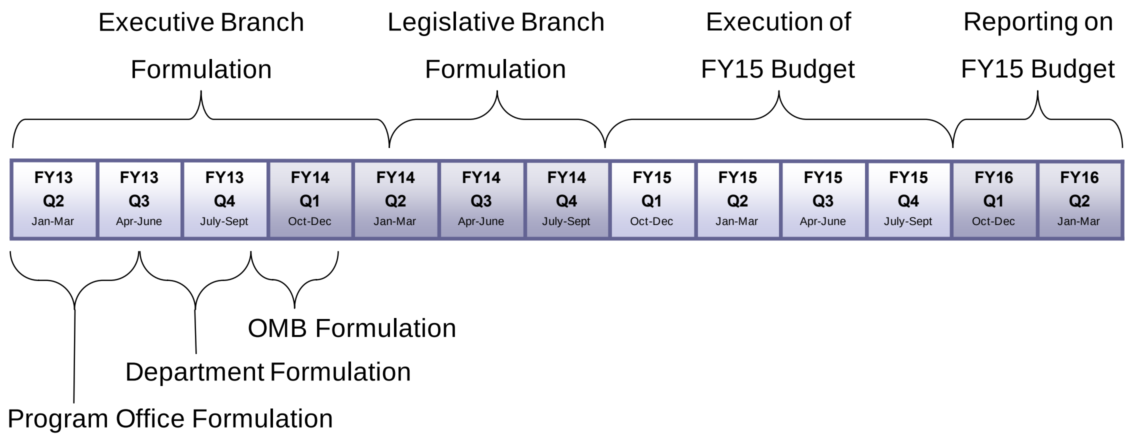

Figure 5. Fiscal Year (FY) 2015 Budget Cycle

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: (a) program office formulation, (b) Department or Agency formulation, and (c) OMB or Administration formulation.[11] The focus of this paper is on these three levels within the executive branch.

[11] For many federal Departments, there are actually four stages: a) program office; b) Component; c) Department headquarters; and d) OMB. The Component level will be ignored throughout this paper for simplicity. The paper's recommendations apply to this level as well.

Implications for Budgeting Processes

Performance-budget integration requires a concerted effort on the part of participants in both the budget formulation processes and performance function. This chapter reviews six specific aspects of budget formulation that are particularly relevant to performance-budget integration and presents a series of recommendations that may be useful in guiding development of reform initiatives. The six aspects of budget formulation are:

- **Leadership**: Resource allocation decisions are about choices between alternatives. For performance-budget integration to be successful, the decision maker of the budgeting process must want to make these decisions and must want to inform them with performance information.
- **Process**: If leadership desires to make resource allocation decisions informed by performance information, the budget formulation process must facilitate the isolation, development, and presentation of issues for decisions.
- **Cost**: To make sound decisions, leadership must understand the full cost of their alternative courses of action. Resource data must be capable of being used to develop estimates of full cost.
- **Integration**: Effectively allocating scarce resources requires integration with a wide range of strategic decisions, e.g., strategic planning and acquisition oversight. Improving the use of performance information to inform budgeting decisions requires constructive engagement with these related decision-making processes.
- **Prioritization**: All of the problems of a program or Agency cannot be solved in one budget cycle. Trying to do so usually produces poor results. A successful performance-budget integration initiative will usually focus on a smaller number of important decisions first and then expand from there.
- **Fiscal Environment**: The fiscal environment can be a significant factor in the level of interest in performance-budget integration. In a tight fiscal environment, there is often greater recognition that decisions have to be made—generating a demand for decision-making aids.

Leadership

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

- **Leadership interest**: The decision maker has to want to receive the data and use them in making their decisions. If the leadership are already planning on making the decisions based on alternative criteria (some of which are described in more detail below), 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 leadership of the program, Agency, or Administration 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 it likely that making budgeting decisions in other ways will provide them with greater resources, performance-budget integration is threatening to them. 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 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. 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 are will be losers who will object to the decisions (this is particularly true in resource allocation decisions). 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 decision maker 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 is instead to compete for resources by whatever means are available. A common corollary view 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 of decision making, they may not be interested in making performance-informed tradeoff decisions in their own budget formulation process, but may feel that it is better to just build as big a budget as possible and let the next higher level make tradeoffs if that becomes 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 tradeoff 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.

With this understanding of some of the reasons why leadership may not be driving reforms to improve performance-budget integration, strategies for enlisting leadership support can be developed. As stated above, the best case scenario is when the leadership initiates and leads the improvement effort. When this is not the case, some recommendations for how to enlist leadership support include:

- **Focus 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, i.e., not a transformation of all budget formulation decision making but targeted improvements within specific mission areas. Ideal candidates include areas in which the leadership is directly interested (but for which they do not already know the precise solution). Getting the leadership

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enthusiastically engaged in a reform initiative by making it a mechanism for advancing their mission priorities is often a wise move.

- **Motivate the reforms from self-interest**: 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:
    - As stated above, performance-budget integration reforms are a way to improve outcomes in the leadership's priority mission areas.
    - Performance-budget integration is also a way for leaders to enhance their control over their organization. Although government organizations are generally hierarchical, the complexity and political realities of government 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, discussed in more detail in a later chapter, was then Secretary of Defense Robert McNamara's use of a performance-budget integration initiative as part of his concerted strategy in 1961 to unify the then relatively new Department of Defense and exert his control over the military departments.
    - Performance-budget integration is also a way for a leader to more constructively engage (and influence) external decisions makers, i.e., higher tiers in the executive branch and the Congress. A budget based on political calculation and parochial or institutional interests is not as 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. An interesting contrast 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). It is presumed that 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. A recent example is the second engine debate with the Congress for the F-35 aircraft. It may be

helpful to explain to leadership that, if a battle is coming, a good way to be prepared for it is to have done the necessary analysis to have a well-grounded, defensible solution.

- **Dispel misconceptions**:
  - 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 does, have more impact on ultimate funding allocation. In one case the author was involved in, 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.

Process

With supportive leadership ready to make performance-informed resource allocation decisions, the next priority is to have a budget formulation process that is capable of isolating, analyzing, and constructively presenting issues for decisions to leadership. Schick (2007) provides a comprehensive critique of the typical budget formulation process—articulating why focusing the process on performance-informed decision making about the allocation of resources can be such a challenge. It is useful to review an extensive portion of his critique:

> Preparation of the budget typically begins in spring (or earlier) each year—at least 9 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 inter- agency 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.

This passage discusses a number of specific issues common to the budget process, including:

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

The tendency to ask for more resources than the organization expects to get was discussed in the previous section. The next chapter discusses the tendency to keep options open until late in the process—leading to a compressed decision-making period in "end game." This section focuses on the other three—incremental budgeting, overtaxed staff, and bottom-up budgeting—and provides recommendations on how to, at least partially, overcome them when designing a performance-budget integration initiative.

Incremental budgeting 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 the rates of growth of some programs are slowed while others are increased based on the issues and priorities of the day, but all stakeholders are reasonably 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 pointed out by Professor Schick, when it becomes the default process, it is detrimental to performance-budget integration.

One of the major aims 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.[12] As will be discussed below in the section on integration, 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 towards 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 yet 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.

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[12] This is a paraphrase of Schick's (1966) description of the aims of a Planning, Programming, and Budgeting System (PPBS).

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 a myriad of other tasks. Analyzing complicated and contentious issues and developing them for decision is also very demanding of time 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 and they are systematically reviewed and combined as the budget makes it 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 in the budget.[13]

However, since one of the major aims 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. Modifying Schick (1966) slightly:

> [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 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. Specific recommendations include:

- **Provide top-down policy guidance**: 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

[13] This issue is discussed further in the timing section of the next chapter.

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.

- **Consider needs and costs simultaneously**: Fiscal guidance should be issued with the policy 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 attention of subordinates on realistic planning.
- **Focus process on decisions and push technical tasks downward**: The process must be focused on making decisions and not overcome with bureaucratic requirements. If the OMB Resource Management Offices (RMOs) are responsible for the accurate pricing of 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). Additionally, issue detailed process guidance early in the cycle that clearly delineates responsibilities and the schedule of events.
- **Develop a separate analytic staff**: 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.
- **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,

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and performance plan should be a standard part of resource data and the decision making process.

Cost

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) and cost. While the performance community may be responsible for measuring benefit, 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 of cost must be complete and accurate, and estimating cost completely and accurately in large government organizations is not easy.

Two major challenges are that (a) the costs of an activity or program are frequently spread across multiple budget accounts and (b) some costs may occur in different years so that they are not reflected in any budget account when the decision is being made. The account structure through which financial control is maintained in the executive branch is generally based on the appropriation structure used by the Congress. This account structure is frequently a legacy structure that has evolved over time 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 based on 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 the program, significant elements of program cost often reside outside the program account.[14]

The second challenge is for cost elements that do not even show up in the budget when the decision is made. This includes costs that occur in the future, such as retiree health care for personnel. It also includes costs that occurred in the past, such as construction costs for a facility that is used by the program but could be used for some alternative 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

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[14] 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.

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. 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, New Zealand in 1989, and Australia in 1999. An unsuccessful example of what would have caused sweeping reforms of the US budget accounting structure was the Managerial Flexibility Act of 2001. In a study of these issues, GAO (2000) described the inter-relationship 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.

There are two basic reforms that may need to be undertaken 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 6.

- **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.

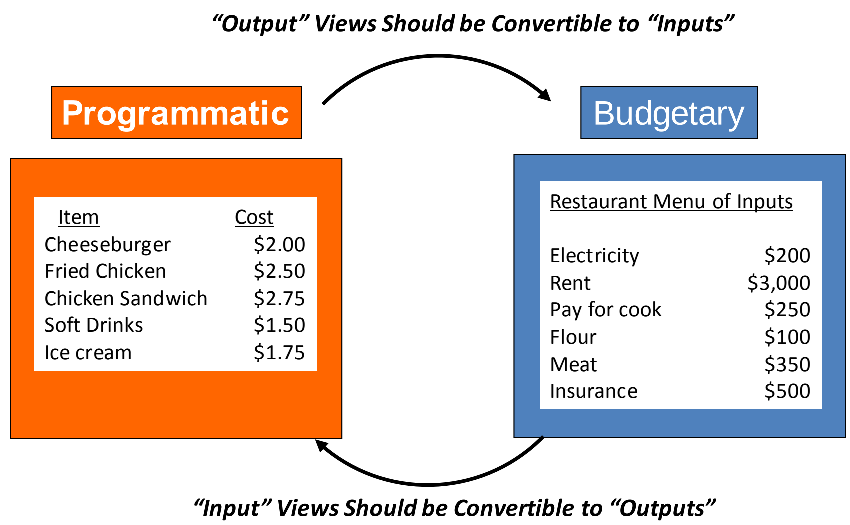

Figure 6. Programmatic Accounts

Both of these tend to require large reforms and, to be fully implemented, require 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.
- **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.

The primary recommendation with respect to account structure and cost is for performance-budget integration advocates to thoroughly think through this issue at the start of their reform efforts and decide which course of action may be best. Virtually any performance-budget reform effort will confront this issue at some point, likely relatively quickly. The right solution will depend on the individual circumstances, and prior consideration given to the issue will help prevent problems from arising.

Integration

As was discussed above, budget formulation is only one part of the complete set of decision support processes that usually support senior leadership in managing their organizations. Other important elements include:

- Strategic Planning,
- Requirements Determination or Validation,
- Acquisition and Operational Program Management and Oversight, and
- Performance Reporting and Program Evaluation.

Although these decision processes have implications that extend beyond the allocation of resources, they are all intertwined with resource allocation decision making. The links between these decisions and resource allocation are fact-of-life, not a matter of choice. For example, if top-level choices on goals and strategies do not determine the allocation of resources, the budget itself (however determined) ends up determining the actual goals and priorities of the Department. In that respect, whether consciously and deliberately or through many unrelated decisions made for perhaps conflicting reasons, the allocation of resources ***is*** the de facto answer to these questions that matters most, 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 should be the measure of benefit. 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.

Connections with requirements determination and program management were provided in the earlier chapter that first discussed these examples. 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 the processes used to support them tend to become more and more disconnected. Thus, in large organizations, the 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 (security, domestic policy, economic), the Resource Management Offices (RMOs) of OMB, and the Performance and Personnel Management office of OMB.

But, as noted above, these decisions are fundamentally interrelated. When this specialization and division of labor occurs, a new challenge in the coordination of these decisions emerges. This coordination challenge can be exacerbated since 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, the allocation of resources 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 of this 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 development of a performance-budget integration initiative and in selection of 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, some recommendations for 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 is 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.

Prioritization

As stated in the discussion above on leadership engagement, performance-budget integration advocates seldom have the luxury of an aggressive, comprehensive, top-down initiative to transform all budget formulation decision making. These take a tremendous commitment, are very costly, and require years to implement. Fortunately, this is not always required to make progress. In reality, although every element of a program's, Agency's, and Administration's 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.

It is therefore recommended that a clear and narrowly defined set of issues be selected early as the focus of a performance-budget integration initiative. Criteria for selection include:

- **Leadership interest**: The initial target issues should be of interest to the decision maker(s).
- **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 and more aggressive decisions in the future—smaller decisions that begin the process of bringing larger and more complicated issues into the realm of feasibility?

Fiscal Environment

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:

- **Decreasing funding**: An advantage of an environment of decreasing funding 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.
- **Stable funding**: 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.
- **Increasing funding**: 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 have a good understanding of 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 include:

- **Decreasing funding**: 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, e.g., issues 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.
- **Increasing funding**: 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 to him or her. 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, e.g., 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.

Implications for Performance Function

Having a budgeting process ready to receive and use performance information is a necessary condition for performance-budget integration, but it is not sufficient. Useful performance information must also be produced and delivered at the right time and in the right way. This chapter examines a series of issues facing the performance community and provides recommendations for improvement of the performance function as part of a reform initiative. These issues include:

- **Analysis**: Performance-budget integration is, first and foremost, the use of analytic forecasts of results to inform resource allocation decisions. This means the performance function must be, at its core, an analytic function.
- **Alternatives**: Budget decisions are about choices among alternative allocations of scarce resources. Performance-budget integration is about using analytic forecasts of results to aid the decision maker in selecting among the alternatives. Forecasts of performance for a program baseline that do not illustrate how performance changes with alternative investment options and resource levels do not aid decision making.
- **Timing**: Budget formulation follows a regular schedule outside of the control of decision makers. Performance information delivered too late (and, to some extent, too early) for the decision-making process does not aid decision making.
- **Transparency**: Open analysis available to all stakeholders is a key for the long-term success of a performance-budget integration initiative.
- **Objectivity**: Objective analysis, free from bias, is another key for the long-term success of a performance-budget integration initiative.
- **Division of Labor**: Forecasting performance results for alternative allocations of resources is complex and requires a great deal of work. It is unlikely that one headquarters performance office can or should attempt to undertake all the required activities. More likely, the work is spread over a number of offices that have subject matter expertise, data, and a stake in different aspects of the problem to be solved. Recognizing and leveraging this expertise from this diverse pool of available talent may be an important element of a successful performance-budget integration initiative.

Analysis

An important theme of this paper is that performance-budget integration is the use of analytic forecasts of results to inform resource allocation decisions and that the performance function is fundamentally an analytic function. In the border security example used above, the fundamental challenge is forecasting the level of border security using different combinations of resources (e.g., border patrol agents, technology, and fencing) in order to determine which allocation of resources is preferred. 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 (e.g., economic model forecasts of US 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.

As will be discussed in more detail below, the *performance* office (e.g., the office of the Agency PIO) 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.

This has wide-ranging implications for development of a performance-budget integration initiative. Three specific recommendations relating to this are:

- **Staff the performance office**: A performance office capable of conducting, integrating, and presenting quantitative analysis must have staff who are 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.
- **Conduct the analyses**: Quantitative analysis takes time to conduct, particularly in areas without a history of such analyses 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: (a) how to develop a performance-budget integration initiative; and (b)

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, e.g., selecting ones that have already been studied or for which the analysis can be conducted in the time available.

- **Set realistic objectives**: Doing comprehensive analyses on a wide range of issues may not be possible in the first years of a performance-budget integration initiative. It is generally better to set realistic analytic objectives at the start of the cycle and meet or exceed these objectives in the end game than to attempt more ambitious analyses and fail to deliver a useful result. Setting realistic objectives helps ensure relevance—producing a *high-level* strategic analysis in time 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 to thoroughly answer a question and failing.

Alternatives

Decisions are, by definition, about 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 on their own. Resource allocation decision making requires an understanding of 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 a 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.

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

Recommended 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 well-defined mission space concerning a program or portfolio of programs.[15] There may also be a need for inter-portfolio balancing during a cycle, but focus a decision within portfolios where 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.

Timing

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 the control of decision makers. For the performance community to be relevant to

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

budget formulation decision makers, their products must be delivered in accordance with this schedule.

Although the schedule varies across the government, the typical budget formulation schedule involves the following key dates:

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

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 in the schedule for decision briefings, and the performance function must execute its analytical process to ensure delivery of its results in time for these decision meetings.

There is another, more subtle, element of timing that is important to performance-budget integration. There is no requirement that all major decisions of a budget cycle 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. 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 bolus 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 inter-relationships 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 hold decisions off until the last possible minute.

However, 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. Two particular challenges this creates are the following:

- **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 passback 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.

This means that one objective of a performance-budget integration initiative is frequently to try and move some decisions earlier in the process so that they can be made in a transparent, performance-informed way. 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. It is easier to effect change in this way than to over-rule or radically alter 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 that 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.

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 their loss, but the loss 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 that were 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, the following ground rules are recommended for the analytic and decision-making phases of a performance-budget integration initiative:

- **Regular meeting**: 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 credibility of the initiative.
- **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 to 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 to the facts, participants cannot relitigate 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 need to be part of the decision making process and feel that they have had a 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.

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. Viewing the performance element of a performance-budget integration initiative as an advocate for specific outcomes rather than as an objective, honest broker presenting alternatives even-handedly will undermine the initiative. In short, objectivity is a key to the long-term success of a performance-budget integration initiative.

To help ensure this objectivity, performance-budget integration advocates should consider the following recommendations:

- **Protect against conflict of interest**: Although the next section suggests that specific elements of the required analyses may be best conducted by stakeholding organizations, the leadership of the performance function (e.g., the headquarters performance office) should not have any stake in the decisions to be made, e.g., should not report to a stakeholding organization. A headquarters office that does not gain or lose any resources, regardless of the decision, is often the best option.
- **Protect against advocacy**: The leadership of the performance function must instill in the staff the importance of objectivity and neutral, fact-based development and presentation of alternatives to the leadership. Even if the analysis overwhelmingly supports one alternative over the others, the role of the performance function is to simply report the facts and not assume an advocacy role.
- **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 analysts who did the work or the analysts' supervisor. The role of the briefer is to objectively present the issues, alternatives, and evidence. The stakeholders should be in attendance and afforded every opportunity to present their cases, but the presentation of the core material should be by a non-stakeholder (who does not engage in advocacy).

Division of Labor

A great deal of work must be undertaken 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 inappropriately 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 is consideration of the levels of the organization. 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 the 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 likeliness 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 that are more willing to participate than others. One obvious portion of the organization to consider is the performance (or whatever other name it may go by, such as policy and planning) office. 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 that must be executed for a performance-budget integration initiative to succeed, it is recommended that:

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

Examples

This chapter reviews some specific examples of performance and/or budgeting initiatives to illustrate many of the recommendations from the previous two chapters. It begins by reviewing and contrasting the two most recent government-wide performance initiatives, the Program Assessment Rating Tool (PART) and High Priority Performance Goals (HPPG). It then reviews the United States Coast Guard performance measurement framework, an example of a rigorous, outcome-oriented and integrated performance measurement framework specifically designed to be able to analytically support resource allocation decision making. It concludes with a review of the DoD Planning, Programming, Budgeting, and Execution system, one of the most significant changes to the budget formulation process conducted as part of a performance-budget integration initiative.

Program Assessment Rating Tool

The Program Assessment Rating Tool (PART) initiative of the Bush Administration was introduced in 2002. PART initiated a "questionnaire designed to help assess the management and performance of programs. It [was] used to evaluate a program's purpose, design, planning, management, results, and accountability to determine its overall effectiveness."[16] The questionnaire was composed of 25 questions covering:

- Whether the program's purpose was clear and well designed to achieve its objectives.
- Strategic planning, evaluating whether the agency established valid annual and long-term goals for the program.
- Management of the program, including financial oversight and program improvement efforts.
- Results the program could report with accuracy and consistency.

Based on the questionnaire results, programs could be rated as effective, moderately effective, adequate, ineffective, or results not demonstrated. At the time PART was terminated by the Obama Administration in 2009, it was evaluating over 1,000 programs that covered 98 percent of the federal budget.

Although PART was not specifically a performance-budget integration initiative, it was the largest performance improvement initiative in recent administrations and was a major element of the Bush Administration's President's Management Agenda which included performance-budget integration as a major goal.[17] When evaluated using the

[16] George W. Bush online presidential archives: http://georgewbush-whitehouse.archives.gov/omb/expectmore/part.html.

[17] See GAO (2004) for a more detailed examination of the use of PART to support budget formulation.

recommendations of this report, it provides a valuable case study and lessons learned for improving performance-budget integration.

First and foremost, PART was a presidential initiative—it not only had senior leadership buy-in, it was driven directly by the senior leadership of the Administration. It was accompanied by a concerted effort to develop programmatic budgetary data and thus tangentially tried to directly relate benefits to (full) costs. PART was also a very transparent process; although many ratings were contentious and there was regular disagreement among elements of the government, the criteria were clear and the results were well coordinated with stakeholders and publicly presented. Finally, PART was also an attempt at objective evaluation. Although many elements of the questionnaire had subjective components and required qualitative assessments, the structured, repeatable, transparent process provided a significant degree of objectivity for such a broad and all-encompassing initiative.

Some elements of PART, however, did not contribute to its usefulness for informing budget decisions. PART was not accompanied by any substantive changes to the federal government budget formulation process and was not specifically timed to inform any specific phases of the budget formulation process (program office, Agency, or EOP). As a program rating tool, it also was not focused on developing program alternatives for consideration as part of budget decision making. These are understandable design features since PART was not specifically a performance-budget integration initiative, but it also meant that PART was not directly relevant to the primary function of the RMO staff at OMB and Agency budget formulation offices. Finally, PART placed the entire budget (98 percent of it, at least) on the same level of Administration-level review. But not all of the budget is of equal priority to a president or requires the same degree of scrutiny at the EOP level; a tremendous amount of effort was exerted that might have been more productively spent digging deeper on a narrower range of programs.

High Priority Performance Goals

The Obama Administration replaced PART with the HPPG initiative. Under HPPG, each Agency developed a limited number of goals (generally three to eight) that were reported to OMB and tracked in various reports (a cross-government website and in performance reports). The goals were to be achievements that could be completed within 18–24 months and would not require additional resources or legislation.

When evaluated using the recommendations of this report, perhaps the most important element of the HPPG initiative was that it focused EOP-level scrutiny on only a subset of each Agency's programs. Whereas PART included EOP-level scrutiny of every program in the government, HPPG only elevated a portion of the budget to this level of scrutiny. This allowed for prioritization and prevented the overloading (with subsequent lack of effective focus and oversight) inherent in the PART process.

On the negative side, however, HPPG has never received the same level of senior leadership interest as PART. Multi-year delays occurred in developing and publishing the first set of HPPGs, and they have not been a major focus of EOP-agency interaction. There was also a high degree of delegation from the EOP-level to the Agency-level in determining the mission areas to be covered by goals and the setting of the actual goals themselves—they did not necessarily represent the president's highest priorities, which should be a primary criterion for determining what gets elevated to the EOP-level. Although the initiative has established a framework that lends itself well to integration into the budget formulation process (e.g., policy guidance could be issued at the start of the cycle, directing achievement of specific goals and enabling a formal dialogue), advantage has not been taken of this. The 18-to-24-month focus of the goals tended, at least initially, to focus them on implementation tracking of specific initiatives and prevented a strategic focus. In summary, although a major improvement was created by focusing the effort more narrowly on high priority areas, much of the potential from this has not yet been realized.

United States Coast Guard

The United States Coast Guard (USCG) has an incredibly diverse set of missions that includes such areas as search and rescue, aids to navigation, migrant and drug interdiction, environmental protection, fishery law enforcement, and direct support to DoD in military operations. 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, the USCG has developed a rigorous suite of data products and performance measures and integrated them into its full range of governance decision making processes, including budget formulation.

The USCG performance function starts with capturing extensive data on its mission outcomes. Examples include:

- **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, the USCG can then generate a variety of outcome 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.

An important feature of this system to note 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 budgetary decision making.

A second feature of the performance function is that the USCG has developed models to forecast each of these performance measures under different scenarios. For example, the 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 the USCG to use its performance measures to directly support the full range of governance decision making. For example:

- **Strategic planning and requirements determination**: The 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, the 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, the USCG can rigorously and quantitatively evaluate the fleet mix alternatives across its full range of missions.
- **Budget formulation**: In a similar fashion, the 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, the USCG also has an integrated cost accounting system (e.g., log books on boats) that enables estimation of actual expenditure on 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, the USCG performance function provides an example of 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 the recommendations of this report concerning the importance of the performance function being first and foremost an analytical function—(a) that the key use of performance data is to compare alternatives (point estimates are not useful), and (b) that it can be developed and delivered on a timeline that meets the needs of the budget formulation process (and other governance processes).

Planning, Programming, Budgeting, and Execution System

The PPBE system, or some variant of it, is the governing process for resource allocation in most of the security agencies of the federal government, including the Department of Defense (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 the National Security Council (NSC) 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 policy to budgets, and the two were largely disconnected. Each of the Defense Components (e.g., military services) annually built its own budget, 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 exigencies than definitive statements of US 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 and 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 7 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.

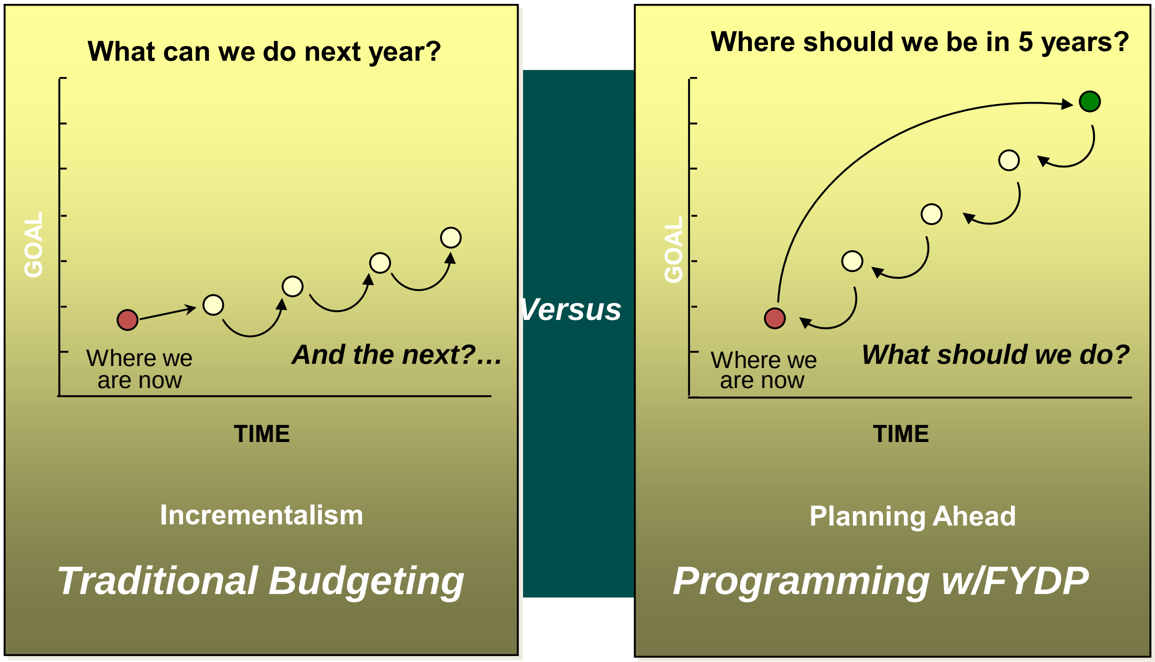

Figure 7. Traditional Budgeting vs. Programming

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. Quantitative analyses along these 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 offices 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 Agencies dealing with their own specific challenges, the principles that underlie it are applicable in a wide range of government settings for integrating performance and budgeting. The 1961 introduction was a Secretarial initiative; i.e., the senior leadership was driving the initiative and committed to seeing it succeed. It fundamentally changed the budget formulation process (e.g., 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 and far reaching performance-budget integration initiatives at the federal level.

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Conclusions

Performance-budget integration is essential for the sound stewardship of taxpayer resources. But achieving it has been hard to achieve, despite extensive effort across the government. This report has provided concrete recommendations that can help performance-budget integration initiatives succeed.

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Acknowledgments

This paper was made possible by the contributions of many individuals, including Dan Chenok, Dick Hersh, Phil Joyce, John Kamensky, Betsy MacCarthy, David McNicol, Greg Pejic, Bryan Roberts, and Robert Shea.

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REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*: xx-08-2014

2. REPORT TYPE: Final

3. DATES COVERED *(From - To)*:

4. TITLE AND SUBTITLE
Performance-Budget Integration: Practical Steps for Improvement

5a. CONTRACT NUMBER: DASW01-04-C-0003

5b. GRANT NUMBER:

5c. PROGRAM ELEMENT NUMBER:

5d. PROJECT NUMBER:

5e. TASK NUMBER: CARDPD

5f. WORK UNIT NUMBER:

6. AUTHOR(S)
Whitley, John, E.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Institute for Defense Analyses
4850 Mark Center Drive
Alexandria, VA 22311-1882

8. PERFORMING ORGANIZATION REPORT NUMBER
IDA Document NS D-5146

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)
Institute for Defense Analyses
4850 Mark Center Drive
Alexandria, VA 22311-1882

10. SPONSOR/MONITOR'S ACRONYM(S)
IDA

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT
Using performance information to inform resource allocation decision making is an important element of sound government management. But integration has been hard to achieve. This report provides recommendations for how meaningful performance-budget integration can be achieved.

15. SUBJECT TERMS
Performance-Budget Integration

16. SECURITY CLASSIFICATION OF: a. REPORT	b. ABSTRACT	c. THIS PAGE	17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
Unclassified	Unclassified	Unclassified	Same as Report	55	Whitley, John, E.

19b. TELEPHONE NUMBER *(Include area code)*: (703) 575-6615

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Standard Form 298 (Rev. 8/98)
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