

# THE PILLARS OF THE MODERN DEFENSE BUDGETING SYSTEM FOR THE PLANNING, PROGRAMMING, BUDGETING AND EXECUTION (PPBE) COMMISSION

By Matt MacGregor, Pete Modigliani, and Greg Grant



This paper frames the challenges inherent in the current system and presents a framework for transformation to a PPBE system that is strategic, collaborative, agile, transparent, and accountable to outcomes. This is the first in a three-part series on modernizing the defense budget, which is designed to contribute to the strategic reforms being considered by the PPBE Commission. The second and third papers will outline targeted reforms to address key challenges and a vision for the 21st Century defense budgeting system.

The FY22 National Defense Authorization Act authorized the Department of Defense (DoD) to establish a [PPBE Commission](#) to make recommendations on improving the fielding of “[operational capabilities necessary to outpace near-peer competitors...and support an integrated budget that is aligned with strategic defense objectives.](#)” The 2018 National Defense Strategy (NDS) openly acknowledged that the United States had allowed its military advantage to erode over the last two decades, when defense priorities focused on counterterrorism to the detriment of peer competition. While the NDS laid out a number of goals to recovery, including prioritizing “[speed of delivery, continuous adaptation, and frequent modular upgrades](#)” and recognizing that DoD’s “[current processes are not responsive to need,](#)” change at the scale and urgency needed has not occurred. As the Director of the Defense Innovation Unit (DIU), Mike Brown, recently said, DoD is [losing its technological edge](#) and “losing it at a rapid rate.”

Generating the DoD’s annual budget and gaining approval from the Executive Branch and Congress is inherently complex. Given the [sheer size of the defense budget](#), the number of stakeholders, and the fact that expenditures on defense represent nearly [half of total U.S. discretionary spending](#), gaining consensus from the many interested parties is no small feat. That consensus, understandably, is only achieved after multiple rounds of tradeoffs and concessions.

The stakeholders involved in advocating for their priorities include three Service Secretaries, five Service Chiefs, eleven [Combatant Commands](#), six Office of the Secretary of Defense (OSD) offices, the Office of Management and Budget (OMB), four [congressional defense committees](#), and the collective defense industrial base. Tradeoffs and concessions occur at multiple points in the process, not only within DoD as it develops the annual [Program Objective Memorandum](#) (POM), but also among DoD, Congress, and the White House. Ultimately, Congress has the final decision-making authority, given its Constitutional power “[to provide for](#)

[the common Defense](#)” and that funding must come from “[Appropriations made by Law](#).” The Executive Branch, as the executor of the budget, retains leverage, but its budget responsibility derives from legislation, specifically the [Budget and Accounting Act of 1921](#), so it is the weaker player in negotiations with Congress.

Recently, attention has turned to DoD’s labyrinthine internal budgeting process, known as the PPBE system. Established in 1961 by then-Secretary of Defense Robert McNamara as a [process for linking strategic objectives with available resources](#), the PPBE’s effectiveness at generating a highly capable and resilient Joint Force armed with the latest technology has been questioned in multiple [studies](#) and [papers](#). The prevailing consensus is that the PPBE system might have been appropriate for its time, when leading companies also used [statistical control](#) to manage their business functions. However, shortly after DoD adoption, experts

identified that approach as being responsible for executives failing to “[keep their companies technologically competitive over the long run](#)” and the commercial sector found better ways. DoD meanwhile retained its legacy practices with little change until this day, which has led to an erosion in the military-technical balance between the United States and advanced rivals, specifically China and Russia.

The United States cannot afford to miss this unique opportunity to correct failings in the force development process and apply the full weight of national innovation to rebuild a joint force capable of defeating advanced rivals. In doing so, the PPBE Commission should understand the key challenges it faces and the pillars that should underpin a modern defense budgeting system. The paper frames the major challenges DoD faces today and proposes key pillars for a modern defense budget.

## Four Key Challenges with the PPBE System



**NOT TIMELY**



**NOT  
STRATEGICALLY  
ALIGNED**



**NOT  
RESPONSIVE**



**NOT  
TRANSPARENT**

There are four primary challenges that the PPBE Commission will face in reimagining a new, modern defense budgeting process. The current processes are not timely, not strategically aligned, not responsive, and not transparent. These challenges form the core rationale for why DoD cannot achieve the force development outcomes it requires and should inform key focus areas for the PPBE Commissioners.



### NOT TIMELY

As [new threats emerge, new operational concepts are generated](#), and new capabilities are pursued to retain the U.S. military's advantage, particularly in the [USINDOPACOM](#) theater, DoD has proven unable to respond at the [speed of relevance](#). This is due in large part to the PPBE system.

The primary shortcoming in building the annual defense program, combined with congressional review cycles, is that it results in [up to 3 years](#) between budget request and allocation of funds. This prevents DoD from taking advantage of opportunities, such as the introduction of a new unanticipated commercial innovation, that would improve joint force capabilities. It also delays the initiation of new capability development and forces the continuation of legacy programs that DoD should halt in favor of a more affordable or more capable program. The trend of [continuing resolutions](#) exacerbates this problem even further as planned new starts, program surges or production increases are delayed or deferred.

PPBE planning, programming and execution processes occur simultaneously. This often leads the individual Components to submit their POM positions to OSD without full knowledge of the congressional position on the previously submitted President's Budget. DoD budget execution continues during this period, with the result that programs proceed as planned without fully understanding potential impacts to their budget profile. DoD requires a timelier budget process that minimizes process overlap and supports faster fielding timelines.



### NOT STRATEGICALLY ALIGNED

DoD has an established structure for translating strategy into capability that begins with the Secretary of Defense (SECDEF) Defense Planning Guidance (DPG), intended to communicate the Secretary's strategic priorities and inform the Services' POM development. The DPG attempts to address operational risk by reconciling the Combatant Command "fight tonight" force and capability needs with the longer-term technology investments needed for future fights.

In practice, however, DoD's ability to reach this goal is often stymied by Service parochialism that dedicates resources to those efforts most likely to retain Service relevance, regardless of whether those allocations conflict with Department-wide strategic objectives. The Services also often expect "equity" in their budgets, which ignores strategic intent. Moreover, despite having [statutory authority](#), the Services often challenge specific OSD direction. For example, if the Secretary's strategic guidance is to resource and build a modernized force, too often the Services bias toward force capacity. This often leads to contentious [Program and Budget Review](#) (PBR) cycles, and, given the timing of these cycles and Service resistance, DoD is only able to adjust a small portion of the overall budget. This can have a significant impact on DoD's ability to develop a joint force ready to engage in peer conflict, since the Services often sacrifice modernization and technology adoption in favor of near-term readiness and capacity.

As a result, DoD fails to deliver on strategic direction that prioritizes and coordinates innovation across the force. This failure often leads DoD to waste resources due to inefficiencies caused by stalled production lines,

lost expertise, and duplication. Congressional priorities can exacerbate these problems, when the possibility of retiring a legacy platform with a constituency is viewed unfavorably, no matter how costly it is to maintain that platform or how irrelevant its capabilities have become.



### NOT RESPONSIVE

The PPBE process is not sufficiently responsive or optimized to take advantage of today's non-linear, risk-taking approach to technology innovation, which requires agility, creativity, and speed. The nation that adopts the latest technological advances is the best poised to dominate in future conflicts. While certain emerging technologies, such as quantum computing, must mature further to become viable in operational programs, others, such as Artificial Intelligence and autonomy, have seen widespread adoption in the civilian sector but are only marginally prioritized or used in DoD. These represent two primary examples that DoD must immediately adopt, integrate and scale to gain major advantages in decision making and mission effectiveness. As former Google Chief Executive Officer Eric Schmidt noted, "[The government is not prepared...there are so many examples where digital technology would completely change the way the systems work.](#)"

The PPBE's overemphasis on formal acquisition programs, with their associated cost, schedule and performance baselines, dramatically limits responsiveness and investment decision space. This occurs primarily because many DoD leaders and members of the congressional defense committees have an inherent expectation of budget stability and control. Major programs are required to have full funding and they are [hard to cancel](#). Across 2,500+ investment budget

lines, fewer than 10 percent are dedicated to large programs but represent approximately 36 percent of DoD's entire [FY21 modernization budget](#), leaving the vast majority of budget line items allocated to highly discrete activities. This over-prescription is further demonstrated by the existence of multiple [appropriations](#), [budget activities](#), [new start rules](#), and [procurement restrictions](#), as well as [obligation and expenditure expectations](#) that punish any carry-over funds with congressional marks in the following budget year.

The inability to reallocate resources across funding lines, due to very limited [reprogramming](#) thresholds, precludes efficient allocation of funds to higher-value efforts. The prohibition against starting new efforts without authorization imposes a substantial time lag when commercial solutions, making use of the latest technologies, are readily available for application to DoD's top priorities. These constraints are the primary cause of the notorious "[valley of death](#)," and no short-term solutions such as [bridge funds](#) can ever replace enterprise-wide flexibility



### NOT TRANSPARENT

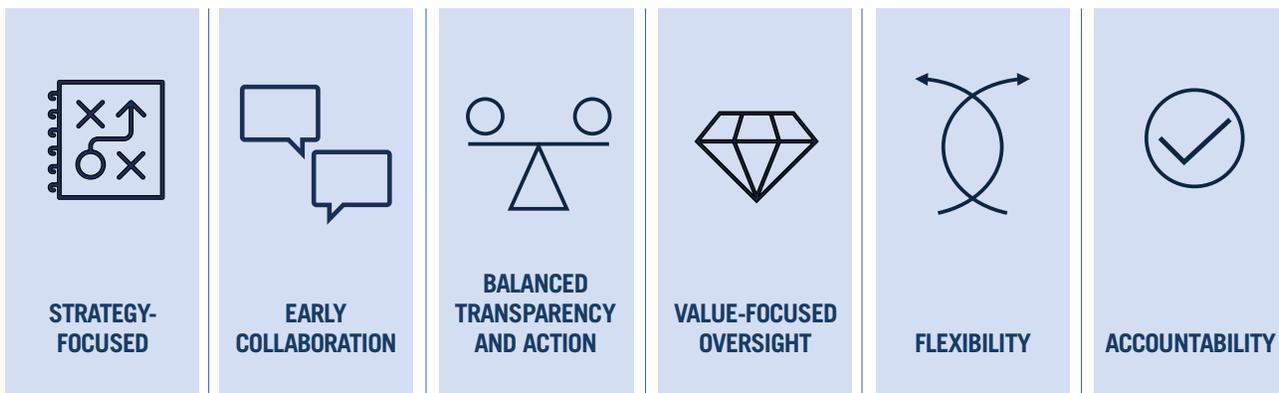
Given the parochial interests already identified, the current PPBE process contains barriers that limit insight into and influence on budget developments. The fear of pre-decisional information being released drives planning and programming details to be generated on classified systems even though the budget becomes public record upon release to Congress. The Services also fear that early insight by DoD will drive undesired redirection, so all artifacts are kept close and shared only among trusted groups. This obscuration and inappropriate classification impair trust and collaboration within the Components and across the Department. The lack of transparency is exacerbated by the

budget being developed and communicated using decades-old databases and countless PowerPoint slides, Excel files, and PDF documents.

The aversion to exposing potential weaknesses or controversies extends to submission of the President’s Budget to Congress. With DoD communicating with Congress primarily in the form of scripted testimony, intricately tailored responses, and briefing decks that provide the minimum amount of information, it should hardly be surprising that members of Congress and their

staffs become frustrated when critical information (from their perspective) is not available. This can turn what could have been a slight adjustment to a budget request into a larger prejudicial mark and possibly require DoD to devote effort in generating a detailed report. Thoughtful deliberation and appreciation for differing perspectives can often avoid these types of problems, but this first requires the ability to justify requests openly and honestly, and with the depth necessary to defend the proposed decision.

### Six Pillars of the Modern Defense Budgeting System



In recognizing the key challenges with the current PPBE system, the new defense budget system should be developed with six pillars that underpin its operation. These pillars do not prescribe specific solutions, but considering them when developing the new budget processes will ensure that the key challenges of the current system are addressed.



#### STRATEGY-FOCUSED

A recent Congressional Research Service report noted the [“great power competition has led to a renewed emphasis on grand strategy... as a starting point for discussing U.S. defense funding levels, strategy, plans, and programs.”](#) DoD is due to issue a new NDS. It appears likely that the NDS will propose a strategy of

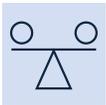
“[Integrated Deterrence](#),” whereby the United States does not rely on its military strength alone to prevent undesirable actions by adversaries. The executive and legislative branches need to agree on the key strategic elements to inform budget negotiations. Deliberations should also be focused on strategic-level budget line items and avoid attempting to manage the budget at a highly tactical level. Competitors such as China and Russia benefit from having long-serving

leaders with [singular vision and substantial power](#). The United States, too, must have strategic alignment between decision makers as a starting point. DoD specifically must ensure that its budget is consistent with stated strategy and that it addresses the priority operational challenges as identified in the Department's strategic guidance. Congress must place some trust that DoD will identify the most-effective means to implement that strategy.



### EARLY COLLABORATION

The commercial sector has learned to [embrace collaboration](#) as an effective business-building strategy, as opposed to adopting a zero-sum mentality. When a budget as complex as that of DoD is submitted for review and approval, having early conversations on changes that may be viewed as [contentious](#) can reap dividends. This applies as much to the Services and OSD as to DoD and Congress. A more productive approach is to engage in open dialogue with key stakeholders, provide context, request feedback and suggestions, and develop compromise positions that still achieve desired effects while maintaining the relationship among key parties. Collaboration is also key to winning future conflicts since adversaries no longer operate in one dimension, but the Services must work as a team, both operationally and in budget planning, to achieve desired outcomes. The budget process must encourage this type of valuable dialogue prior to DoD finalizing its budget positions.



### BALANCED TRANSPARENCY AND ACTION

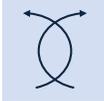
The FY21 defense budget was submitted to Congress in over 28,000 pages of documentation. The intricate level of detail across thousands of budget line items imposes a significant time

burden for any DoD or congressional reviewer and can result in the details not being read or absorbed. Understandably, the FY21 NDAA called for a modernization of budget justification documents that would promote [“the flow between the Department and the congressional defense committees of other information required by Congress for its oversight of budgeting for the Department.”](#) While budget reform should aim at the goal of full transparency, it must also be tempered with restraint. If additional insight results in knee-jerk reactions that undermine project execution, it will drive reversals. This requires DoD to institute a mechanism for promoting continuous dialogue that recognizes transparency is an act of mutual trust.



### VALUE-FOCUSED OVERSIGHT

The defense budget consists of many different accounts, not all of which pertain to material items. However, military capabilities, and particularly major platforms, attract the most attention and are easier to monitor. [The defense acquisition system](#) that develops and fields these military capabilities often requires [program cost, schedule and performance baselines](#). These predictive metrics offer a tempting way to gauge progress and maintain a sense of control. However, despite years of practice in employing this system, the resulting acquisition outcomes [have not markedly improved](#). Oversight must shift from a mindset that emphasizes conformance to one more focused on achieved value. Value will be measured differently for different goods but should focus on forward momentum and impact to stakeholders who execute the defense mission.



## FLEXIBILITY

Debates over budget flexibility harken back to disputes between Thomas Jefferson and Alexander Hamilton, whose views differed on the desired level of detail in an appropriation bill. They seem to have concurred that the budget “in all its details, the necessary application of moneys, and a reasonable discretion should be allowed to the proper executive department.” Prior to 1962, only procurement figures required authorization, but in the last decade the size of both authorization and appropriation bills has tripled, which denotes greater congressional control. With the appropriate level of transparency and insight, decision makers should instead view flexibility as a virtue that enables more efficient allocation of resources, eases the adoption of new technologies, and responds more rapidly and effectively to new threats.



## ACCOUNTABILITY

While political appointees, senior civilian officials and high-ranking officers serve as the primary advocates of the Department’s budget, interactions that occur closer to the execution level have great value. As the Department has delegated acquisition authorities to lower levels, it should engage those less senior but still highly responsible individuals in advocating for the necessary resources and should also call them into account for failures. This will not only empower lower-level officials by giving them a more public voice but will also ensure they provide the most current and nuanced information to decision makers.

## Strategic Opportunity

The PPBE Commission has a unique opportunity to finally modernize the 60-year-old defense budgeting process and bring it into the Digital Age. A complaint often heard when it comes to reforming DoD processes is, “If only we could start from the beginning with a clean sheet.”

Congress has provided DoD its first real opportunity in more than a generation to “clean sheet” its most fundamental and important process, translating our nation’s defense strategy into the military

capacity and capability it requires. *Failure to take advantage of this opportunity to implement much-needed reforms will place the United States at a strategic disadvantage relative to adversaries such as China and Russia.*

Reforming the decades-old PPBE process will demand a huge investment of time and effort and will require significant support from Congress and DoD. It will take several years for the PPBE Commission to analyze, debate, and shape a modern defense budget system and for Congress and DoD to implement the recommendations. In the meantime, targeted reforms must be pursued to address key shortfalls. The next paper in this series will dive into targeted reforms to shape the near-term process and serve as foundational elements for the modern defense budget system.



**And one of the relics of those days gone by is the current DoD budget process. It was a product of McNamara, the Whiz Kids, and I can assure you those Whiz Kids are not kids anymore. It is 70 years.**

**-Sen. Jack Reed, Senate Armed Services Committee Chairman**

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