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New Priorities, Familiar Challenges: Defense Trends in Budgets, Appropriations, and Contract Obligations

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Abstract

The Department of Defense (DoD) and its industry partners face an uncertain fiscal environment that includes constraints from continuing resolutions (CRs), the absence of a 2-year budget agreement, and budgetary pressure from program growth, inflation, and other cost increases. Also, administration priorities include many initiatives (such as supply chain resiliency, Made in America, diversity and inclusion, and climate actions) that can impact DoD requirements and contracting. In addition, the defense industrial base needs to invest and prepare for new ways to support its DoD customers. In this paper, the PSC Foundation describes recent trends in DoD funding and contract obligations and explores how those trends link to current challenges and new priorities. A panel of top defense experts with experience in both government and industry will then discuss the impacts of limited defense budgets and the constraints of CRs on defense acquisition of products and services and the defense industrial base. They will also discuss the impact of the Biden–Harris administration's stated priorities on defense spending as reflected in the FY2023 President's Budget Request and Future Years Defense Program and ways that the defense industry can plan and prepare to help address and support those priorities.

Background

In 12 of the last 13 fiscal years, the Department of Defense (DoD) has begun the year under a series of continuing resolutions (CRs). These short-term appropriations have sometimes lasted for half a year or more. Fiscal Year (FY) 2022 appropriations did not become law until March 15, 2022, nearly 6 months after the start of the fiscal year. Such budget uncertainty, though it occurs nearly every year, impacts programs and activities across the DoD (and the rest of the federal government).

Today's uncertain budget environment includes CRs, the absence of a 2-year budget agreement, and significant budgetary pressure from program growth, inflation, and other cost increases. Against this backdrop, the Biden–Harris administration has stated its intent to undertake several initiatives of high importance to the DoD. These high-profile efforts range from supply chain resiliency and domestic sourcing to climate change and diversity, equity, inclusion,

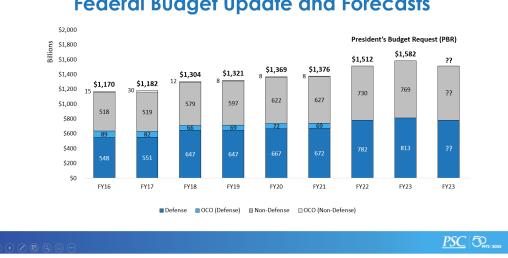


and accessibility. All of them, in one way or another, can impact DoD requirements and how the department uses procurement tools to meet those needs.

Recent DoD Budget History

Fiaure 1

The availability of appropriations is a significant determinant of DoD responses to new priorities and persistent challenges. Figure 1 reflects federal funding trends from FY2016 through FY2022 and also shows top-line information in the FY2023 President's Budget Request (PBR). The lower part of each column shows total appropriations in billions of current dollars for defense (i.e., the 050 budget account). The upper part shows non-defense, or civilian agency, appropriations.



Federal Budget Update and Forecasts



In addition, each pair of fiscal years from FY2016 through FY2021 reflects 2-year budget deals between Congress and the administration, and each 2-year agreement provided substantial increases when compared to the prior 2 years. For example, FY2018 and FY2019 represented an increase for defense of approximately 15% when compared to FY2017. FY2020 and FY2021 were only 3% above FY2019. With the end of the Budget Control Act caps following FY2021, there was no 2-year budget deal for FY2022-FY2023. As a result, while the FY2023 PBR includes an increase over FY2022, there is at this time no agreement in Congress on the final FY2023 total budget numbers.

Timeline of Budget-Related Activities of the Executive and Legislative Branches

Figure 2 shows the timeline of budget-related executive and legislative branch activities for the remainder of 2022 and into 2023. Budget details were submitted to Congress at the end of April, 1 month after the summary document on March 28. In addition, with primaries throughout the year and with mid-term elections in November 2022, members of Congress will spend more time outside of Washington, D.C., to engage in campaigns. These factors, coupled with the absence of an agreement for FY2023 spending levels, decrease the likelihood of on-time appropriations by the October 1 start of the fiscal year. It is nearly certain that the DoD will operate under a CR for at least the first part of FY2023.



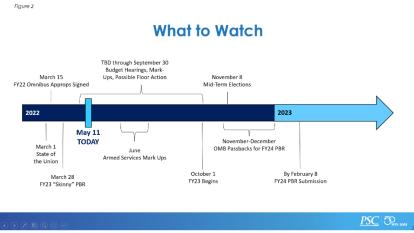


Figure 2. What to Watch

The \$1.6 trillion discretionary funding proposed in the FY2023 PBR includes funding to address many of the national security challenges facing the United States—and the DoD—today and in the coming years. In addition, for the DoD, it is also the first budget incorporating the new National Defense Strategy, for which only an unclassified summary is currently available to the public. However, even though the budget was submitted weeks after the statutory deadline of early February, the internal DoD budget process was unable to incorporate a number of emerging challenges, including but not limited to the impacts of and lessons learned from the Russian invasion of Ukraine and the increases in inflation across the U.S. and global economies.

The FY2023 PBR also represents the first detailed budget submission that includes funding for the Biden–Harris administration's policy priorities. Many of those priorities were not sufficiently developed to be part of the administration's first budget request, submitted to Congress in the spring of 2021.

As of May 1, 2022, President Biden had issued 88 executive orders, 249 proclamations, and scores more presidential memoranda, notices, and determinations. Many of these issuances have potentially significant implications for DoD programs and resources, adding to the existing and growing challenges already faced by the DoD. Some of them, such as mitigation measures for climate impacts on DoD facilities and operations, are addressed by increases in requested funding for FY2023. Others, such as replenishment of weapon and munitions stocks drawn down to support Ukraine, are not included in the budget request at all. As a result, significant questions remain regarding how the DoD, in particular, will be impacted by the administration's efforts and budget plans, both for new priorities and for familiar challenges. Some of these questions will be examined later in this paper.

Trends in Contract Obligations

The impacts of these questions need to be assessed against current trends of DoD spending. Much of that spending—for example, for military and civilian personnel, pay, and benefits—is beyond the scope of a paper for the Acquisition Research Program. Other spending, however, is a direct result of DoD procurement of products and services.

For centuries, one of America's great national security strengths has been the dynamic partnership of government and the private sector. This partnership is *vital* in the core meaning of that word: our lives depend on the continuing success of that partnership.

In the DoD, contractors provide a wide range of goods and services to the warfighter, as well as to the components and agencies of the department. Contractor contributions are



necessary and vital to maintaining national security, and the government benefits from a strong, diversified national interest business base to support its current and emerging requirements.

The figures below provide top-level data and trends in contract obligations on a government-wide, defense, and civilian basis. These six figures on contract obligations share a common presentation framework: each shows contract obligation dollars (in current year dollars) for each quarter of FY2016–FY2021, with FY2022 obligations for the quarters for which data have been released. Note that non-defense agencies have already released second-quarter data for FY2022, while the DoD continues its decades-long practice of not releasing data until 90 days after the quarter has ended. Data are drawn from the Federal Procurement Data System and exclude classified contracts.

In addition, each figure lists the percentage change from the prior year (or, in the case of partial data for FY2022, from the prior quarter or quarters). For the government-wide, defense, and civilian agency contract obligations, data are shown first for *all* contracts, then separated into *services* and *products*. Data are as reported by the agencies and are not independently verified or validated. For the most part, data are current as of April 30, 2022.

Government-Wide Total Contract Obligations

Figure 3

Figure 3 shows government-wide trends in contract obligations as a whole, beginning in FY2017. There are several items worth noting.

- 1. Contract obligations increased year-over-year, roughly commensurate with increases in appropriations, as shown in Figure 1.
- 2. For most fiscal years, contract obligation levels are lowest in the first quarter and highest in the fourth quarter. This is consistent both with historical patterns and with expected impacts of beginning fiscal years under the constraints of a CR. The exception to this pattern is the first quarter of FY2019, when six cabinet departments began the fiscal year with a full-year appropriation rather than a CR. Most of these agencies (DoD, Health and Human Services, Veterans Affairs, Department of Energy, Department of Labor, and Department of Education) saw increased contract obligations in the first quarter, compared to the first quarters of prior fiscal years.
- 3. FY2020 saw an increase in contract obligations that was disproportionately larger than the corresponding appropriations level. This was largely due to spending for COVID-19 impacts. Part of the decline in contract obligations in FY2021, compared to FY2020, is because of lower COVID-19 spending on federal contracts.



Government-Wide Total Contract Obligations

Figure 3. Government-Wide Total Contract Obligations



ACQUISITION RESEARCH PROGRAM Department of Defense Management Naval Postgraduate School Additional observations on year-to-year trends in obligations are discussed later in this paper.

Government-Wide Contract Obligations, Services, and Products

Figure 4 separates government-wide contract obligation information into two categories, services and products. Note that the scales are different, because approximately 60% of government-wide contract obligations are for services and 40% for products.

Items worth noting from Figure 4:

- 1. Both categories show increases in contract obligations across all fiscal years, until FY2021.
- 2. Increases in contract obligations in FY2020 for COVID-19 included both products and services, while FY2021 decreases in COVID-19 contract obligations were nearly 4 times as high in products as in services.

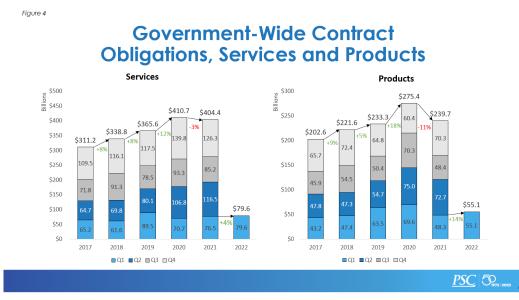


Figure 4. Government-Wide Contract Obligations, Services, and Products

Some increases in contract obligations for services reflect changes in government requirements and procurement practices. In particular, what once were contracts for products are today contracts for services. From data systems and data storage to space launches and telecommunications, the federal government, including the DoD, has shifted from ownership to usage as a service.

DoD Total Contract Obligations

Figure 5 presents total contract obligations for the DoD. For FY2017–FY2020, contract obligations increased at a rate commensurate with the increases in overall defense appropriations shown in Figure 1. The significant drop in contract obligations in FY2021 reflects at least two unique dynamics. The first is the reduction in contract obligations related to COVID-19. The second is the withdrawal from Afghanistan, which reduced contract obligations beginning in the first half of calendar year 2021.





Figure 5. DoD Total Contract Obligations

It is worth noting the slight increase in contract obligations in the first quarter of FY2022, which saw a 3% rise despite CR funding at FY2021 levels and an FY2022 PBR with only a 1.4% increase over FY2021. It would be useful to know if this pattern continued in the second quarter while the DoD operated under a CR for most of the quarter. The DoD has not yet released these data.

DoD Contract Obligations, Services, and Products

Figure 5

Figure 6 separates DoD contract obligations into the two categories of services and products. Unlike the figure for government-wide services and products, the scale is the same for both categories because DoD contract obligations are nearly the same for services as for products, a trend that extends back well before FY2017. For the DoD, the FY2021 decline in contract obligations, compared to FY2020, is roughly double the rate of decline for products as for services.



Figure 6. DoD Contract Obligations, Services, and Products



Acquisition Research Program Department of Defense Management Naval Postgraduate School The PSC Foundation assembles similar graphs for contract obligation data, both for totals and for services and products, for each military department, defense-wide accounts, and several defense agencies. Those figures are not presented in this paper but could be included in a future update.

Civilian Agency Total Contract Obligations

Figure 7 presents overall contract obligations for civilian agencies, with data available for both the first and second quarters of FY2022.

Note that the 22% increase in FY2020 over FY2019 is substantially greater than the 4% increase in appropriations for non-defense agencies. This is substantially due to COVID-19 spending on contracts, particularly in Health and Human Services accounts.

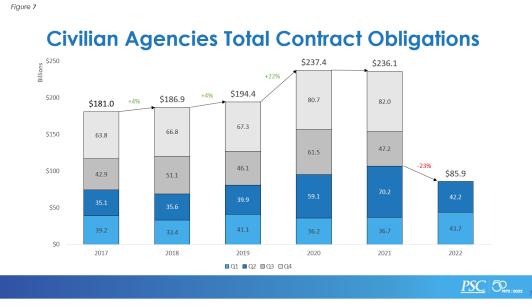


Figure 7. Civilian Agencies' Total Contract Obligations

However, FY2021 did not see the same rate of decline for non-defense contracts as was seen in the DoD (see Figure 5), even with the elimination of most COVID-19 contracts and despite the fact that FY2020 and FY2021 non-defense appropriations were essentially equal.

Civilian Agency Contract Obligations, Services, and Products

Figure 8 separates civilian agency contract obligations into services and products, with different scales since service spending levels in civilian agencies are approximately 4 times as great as spending on products. The decline in products from FY2020 to FY2021 is largely due to reductions in COVID-19 contracts. For the most part, trends in civilian agency contract obligations do not impact DoD programs directly.



Figure 8 **Civilian Agencies Contract Obligations**, Services and Products Services Products \$60 \$55.3 [] 명 \$200 \$190.2 \$182.1 \$50 \$45.9 16.1 \$154.4 \$150.0 \$40.0 64.7 \$143.8 \$150 \$40 \$37.3 64 (\$36.9 17.4 51. \$30 13. \$100 41.: 10.3 8.5 \$17.7 34 3 42.6 \$20 8.6 \$50 \$10 \$0 \$0 2017 2018 2019 2020 2021 2022 2017 2018 2019 2020 2021 2022 ■ Q1 ■ Q2 ■ Q3 ■ Q4 PSC 5

Figure 8. Civilian Agencies' Contract Obligations, Services, and Products

Observations and Impacts of Current Challenges and New Priorities

This paper turns now to several challenges and new priorities with potentially significant impacts on DoD programs and spending.

Inflation

Escalating costs for labor, materials, and transportation have rapidly outpaced planning assumptions within federal agencies' budgets for FY2022. The DoD, for example, planned for a roughly 2.2% inflation rate in FY2022 (Office of the Under Secretary of Defense [Comptroller], 2021). While the DoD uses different bases for inflation, it is noteworthy that the most recent annualized consumer price index report from the U.S. Bureau of Labor Statistics shows that the all-items index rose 7.9% for the 12 months ending in February 2022 (U.S. Bureau of Labor Statistics, 2022).

This large discrepancy between budget assumptions and reality can severely constrain buying power, both for agencies and for their industry partners. From a government contractor perspective, it puts a premium on the ability of those contractors to leverage existing tools—such as economic price adjustments—to keep their businesses viable. This is especially true for companies whose business is primarily with the federal government, since companies with significant commercial sales may return higher rates that could potentially offset any negative financial impact on their government-focused practices.

Many companies informally report that they are experiencing the impact of inflation most acutely in labor costs. In some cases, inflation has exacerbated an already misaligned rate structure for specialized talent (e.g., IT and cybersecurity). While companies in this report are not identified by name, their experiences represent many in the government contracting industry. For example, one company reported, "Inflation is making staffing more difficult for all contract types. Even for cost type contracts, customers are not always willing to allow for higher direct labor costs. Materials have been impacted mostly by timing and delayed delivery speeds."

Another company noted that regardless of the level of the employee, it is on average between 10% and 33% more expensive to hire employees in accounting/consulting/technology fields in the Washington, D.C., metropolitan area, compared to the national median (which



includes other high-pay locales such as New York City and Los Angeles, as well as lower-pay locales such as Huntsville, Detroit, Tampa/Orlando, and Virginia Beach). Additionally, those figures represent only the median base salary, which typically lags market leaders by an additional 12% to 25% (TalentNeuron, 2022).¹

Over the last 2 years, one company found several voluntary terminations, including top talent, at one company were due to healthy salary increases at new positions elsewhere. Self-reporting employees indicated anywhere from a 20% to 40% increase, plus additional perks like fully company-paid benefits and bonuses. In 2022, this trend has continued. If a "true" inflation rate of 7% or 8% is factored in, it becomes clear that salaries are increasing to account for both the function of work as well as a constrained talent pool for core functional areas.

There are three separate challenges with these higher rates of inflation: wage and price inflation today, recovering cost increases on existing contracts, and addressing possible inflation shortfalls in the FY2023 DoD budget proposal.

1) Wage and Price Inflation Today

Existing contracts, whether of a fixed-price or cost-reimbursable nature, offer defense contractors little room to recover the increased costs from wage inflation or the increase in prices for material and components, including energy and transportation. Because inflation has been so low and stable for so long, fewer existing contracts include the clause that permits economic price adjustments. Absent such a clause, contractors have a harder time making the case for the DoD to cover increased costs. However, even with such a clause, programs may claim that they have insufficient funds to cover these costs.

This is particularly a problem for companies providing services. Such contracts are often so competitive that margins are in the low single digits. A company that realizes a 4% or 5% fee on a contract simply cannot absorb wage cost growth of 7% or 8%.

The DoD's public response has been to note that, to date, it has received few requests for equitable adjustments (REAs). However, this does not mean there is no problem. Rather, companies faced with uncompensated cost growth must first document the situation and discuss it with their program office before submitting any REA. In addition, the REA process requires companies to submit requests rapidly, often within 30 days of incurring the unanticipated cost, but there is no timeliness requirement for the government to respond to those requests. In past cases, the DoD has taken a year or more to reach a decision on an REA, and even then, some (or all) of the costs may not be repaid.

Finally, the breadth of the inflation problem cannot be addressed one contract at a time, which is the preferred approach of the current policy. One option would be for the DoD to issue broad agency-wide guidance that reminds programs and contracting officers of their affirmative responsibility to maintain the long-term viability of the industrial base and that increases the flexibility programs have to cover such cost growth.

2) Recovering Inflation Cost Increases on Existing Contracts (and Availability of FY2022 Funds)

Even though the DoD's FY2022 appropriations was signed by the president just over 1 month ago, its funding levels did not provide for coverage of today's 8% inflation. One approach would be for the DoD to estimate the additional funding needed to cover this cost growth and to look at ways to meet those costs. Absent action, this problem will get worse. Companies that cannot recover their costs will not be able to stay in business for long.

¹ Accountants Junior, Mid-Level, and Senior; IT Associate Junior and Mid-Level as well as IT Audit Senior



3) FY23 Inflation

DoD officials in congressional testimony have already undertaken to explain their approach to, and future work on, inflation estimates in the FY2023 budget. While this is a real challenge, it is important to recognize that addressing inflation in FY2023 will not fix current problems.

Insufficient Budget Growth

While the FY2023 PBR includes \$773 billion for the DoD, a number that represents a significant increase over the FY2022 appropriated amount, the DoD's buying power is also degraded by inflation and internal cost growth. The department is also challenged by legacy systems that are increasingly expensive to operation and sustain, a constant struggle within the requirements development process to "get ahead of the curve" vis-à-vis innovations offered by the private sector, and the prohibition on new program starts under the now-ubiquitous cycle of CRs.

In addition, the impact of new administration priorities is not fully reflected in these proposed amounts. For example, the acquisition regulations issued in response to Executive Order 14005, *Ensuring the Future Is Made in All of America by All of America's Workers*, provides for a price premium to be paid for items made in America. However, no funds were appropriated in FY2022 or proposed in the FY2023 PBR for these premiums, and the specific size of the premium percentage was not included in the new Federal Acquisition Regulation clause. The question of how the DoD can comply with this new priority remains unanswered, and similar unanswered questions remain for most of the new priorities, whether for diversity and inclusion, supply chain resiliency, or even the increase of contractor minimum wages to \$15.00 per hour.

The Impacts of Ukraine

Even before Russia invaded Ukraine on February 24, 2022, the DoD was drawing down stocks of weapon systems and supplies and providing them to Ukrainian forces. The pace of that support continues to increase, with the president announcing additional support last week and preparing to ask Congress to authorize more. The nature and purposes of such support is evolving and will continue to change. Three big questions arise for the DoD:

- 1. How will depleted stocks be replenished or replaced?
- 2. What else will be needed?
- 3. Who pays for all this?

Public reports indicate, for example, that in the first 2 months of combat, fully one-third of the available stock of Javelin anti-tank weapons have been drawn down for Ukraine. It is apparent that available inventories cannot withstand such a pace for long. Few, if any, contracts have been awarded for replenishment.

What else will be needed? That information is not broadly available to industry today, although some programs have begun discussions with some companies. Who will pay for the upfront costs of increasing production capacity or even reopening closed production lines? The administration's recently submitted supplemental appropriations request has only limited details.

The DoD did, however, issue a Request for Information (RFI) in late April for "Weapons Systems or Commercial Capabilities for Ukraine Security Assistance," with responses due May 6. This is a step, albeit belated, in the right direction, but it appears to be far easier to deplete stocks of munitions than it is to restore them.

This is not a new problem. Operations in Iraq and Afghanistan led to usage rates for certain munitions, for example, in excess of current production capacity to replace them, and the lead



time for increasing production was years, not months. It is likely that today's supply chain constraints have made those timelines longer, not shorter.

In addition, replenishment faces a problem today that did not exist for Afghanistan or the counter-ISIS campaign, and that is a shortage of workers for nearly every defense contractor. Supply chain problems also were largely not an issue for Afghanistan. If action is not taken soon, the shortage of workers and the supply chain problems will diminish industry's ability to respond to the increased demands from Ukraine assistance.

Conclusion

The DoD faces dramatically increased current challenges, not only from the Russian invasion of Ukraine but also in other theaters, including China and the Pacific, cybersecurity, and nuclear threats. Coupled with numerous new priorities from the administration, DoD resources, including spending on essential contract support for missions and operations, may prove insufficient. The questions remain: What can be done to meet these familiar challenges and address those new priorities? The plenary session panel will tackle those questions.

References

Office of the Under Secretary of Defense (Comptroller). (2021, August). *National defense budget estimates for FY 2022*. Department of Defense.

https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2022/FY22_Green_Book.pdf TalentNeuron. (2022, March 1). *Data appendix report, 2022*. Gartner.

U.S. Bureau of Labor Statistics. (2022). *Economic news release: Consumer price index summary.* https://www.bls.gov/news.release/cpi.nr0.htm





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