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ANALYSIS OF THE FY 2015 DEFENSE BUDGET

TODD HARRISON

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2014

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The Center for Strategic and Budgetary Assessments (CSBA) is an independent, nonpartisan policy research institute established to promote innovative thinking and debate about national security strategy and investment options. CSBA's analysis focuses on key questions related to existing and emerging threats to U.S. national security, and its goal is to enable policymakers to make informed decisions on matters of strategy, security policy, and resource allocation.

ABOUT THE AUTHOR

Todd Harrison is the Senior Fellow for Defense Budget Studies at the Center for Strategic and Budgetary Assessments. Since joining CSBA in 2009, Mr. Harrison has authored a number of publications on trends in the overall defense budget, defense acquisitions, the defense industrial base, military personnel costs, military readiness, and the cost of the wars in Iraq and Afghanistan. He frequently contributes to print and broadcast media and has appeared on CNBC, CNN, NPR, Al Jazeera English, and Fox News. He has been a guest lecturer for a number of organizations and is a part-time professor at George Washington University's Elliot School of International Affairs. Mr. Harrison is a term member of the Council on Foreign Relations and for the past two years has been named one of the Defense News 100 Most Influential People in U.S. Defense.

Mr. Harrison joined CSBA from Booz Allen Hamilton, where he supported clients across the Department of Defense, assessing challenges to modernization initiatives and evaluating the performance of acquisition programs. He previously worked in the aerospace industry developing advanced space systems and technologies and served as a captain in the U.S. Air Force Reserves. He is a graduate of the Massachusetts Institute of Technology with both a B.S. and an M.S. in Aeronautics and Astronautics. Mr. Harrison combines his budgetary, technical, and engineering experience with a strong background in systems analysis to lead the Budget Studies program for CSBA.

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EXECUTIVE SUMMARY

The Obama Administration's fiscal year (FY) 2015 budget requests a total of $560.4 billion in funding for the Department of Defense (DoD), including $495.6 billion in the base discretionary budget, $6.2 billion in mandatory funding, and $58.6 billion in supplemental funding for Overseas Contingency Operations (OCO). The base discretionary budget is roughly the same level as Congress enacted for FY 2014, which in real terms is a reduction of 1.7 percent. This level of funding is consistent with the Budget Control Act (BCA) budget caps currently in effect, as modified by the Bipartisan Budget Agreement in December 2013. The Future Years Defense Program (FYDP) included with the base budget, however, exceeds the BCA budget caps by roughly $116 billion over the next five years and $168 billion over ten years.

Of the $58.6 billion in the OCO supplemental request, $53.4 billion is for Operation Enduring Freedom in Afghanistan. While this is a 38 percent reduction in real terms from the FY 2014 level of funding for Afghanistan, force levels in Afghanistan are planned to decline by 69 percent. If the request is enacted, the average cost per troop in Afghanistan will reach a record high in FY 2015 of $4.6 million per troop per year, compared to $2.3 million in FY 2014 and an average of $1.2 million for FY 2005 to FY 2013. The rise in the cost per service member can be attributed in part to Congress and DoD moving funding into the OCO budget that had previously been in the base budget. Because OCO funding does not count against the BCA budget caps, moving funding from base budget to OCO funding allows DoD and Congressional appropriators to fund additional programs and activities without offsetting cuts. While there are surely costs associated with the drawdown, these costs should not be significantly higher than the costs included in previous OCO budgets to build bases and transport the same troops and equipment to Afghanistan.

In addition to the normal budget request and the OCO request, the Services also submitted unfunded priority lists to Congress totaling $36 billion, and the administration included a separate Opportunity, Growth, and Security Initiative (OGSI) request with $26.4 billion of funding for DoD. These two additional requests are somewhat duplicative due to many overlaps between what is included in each. While the OGSI request appears to be a one-time initiative, the unfunded priority lists are a recurring submission at the request of Congress. The unfunded priority lists grew significantly in the late 2000s to a peak of $40 billion in FY 2008. Under the direction of Defense Secretary Robert Gates, these requests fell by an order of magnitude in FY 2010, but the unfunded priorities in FY 2015 returned to a level near their previous peak.

The budget also requests $285.7 billion in defense-related funding outside of the DoD budget, including $19.3 billion for defense-related atomic energy programs, $8.3 billion for defense-related

activities in other agencies, and $161.2 billion for veterans benefits and services. Under the Obama Administration, spending on veterans has been one of the fastest growing areas of the federal budget, growing by 52 percent in real terms while the number of veterans has steadily declined. The treasury must also make annual payments of $73.2 billion to the Military Retirement Trust Fund and $3.4 billion to the Medicare-Eligible Retiree Health Care Fund in FY 2015 to cover unfunded liabilities from prior years. Tax exemptions for military personnel and veterans benefits also result in $20.3 billion in lost revenue for the federal government in FY 2015. When these additional costs outside the DoD budget are included, total defense-related spending in FY 2015 is $846.1 billion, or 21 percent of the total federal budget.

The FYDP submitted with the FY 2015 request makes a number of shifts in how funding is allocated within the base DoD budget. The Air Force is the only Service to receive a real increase (0.6 percent) in FY 2015 with a larger increase (8.6 percent) planned for FY 2016. The Air Force's share of the budget increases to 28 percent by FY 2019 (22 percent excluding pass-through funding to other agencies), while the Navy's budget share stays roughly the same at 29 percent. The Army's share of the budget falls to 23 percent, the lowest level since FY 1959, while defense-wide accounts remain at 20 percent, the highest level since the end of World War II.

Personnel costs are just over half ($258 billion) of the DoD base budget in FY 2015, including $183 billion on pay and benefits for military personnel and $75 billion on pay and benefits for civilian employees. On a per person basis, the cost of active military personnel grew by 76 percent from FY 1998 to FY 2014. The FY 2015 budget aims to arrest this trend by proposing several reforms to the military compensation system and reducing the size of the force. The cost per DoD civilian also grew, but by a more modest 26 percent from FY 1998 to FY 2010. Civilian costs have leveled off since then due in part to a three-year pay freeze and increased cost sharing for civil service retirement benefits.

Operation and maintenance (O&M) receives a real increase of 1.3 percent in FY 2015, and the FYDP projects an additional increase of 5.2 percent in FY 2016 before leveling out through FY 2019. The majority of each of the Services' O&M budgets funds core readiness activities, such as training, peacetime operations, and equipment maintenance. Overall, base budget funding for operating forces is up 1.6 percent compared to FY 2014, with the largest increases in ship and air operations. Despite this increase in O&M funding for operating forces, the Services' report that readiness inputs remain underfunded in the FY 2015 request relative to targeted levels.

Acquisition funding declines in FY 2015 by 3.9 percent in procurement and 0.5 percent in research, development, test, and evaluation (RDT&E). RDT&E is projected to remain relatively flat over the FYDP, but procurement funding is projected to grow by nearly 20 percent. In this budget cycle, acquisition funding fared differently than in the previous budget cycle of the 1980s. Procurement funding in the base budget peaked at a much lower level compared to the 1980s, while RDT&E peaked at a substantially higher level. The 1980s buildup was driven largely by the procurement of large quantities of weapon systems, many of which remain in service today. In contrast, the growth in base budget acquisition funding during the 2000s was driven more by technology development for new programs. Many of these programs were subsequently terminated, truncated, or delayed as the budget began to decline, leaving parts of the force structure still in need of recapitalization.

While DoD is planning for future growth in many areas of the budget, historical evidence suggests that DoD is not likely to receive the level of funding projected in the FYDP—particularly during a time when the budget is declining. For the first five years of the last drawdown (FY 1986 to FY 1990), DoD submitted budget requests that projected growth while the budget was actually declining. The current drawdown appears to be following a similar pattern. Rather than showing where the

budget is likely to go in future years, the FYDP indicates what level of funding the Department is assuming and, more importantly, the degree to which the current program of record may be at risk because of these assumptions.

The FY 2015 budget appears insufficient to support the defense program and strategy articulated in the 2012 Defense Strategic Guidance (DSG) and the 2014 Quadrennial Defense Review (QDR). The budget request does not fund Army and Marine Corps end strength and Navy aircraft carriers to the levels stated in the QDR, making it roughly $20 billion short over the FYDP. The budget also continues to rely on OCO funding to supplement base budget programs and activities. While an OCO projection is not included for future years, DoD may be depending on $50–100 billion in OCO funding for the base budget over the FYDP. The budget also assumes many "efficiency" savings, totaling hundreds of billions of dollars over the FYDP, and some $31 billion in savings from the proposed changes to military compensation over the FYDP. Additionally, acquisition programs have historically exceeded their initial cost estimates by 20 to 50 percent, and O&M funding has historically grown well beyond DoD's FYDP projections. Perhaps the most consequential assumption in the FY 2015 request, however, is that DoD will be allowed to exceed the BCA budget caps by $116 billion over the FYDP.

To execute the programs and plans laid out in DoD's budget and the strategy and force levels detailed in the DSG and QDR, DoD could need some $200–300 billion more over the FYDP than the BCA budget caps currently allow. The shortfall could be more or less depending on the success of DoD's efficiency initiatives, Congress' willingness to enact some of the proposed changes to military compensation, and the ability to continue using OCO funding for base budget activities. If the budget caps are not raised by Congress, DoD could be forced to fund this shortfall by making additional cuts to force structure, personnel, acquisitions, and readiness beyond what was proposed in the request—meaning greater risk in executing the strategy. Alternatively, DoD could adjust its strategy to fit within the BCA budget constraints.

The Department appears to be caught between these two approaches—it has not budgeted enough to fully resource its strategy, nor has it revised its strategy to fit within the budget constraints set by Congress. To better inform this competition for resources within the defense budget, DoD should pick an approach. It should either submit a budget that fully funds the strategy and clearly communicates the difference between the BCA budget caps and the needs of the strategy, or it should revise defense strategy to fit within the resource constraints of the BCA and communicate the strategic risks and limitations this would impose. Without such a stark choice, it appears unlikely Congress will remove the BCA budget caps or grant DoD the flexibility it needs to manage within the caps.

OVERVIEW OF THE BUDGET REQUEST

In the fiscal year (FY) 2015 budget, the Obama administration is requesting $495.6 billion in discretionary funding and $6.2 billion in mandatory funding for the Department of Defense (DoD). The budget did not initially include a request for Overseas Contingency Operations (OCO) funding. Instead, the administration used a placeholder of $79.4 billion, identical to the level of OCO funding requested in FY 2014. The administration released its FY 2015 OCO budget in June, which included $58.6 billion for DoD. With this change, the total DoD request for FY 2015 is $560.4 billion.

TABLE 1: SUMMARY OF DEFENSE-RELATED ITEMS IN THE FY 2015 BUDGET REQUEST

Category	FY 2015 Request
DoD Base (discretionary)	$495.6B
DoD Base (mandatory)	$6.2B
DoD Overseas Contingency Operations	$58.6B
DoD Total (051)	***$560.4B***
Department of Energy	$17.8B
Department of Labor	$1.3B
Other Agencies	$0.2B
Atomic Energy Total (053)	***$19.3B***
Department of Justice	$5.0B
Department of Homeland Security	$1.6B
Other Agencies	$1.7B
Defense-Related Activities Total (054)	***$8.3B***
Department of Veterans Affairs (discretionary)	$65.3B
Department of Veterans Affairs (mandatory)	$95.5B
Other Agencies	$0.4B
Veterans Total (700)	***$161.2B***
Treasury Payment to the Military Retirement Trust	$73.2B
Treasury Payment to the Retiree Health Care Fund	$3.4B
Tax Exemptions for Military Personnel	$13.2B
Tax Exemptions for Veterans Benefits	$7.1B
Other Total	***$96.9B***
Total Defense-Related Spending	***$846.1B***

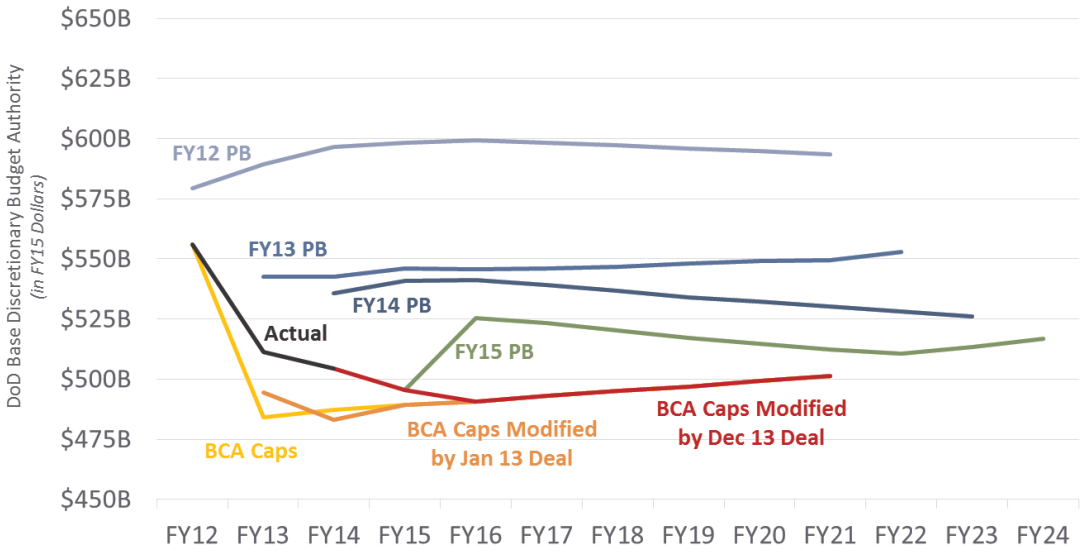
The budget also requests $285.7 billion in defense-related funding outside of the DoD budget, shown in Table 1. This includes $19.3 billion for defense-related atomic energy programs, $8.3 billion for defense-related activities in other agencies, and $161.2 billion for veterans benefits and services. The

treasury must also make annual payments of $73.2 billion to the Military Retirement Trust Fund and $3.4 billion to the Medicare-Eligible Retiree Health Care Fund to cover unfunded liabilities from prior years. Tax exemptions for military personnel and veterans benefits also result in $20.3 billion in lost revenue for the federal government in FY 2015. Together these expenses total $846.1 billion, or 21 percent of the total federal budget.

Base Defense Budget

The base defense budget funds the peacetime costs of the DoD. The FY 2015 request is roughly the same level as Congress enacted for FY 2014 ($496 billion in base discretionary funding), which represents a reduction of 1.7 percent in real terms.[1] The level of funding requested for FY 2015 is consistent with the Budget Control Act (BCA) budget caps currently in effect, as modified by the Bipartisan Budget Agreement in December 2013. However, the Future Years Defense Program (FYDP) included with the budget projects that the base defense budget will increase by 6.0 percent in FY 2016, then decline slightly in real terms through FY 2019. For FY 2016 to FY 2019 the FYDP is $116 billion more than the BCA budget caps allow, and the ten-year projection for DoD is $168 billion above the caps.[2]

FIGURE 1: EVOLUTION OF BUDGET REQUESTS AND BUDGET CAPS SINCE 2011



[1] Unless otherwise stated in this report, all figures are in FY 2015 dollars. Adjustments for inflation are made using the GDP price index provided in: Office of Management and Budget (OMB), *Fiscal Year 2015 Historical Tables: Budget of the U.S. Government* (Washington, DC: Government Printing Office [GPO], 2014), Table 10-1, available at: http://www.whitehouse.gov/sites/default/files/omb/budget/fy2015/assets/hist10z1.xls. Using the Department of Defense's (DoD's) own deflators would show a more modest change in defense spending because they tend to overstate inflation relative to the GDP price index.

[2] This assumes a straight-line extension of the budget caps through the end of the ten-year period (FY 2024).

As shown in Figure 1, the ten-year projection for the base DoD budget has declined with each president's budget (PB) submission since the FY 2012 request.[3] The largest change occurred in the FY 2013 request, with the ten-year projection falling by roughly $500 billion from what had previously been projected over the same period. The FY 2014 request called for further reductions, most of which were back-loaded near the end of the ten-year period. In contrast, the reductions in the FY 2015 request are front-loaded, with the largest reduction relative to last year's projection occurring in the first year.

Congress has also modified the budget caps twice since they went into effect. The first adjustment was part of the American Taxpayer Relief Act in January 2013, which increased the defense budget cap for FY 2013. This increase, however, was paid for in part by reducing the budget for FY 2014. The second modification was through the Bipartisan Budget Agreement in December 2013. This act raised the defense budget caps for FY 2014 and FY 2015.[4] The caps for FY 2016 and beyond have not changed since the BCA was enacted.

Supplemental and War-Related Funding

The OCO supplemental request of $58.6 billion for DoD includes $4.0 billion for a new Counterterrorism Partnership Fund, $0.9 billion for a new European Reassurance Initiative, and $0.3 billion for on-going support to Iraq. DoD lists the remaining $53.4 billion as being for Operation Enduring Freedom in Afghanistan.[5] The request also estimates that the average number of troops deployed in Afghanistan for FY 2015 will be 11,661, a reduction of 69 percent from the FY 2014 average level.[6]

The FY 2015 request for Afghanistan, however, falls by just 38 percent in real terms from the FY 2014 level of funding, considerably less than the 69 percent reduction in forces. A similar discrepancy was observed in FY 2014 in which the budget fell by 2 percent while troop levels fell by 41 percent. The blue data points in Figure 2 show the cost of operations in Afghanistan versus the average number of service members deployed in Afghanistan for FY 2005 to FY 2013. During this period, the annual cost to support each service member in Afghanistan varied between $1.0 million and $1.8 million with an average cost of $1.2 million (in FY 2015 dollars). The budgets for FY 2014 and FY 2015, shown in red, are roughly $35 billion above the trend line. The cost per service member rises to $2.3 million in FY 2014 and $4.6 million in FY 2015.

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[3] The ten-year projections are from the following OMB tables: OMB, *Fiscal Year 2015 Budget of the U.S. Government* (Washington, DC: GPO, 2014), Table 28-1, available at: http://www.gpo.gov/fdsys/pkg/BUDGET-2015-PER/pdf/BUDGET-2015-PER-9-7-1.pdf; OMB, *Fiscal Year 2014 Budget of the U.S. Government* (Washington, DC: GPO, 2013), Table 26-13, available at: http://www.gpo.gov/fdsys/pkg/BUDGET-2014-PER/pdf/BUDGET-2014-PER-1-5-1.pdf; OMB, *Fiscal Year 2013 Budget of the U.S. Government* (Washington, DC: GPO, 2012), Table 27-13, available at: http://www.gpo.gov/fdsys/pkg/BUDGET-2014-PER/pdf/BUDGET-2014-PER-1-5-1.pdf; and OMB, *Fiscal Year 2012 Budget of the U.S. Government* (Washington, DC: GPO, 2011), Table 27-14, available at: http://www.gpo.gov/fdsys/pkg/BUDGET-2012-PER/pdf/BUDGET-2012-PER-1-6-1.pdf.

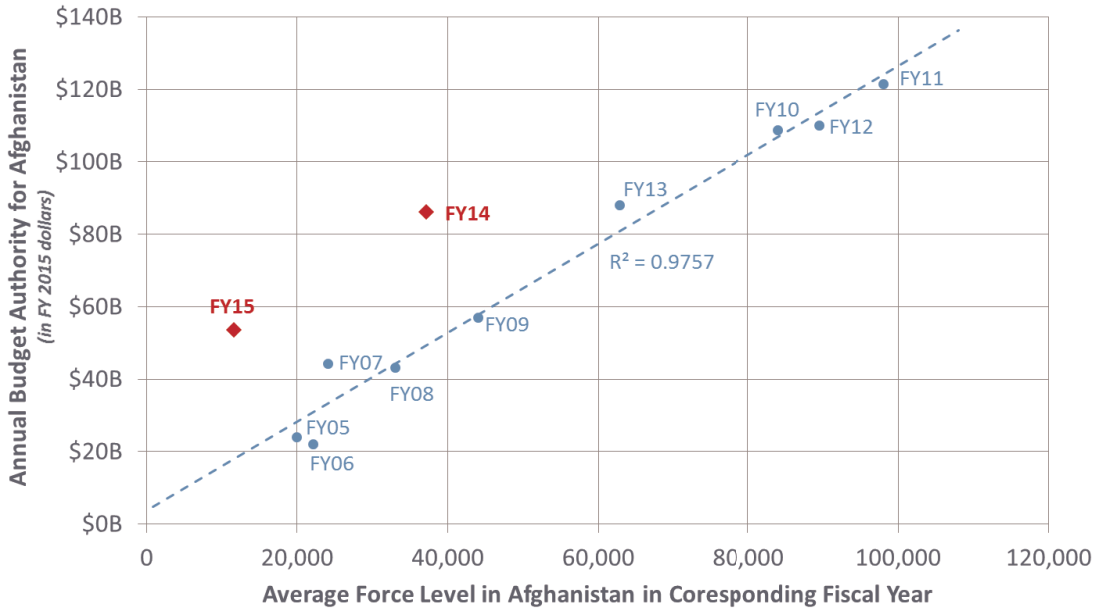
[4] House Budget Committee, *Summary of the Bipartisan Budget Act of 2013* (Washington, DC: House Budget Committee, December 10, 2013), accessed on August 3, 2014 at: http://budget.house.gov/uploadedfiles/bba2013summary.pdf.

[5] Office of the Under Secretary of Defense (Comptroller), *United States Department of Defense Fiscal Year 2015 Budget Amendment Overview: Overseas Contingency Operations* (Washington, DC: DoD, June 2014), p. 1.

[6] Ibid., p. 2.

Some have attributed the rise in OCO costs on a per person basis in FY 2014 and FY 2015 to the repair and replacement of equipment (known as equipment reset) and transportation costs as forces return from Afghanistan. The funding shown for all other years in Figure 2, however, also includes funding for equipment reset and the costs of transporting troops and their equipment to and from Afghanistan. Moreover, the funding in previous years includes the procurement of new equipment needed for Afghanistan and the construction of new bases and facilities throughout Afghanistan. The linear relationship observed between funding and troop levels from FY 2005 to FY 2013 held true when large numbers of troops and equipment were being transported into Afghanistan for the surge, when mine-resistant ambush-protected (MRAP) vehicles were being procured in large quantities, and when many bases were being built and expanded throughout Afghanistan. While there are surely costs associated with bringing troops and equipment back from Afghanistan and dismantling, cleaning up, and handing over bases to the Afghan government, there is no reason to expect that these costs will be significantly higher than the costs incurred in previous years to build these bases and transport the same troops and equipment to Afghanistan. The cost of bringing equipment back from Afghanistan should arguably be lower than transporting it there, because not all of the equipment is returning. The Army estimates that some $5 billion worth of equipment will be sold or destroyed rather than transported back to the United States.[7]

FIGURE 2: FUNDING FOR AGHANISTAN VERSUS TROOP LEVELS



The apparent rise in the cost per troop in Afghanistan for FY 2014 and FY 2015 can be attributed to a number of factors. First, Congress moved some $10.2 billion of funding from the base DoD budget to the OCO budget during the FY 2014 appropriations process.[8] Because the OCO budget is not subject to the BCA budget caps, moving this funding to the OCO budget allows appropriators to fund programs and activities without having to make offsetting cuts in the base budget. Appropriators may

[7] Daniel Wasserbly, "Billions worth of US Army kit to remain in Afghanistan after withdrawal," *IHS Jane's Defence Weekly*, July 23, 2014, accessed on July 25, 2014 at: http://www.janes.com/article/41128/billions-worth-of-us-army-kit-to-remain-in-afghanistan-after-withdrawal.

[8] DoD, *FY 2015 DoD Overseas Contingency Operations (OCO) Budget Amendment,* PowerPoint Briefing (Washington, DC: DoD, June 27, 2014), slide 6.

do the same thing again in FY 2015, which would increase the OCO budget above the requested level. Congressional movement of money from the base to OCO budget, however, can only account for less than one-third of the increased cost per troop in FY 2014 and none of the increased cost in the FY 2015 request, since Congress has not yet enacted appropriations for this year.

Viewing OCO funding by major activities, as shown in Table 2, provides additional insight into how the OCO request is being used. Several items are included in DoD's request for Afghanistan that are not directly connected to U.S. forces operating in Afghanistan. This includes Army and Marine Corps end strength funding for basic pay and allowances that troops would receive even if they were not deployed. It also includes classified funding that DoD lists as not being related to operations in Afghanistan. With these costs removed, FY 2015 funding for Afghanistan is $47.3 billion, still some $30 billion above the trend line in Figure 2.

One reason for the increased cost per troop is that some types of OCO funding would not be expected to vary with the level of U.S. forces in Afghanistan. For example, the FY 2015 OCO request includes $4.1 billion in the Afghan Security Forces Fund, a modest reduction (13 percent) from the FY 2014 level of funding. The level of funding required for Afghan forces should depend more on the number of Afghan forces than the number of U.S. forces deployed to Afghanistan. Funding for non-DoD and classified activities, such as intelligence support, might also not scale linearly with the level of U.S. forces, because a minimal level of effort may be needed as long as any troops remain. Reductions in other areas, such as Joint Improvised Explosive Devices (IED) Defeat, Commander's Emergency Response Program, and Task Force for Business Stability Operations, may also vary somewhat independently of troop levels.

TABLE 2: OCO FUNDING BY MAJOR ACTIVITIES (IN THOUSANDS OF DOLLARS)

Major Activities	FY13 Enacted	FY14 Enacted	FY15 Requested
U.S. Forces Operating in Afghanistan	$27,647,591	$26,171,296	$10,982,895
Other CENTCOM Operations (Outside Afghanistan)	$22,817,619	$19,812,673	$17,948,036
Non-DoD and Classified	$4,433,838	$3,725,378	$2,744,149
Joint IED Defeat	$1,622,614	$879,225	$379,000
Afghan Security Forces Fund	$5,124,167	$4,726,720	$4,109,333
Afghan Infrastructure Fund	$325,000	$199,000	$0
Commander's Emergency Response Program	$200,000	$30,000	$15,000
Task Force for Business Stability Operations	$179,000	$121,300	$5,000
Coalition Support	$2,030,000	$1,707,000	$1,660,000
Unexploded Ordnance Removal	$0	$0	$250,000
Military Construction	$150,768	$0	$0
Cancellation of Prior Year Funding	($2,010,820)	$0	($117,000)
Equipment Procurement and Reset	$9,906,208	$8,357,677	$9,245,098
Army End Strength	$4,844,890	$4,094,382	$2,053,979
Marine Corps End Strength	$1,004,739	$568,714	$295,372
Non-war classified / Congressional Base to OCO	$6,982,634	$14,129,318	$3,817,221
Total Afghanistan Funding	***$85,258,248***	***$84,522,683***	***$53,388,083***
Iraq-Related Expenses	$1,968,263	$821,936	$260,675
Counterterrorism Partnerships Fund	$0	$0	$4,000,000
European Reassurance Initiative	$0	$0	$925,000
Total Non-Afghanistan Funding	***$1,968,263***	***$821,936***	***$5,185,675***
Grand Total	***$87,226,511***	***$85,344,619***	***$58,573,758***

However, two items in Table 2 stand out as potentially belonging in the Department's base budget. The first is "In-Theater Support," which DoD defines as funding for "critical combat and other support for personnel in Afghanistan but from units and forces operating outside Afghanistan." In-theater support funding falls by 9 percent from FY 2014 to FY 2015, while the number of troops falls by 69 percent, making In-Theater Support costs nearly double the cost of U.S forces operating in Afghanistan. DoD's description of this activity acknowledges that some of it is unrelated to Afghanistan, noting that "this category also includes funding to support other operations conducted outside Afghanistan such as OEF-Horn of Africa and OEF-Philippines" and "other important missions" in Central Command.[9] It does not, however, indicate how much of the $18.1 billion requested is for these other missions or what these operations include. Routine presence and peacetime operations, whether in Central Command or in other theaters, have traditionally been funded through DoD's base budget.

Funding requested for equipment reset may also include items that would normally be funded in the base budget. While it is reasonable to expect that reset funding would not decline as quickly as force levels, since some equipment cannot be repaired or replaced until forces return to their home station, it is hard to explain the 5 percent increase requested for FY 2015. Equipment reset has been funded consistently in previous years, and it has generally declined as force levels have declined, as occurred in FY 2014. DoD does not specify how all of the $9.2 billion requested for equipment procurement and reset will be spent. This activity could include funding for equipment that would have been replaced or depot maintenance that would have been performed regardless of operations in Afghanistan and thus should be funded in the base budget.

To be clear, the Department's request for OCO funding in excess of what appears to be legitimately needed for Afghanistan does not suggest waste or abuse. Rather, this funding would be used for legitimate military purposes, just not for Afghanistan.

Unfunded Priorities and Opportunity, Growth, and Security Initiative

In addition to the base and OCO budgets, the DoD also submitted two other requests, which are not included in the defense budget totals used in this analysis. At the request of Congress, the Services each submitted unfunded priority lists, which include items not part of the budget request because they are a lower priority and do not fit within the funding ceiling set for the Department. The Services' unfunded priority lists total $36 billion for FY 2015, roughly equal to the amount DoD was forced to cut from the FY 2015 projection included in last year's FYDP.[10] The administration also submitted a proposal for additional discretionary funding known as the Opportunity, Growth, and Security Initiative (OGSI). OGSI includes a total of $56 billion in spending, $26.4 billion of which is for the DoD.[11]

The two requests are not additive due to many overlaps between what is included in each. For example, the Army includes additional Apache, Blackhawk, and Chinook helicopters in both its unfunded priority and OGSI requests; the Navy includes funding for additional P-8As and military

[9] Office of the Under Secretary of Defense (Comptroller), *United States Department of Defense Fiscal Year 2015 Budget Amendment Overview: Overseas Contingency Operations*, p. 4.

[10] Secretary Chuck Hagel, *Fiscal Year 2015 Unfunded Requirements List* (Washington, DC: DoD, April 1, 2014), accessed on July 15, 2014 at: http://armedservices.house.gov/index.cfm/files/serve?File_id=5D75284D-1353-4FED-ACBC-E9F69BD8E562.

[11] Office of the Under Secretary of Defense (Comptroller), *Opportunity, Growth, and Security Initiative Fiscal Year 2015* (Washington, DC: DoD, March 2014) p. 1.

construction in both; and the Air Force includes funding for additional F-35s and C-130Js in both. One of the more notable differences between the two sets of requests is that the Navy includes a $2.1 billion request for 22 additional E/A-18G Growler aircraft in its unfunded requirements list, but these aircraft are not included in the OGSI request. The Navy also provides a paragraph explaining the utility of these aircraft—something it does not do for other unfunded priorities in the list—potentially indicating a difference of opinion between military and civilian leaders. The unfunded priority lists were developed by the Service chiefs and submitted directly to Congress, while the OGSI request was submitted through the administration.

FIGURE 3: COMPARISON OF UNFUNDED PRIORITY AND OGSI REQUESTS

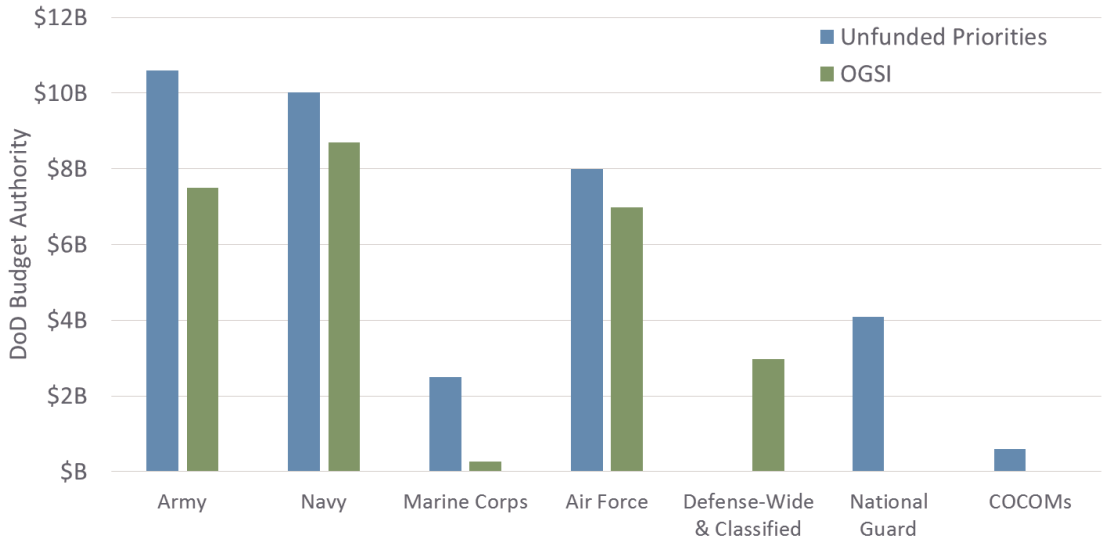
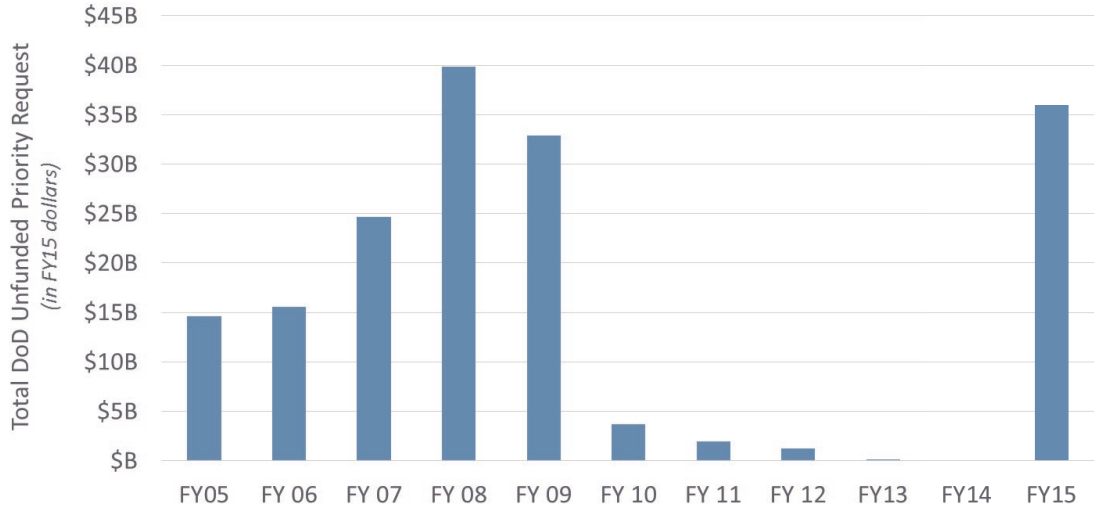


FIGURE 4: TRENDS IN UNFUNDED PRIORITY REQUESTS



While OGSI appears to be a one-time initiative submitted by the administration as an alternative to the BCA budget caps agreed to for FY 2015, Congress requests the unfunded priority lists each year.

Sometimes referred to as "wish lists," the unfunded priorities are used by Congress for consideration during their markup of the budget. As shown in Figure 4, the total amount of unfunded priorities submitted by the Services grew significantly in the late 2000s, rising from $15 billion in FY 2005 to a peak of $40 billion in FY 2008. In the FY 2010 budget process, Secretary Gates required the Services to present their unfunded priorities to him for review before submitting them to Congress. Unfunded priorities for that year fell by an order of magnitude to just $3.7 billion, and they remained at a relatively low level through FY 2014. The unfunded priorities in FY 2015 have rebounded to a level near the previous peak.

Defense-Related Funding Outside the DoD Budget

As shown in Table 1, more than one-third of total defense-related funding is outside the DoD budget. This funding supports a variety of activities, from nuclear weapons research to the GI Bill and veterans medical care. Of the $286 billion in non-DoD defense-related funding in the FY 2015 request, $258 billion is used to provide benefits, services, and tax exemptions for current and former military personnel.

Atomic Energy and Other Defense-Related Activities

The FY 2015 budget request includes $19.3 billion for atomic energy defense activities, primarily through the Department of Energy (DoE). The DoE funding is used for weapons activities ($8.3 billion), defense environmental cleanup ($5.3 billion), nuclear non-proliferation programs ($1.6 billion), naval nuclear reactors ($1.4 billion), and the DoE occupational illness compensation fund ($1.2 billion).

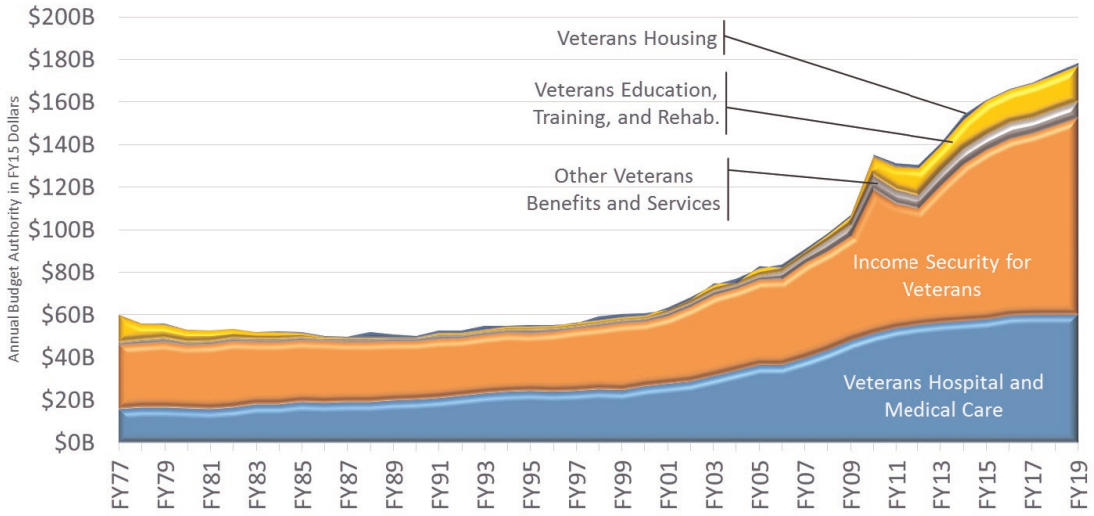
An additional $8.3 billion is included for defense-related activities in other agencies. More than half of this amount, $4.9 billion, is directed for defense-related activities in the Federal Bureau of Investigation (FBI). It also, among other things, provides $1.6 billion for the Department of Homeland Security—specifically to the U.S. Coast Guard, Federal Emergency Management Agency (FEMA), and the National Protection and Programs Directorate—and provides $0.5 billion to the Intelligence Community Management Account.

Veterans Benefits and Services

A total of $161 billion is included for veterans benefits and services, primarily through the Department of Veterans Affairs. This is a 4.7 percent real increase over the amount enacted in FY 2014.[12] With this budget request, spending on veterans benefits and services will have increased by 52 percent in real terms (or 7.2 percent real annual growth) under the Obama administration, making it one of the fastest-growing areas in the federal budget. The administration projects continued growth through FY 2019 at a real annual rate of 2.5 percent, as shown in Figure 5.

[12] This does not include the additional VA funding enacted by Congress in H.R. 3230.

FIGURE 5: FUNDING FOR VETERANS BENEFITS AND SERVICES



As the budget is increasing, however, the number of veterans is falling. The number of living veterans fell from 22.7 million in 2011 to 21.6 million in 2014 and is projected to drop to 19.3 million by 2021 as the number of surviving World War II, Korean war, and Vietnam war veterans continues to decline.[13] Despite the decline in the number of veterans, the total cost of veterans benefits and services is increasing due to several factors. The number of veterans enrolled in the healthcare system is increasing with 6.7 million unique patients anticipated for 2015—only 11 percent of whom will be veterans of Iraq and Afghanistan.[14] Congress and the administration have also expanded and enhanced veterans benefits in recent years; this includes the ability to transfer GI Bill educational benefits to dependents and expanded enrollment to cover additional moderate-income veterans. The VA is also attempting to work through a backlog of disability compensation and pension claims, which reached a high in 2012 with 66 percent of claims waiting more than 125 days. The backlog has been reduced to 50 percent in 2014, and the budget request projects no backlog by the end of FY 2015.[15]

Unfunded Liabilities

Payments to military retirees are made from the Military Retirement Fund held by the Treasury. Each year since FY 1985, DoD has made payments into this fund to cover the expected future retirement costs of personnel currently serving in the military. Since no such payments were made prior to FY 1985, the fund began with an unfunded liability of $529 billion to cover the expected future cost of people who had earned retirement benefits prior to FY 1985. Congress directed that the Treasury make annual payments to cover any unfunded liability, and the initial unfunded liability was amortized over sixty years. In 1996, the Board of Actuaries determined that the amortization period should be shortened to fifty years to avoid having a negative balance in the fund for several years, which increased the annual Treasury payments into the fund. Congress also made several changes to military retirement benefits, such as the partial repeal of REDUX in 2000, which created a larger

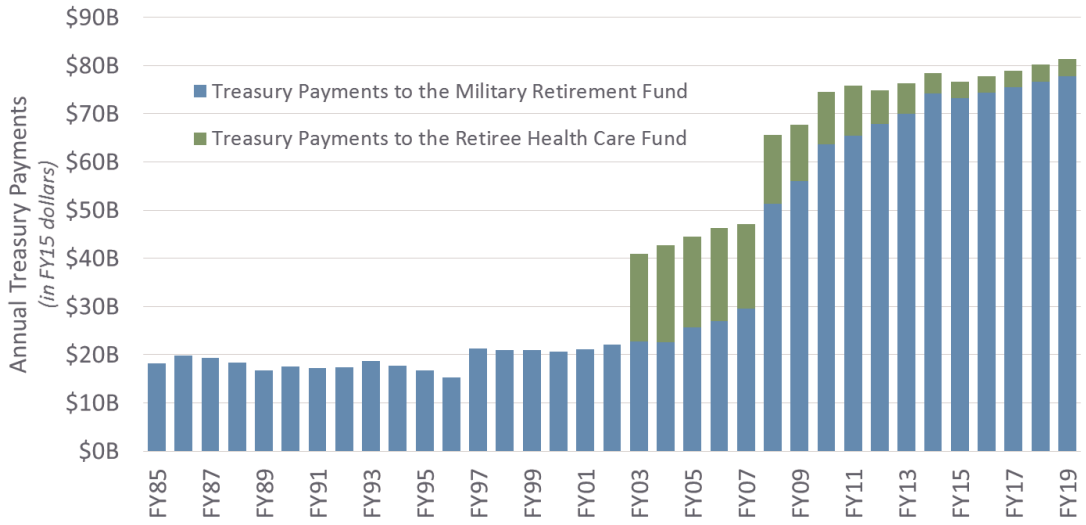
[13] Department of Veterans Affairs, *Annual Budget Submission* (Washington, DC: GPO, 2014), p. EXSUM-21, available at: http://www.va.gov/budget/products.asp.

[14] Ibid., p. Highlights-24.

[15] Ibid., p. EXSUM-12.

unfunded liability.[16] The Board of Actuaries shortened the amortization period again in 2007 to forty-two years in order to ensure that payments would cover the interest on the unfunded liability each year.[17] As a result of these changes, the annual Treasury payment for the unfunded liability in the Military Retirement Fund has grown to more than $73 billion in FY 2015 and is projected to continue growing at a real annual rate of 1.5 percent through FY 2019.

FIGURE 6: TREASURY PAYEMENTS TO COVER UNFUNDED LIABILITIES



In 2001, Congress created a new benefit known as TRICARE for Life that provides health care benefits to military retirees eligible for Medicare. Because the benefit was made retroactive to cover retirees that served prior to its enactment, this fund also began with an unfunded liability. As of September 30, 2012, the unfunded liability in this account was $173 billion, which is amortized over forty-five years.[18] The annual Treasury payment to cover this unfunded liability is $3.4 billion, down from a high of $20 billion in FY 2004. The annual Treasury payments for TRICARE for Life are projected to remain at roughly the same level in future years, provided Congress does not substantially alter the benefit from what is proposed in the DoD budget. Figure 6 shows the annual Treasury payments for both the military retirement and TRICARE for Life unfunded liabilities in the budget request.

Tax Exemptions

In addition to regular spending, the federal budget also includes tax expenditures, which are lost revenue to the Treasury due to exemptions and exceptions in the tax code. Military personnel, for example, do not pay federal taxes on allowances for housing and subsistence or any pay when deployed in a qualifying combat zone. Veterans benefits also receive special treatment in the tax code with exemptions for disability compensation, pensions, and GI bill educational benefits. Tax

[16] The REDUX retirement system decreased retirement pay from 50 percent to 40 percent for twenty years of service, among other changes, for service members who entered the military on or after August 1, 1986.

[17] DoD Office of the Actuary, *Valuation of the Military Retirement System: September 30, 2012* (Washington, DC: DoD, April 2014) pp. 24–25.

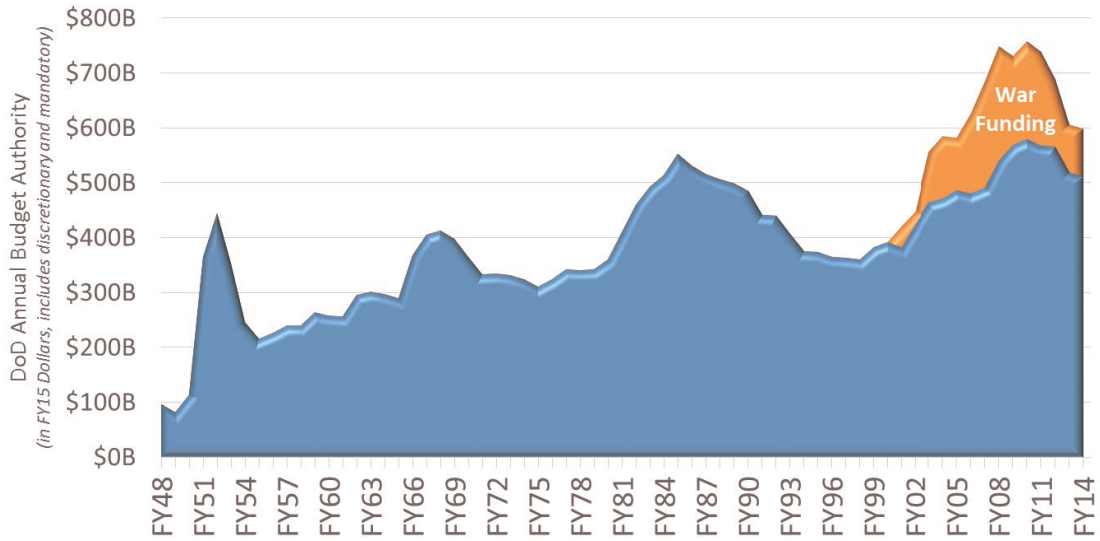
[18] DoD Office of the Actuary, *Valuation of the Medicare-Eligible Retiree Health Care Fund: September 30, 2012* (Washington, DC: DoD, February 2014) pp. 1–2.

expenditures for military personnel and veterans benefits total $13.2 billion and $7.1 billion, respectively, for FY 2015.

Historical Perspectives

Three metrics are commonly used to understand current levels of defense spending in a historical context—defense spending in inflation-adjusted dollars, defense spending as a percentage of gross domestic product (GDP), and defense spending as a percentage of the overall federal budget. Each metric serves a different purpose and provides different insights into the current level of defense spending.

FIGURE 7: DOD BUDGET ADJUSTED FOR INFLATION



Adjusting for inflation (using the GDP price index), the base DoD budget grew 61 percent from its most recent low in FY 1998 to its most recent high in FY 2010—higher than the previous peak in FY 1985 of $552 billion in FY 2015 dollars. Since FY 2010, however, the base defense budget has fallen by 12 percent in real terms through FY 2014. When war funding is included, the total DoD budget has fallen by 21 percent since FY 2010. The drop in FY 2013 alone, including base and OCO funding, was 12 percent, making it the largest single year percentage decline in the DoD budget since FY 1955. The FY 2015 request would reduce the base budget by an additional 1.7 percent, returning to roughly the same level of funding (in inflation adjusted dollars) as in FY 2007 and the average level of funding during the Reagan administration.

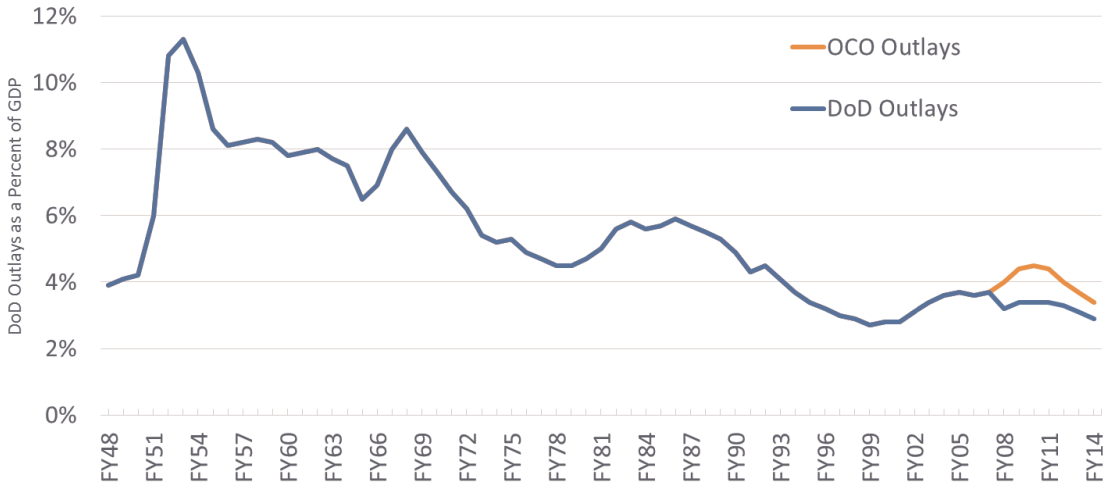
DoD spending as a percent of GDP, however, shows a markedly different trend.[19] The base DoD outlays for FY 2014 are 2.9 percent of GDP, or 3.4 percent if OCO funding is included. In comparison, the average since the end of World War II has been roughly 5.5 percent of GDP overall, or 5.0 percent in peacetime.[20] The FY 2015 request would fund base DoD spending at 2.7 percent of GDP, roughly the same level as FY 1999. If the BCA budget caps remain in place, the DoD budget

[19] DoD spending as a percent of GDP is expressed using outlays rather than budget authority to reflect when spending actually occurs in the economy rather than when it is appropriated.

[20] The peacetime average includes FY 1948–49, FY 1954–64, and FY 1976 to present excluding OCO funding. DoD does not separate war-related funding for FY 2001–2007 in its GDP figures.

will drop to below 2.5 percent of GDP by FY 2019, the lowest level, using this metric, since the end of World War II.

FIGURE 8: DOD OUTLAYS AS A PERCENT OF GDP



The apparent discrepancy between the DoD budget being at a relatively high level in inflation-adjusted dollars but not as percent of GDP is due to the different rates of growth in the defense budget and the overall economy. In periods when GDP grew faster than the defense budget, defense spending as a percent of GDP declined even though the defense budget grew. Defense spending as a percent of GDP does not indicate the direction or magnitude of change in the defense budget. Rather, defense spending expressed as a percent of GDP is useful to understand whether the level of spending is affordable by historical standards or how U.S. defense spending compares to the share of economic output other countries spend on defense.

A third metric to consider is the defense budget as a fraction of the overall federal budget. Since the end of World War II, defense spending has ranged between 15 and 57 percent of total federal spending, measured in outlays. Since FY 1976, defense spending has averaged 21 percent of total federal spending, or 20 percent excluding OCO funding.[21] In FY 2014, DoD's budget is 16.3 percent of federal spending, or 13.6 percent if OCO funding is excluded. This compares to 23 percent for social security, 14 percent for Medicare, and 6 percent for net interest on the national debt, the other major components of the federal budget. In the coming years, however, the costs of Social Security, Medicare, and net interest are expected to grow faster than the defense budget, making the defense budget a relatively smaller share of the budget over time. According to the administration's projections in the FY 2015 request, net interest on the debt will exceed base DoD discretionary outlays in FY 2019—the first time this will have happened in modern history.

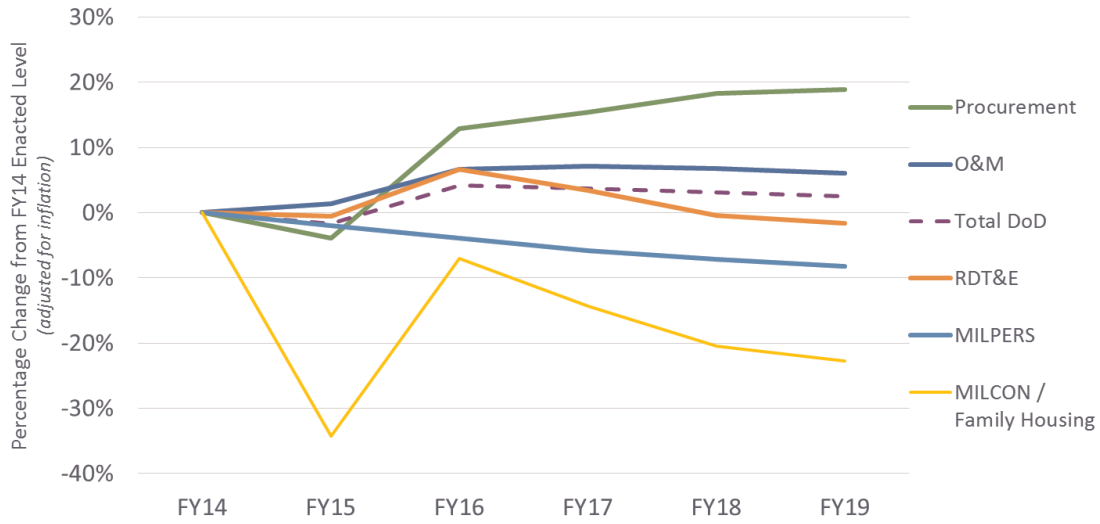
Together, these three metrics indicate that while defense spending is at a relatively high absolute level by historical standards, it is affordable given the size of the U.S. economy, and is shrinking as a portion of overall federal spending. This chapter examined defense spending in the context of the overall federal budget; the following chapter explores trends in DoD's FY 2015 base budget and the five-year projection included with it.

[21] Office of the Under Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 2015*, Green Book (Washington, DC: DoD, April 2014), Table 7-7, available at: http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/FY15_Green_Book.pdf.

TRENDS IN DOD'S BASE BUDGET AND FYDP

While the overall level of funding in the base DoD budget for FY 2015 is roughly the same as currently enacted, there are significant shifts in how funding is allocated. Operation and maintenance (O&M) is the only title in the base budget that receives a real increase in FY 2015 relative to what was enacted for FY 2014. As shown in Figure 9, the budget requests a real increase of 1.3 percent in O&M funding and projects an additional increase of 5.2 percent in FY 2016 before leveling out through FY 2019. Military personnel (MILPERS) funding falls by 2.0 percent in FY 2015 and continues declining at a rate of 1.6 percent annually through the FYDP due to the compensation reform proposals included with the request and planned reductions in end strength.

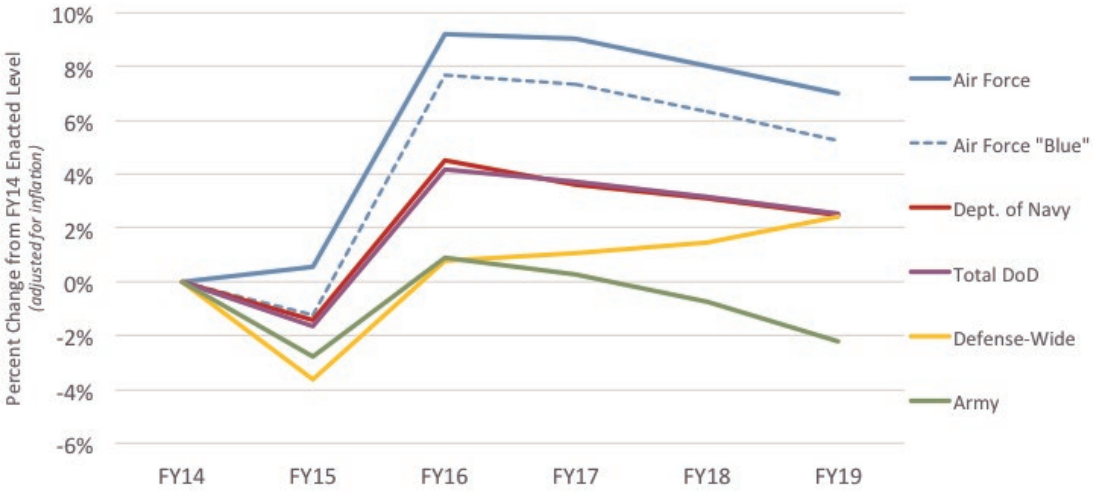
FIGURE 9: CHANGE IN BUDGET BY TITLE FROM THE FY 2014 ENACTED LEVEL



The procurement and research, development, test, and evaluation (RDT&E) accounts decline in FY 2015 by 3.9 percent and 0.5 percent, then increase by 17 percent and 7 percent, respectively, in FY 2016. RDT&E is projected to return to roughly its current level by FY 2019. Procurement funding, in contrast, is projected to continue growing to nearly 20 percent above its current level by FY 2019. Funding for military construction (MILCON) and family housing drops sharply in FY 2015 before recovering somewhat in FY 2016, then declines steadily over the remainder of the FYDP. Each of the major accounts is explored in more detail later in this chapter.

The budget request also shifts how funding is allocated among the Services. The Army's budget falls by 2.8 percent in real terms in FY 2015 before increasing by 3.8 percent in FY 2016 and falling gradually over the rest of the FYDP. The Department of the Navy's budget, which includes the Marine Corps, tracks closely with the overall DoD budget and falls by 1.4 percent in FY 2015 before rebounding by 4.5 percent in FY 2016. Defense-wide accounts not associated with any of the Services are cut the deepest in FY 2015 (3.8 percent) but recover and continue growing over the rest of the FYDP.

FIGURE 10: CHANGE IN BUDGET BY SERVICE FROM FY 2014 ENACTED LEVEL



The Air Force is the only Service to receive a real increase (0.6 percent) in FY 2015 with a much larger increase (8.6 percent) planned for FY 2016. However, the Air Force budget includes both a "blue" portion that directly funds Air Force programs and activities and a "non-blue" portion that funds classified activities that pass through the Air Force to other agencies. When the pass-through is excluded, the "blue" portion of the Air Force budget, shown in the dashed blue line in Figure 10, declines by 1.2 percent in FY 2015 and then rises by 9.0 percent in FY 2016. At the end of the FYDP, the Services' shares of the defense budget will have declined from 24.2 to 23.1 percent for the Army, remained even for the Navy and defense-wide accounts at 29.3 percent and 19.6 percent, respectively, and increased from 26.8 to 28.0 percent for the Air Force (or 21.7 percent to 22.3 percent for the Air Force "blue" budget).[22] If the FYDP holds true, the Army's share of the budget would be its smallest since FY 1959, while the defense-wide funding share would be near its highest level since the end of World War II.

Differences between the FY 2015 Budget and 2014 QDR

The 2014 Quadrennial Defense Review (QDR) was delivered in parallel with the FY 2015 budget request. The force described in the QDR, however, differs in several ways from force budgeted in the request. The QDR states that the Army will be reduced to 440,000–450,000 in active end strength and 530,000 in the Guard and Reserve; the Marine Corps will halt end strength reductions at 182,000; and the Navy will maintain eleven aircraft carriers in the fleet. However, the budget only funds Army

[22] For data on the Air Force's "non-blue" budget see: United States Air Force, *Fiscal Year 2015 Budget Overview* (Washington, DC: DoD, February 2014), p. 7.

active end strength at 420,000 and Guard and Reserve end strength at 500,000 by FY 2019, funds Marine Corps end strength at 175,000 by FY 2017, and does not fully fund the refueling and overhaul of the USS George Washington aircraft carrier, which would leave the Navy with ten carriers.[23]

The QDR says these lower force levels would only be necessary if DoD is forced to adhere to the Budget Control Act caps. As noted previously, the FY 2015 FYDP is $116 billion higher than the Budget Control Act caps, and the QDR suggests this additional money is being used in the budget to maintain the higher force levels it says are necessary. *This is not the case.* The budget does not use the $116 billion above the budget caps to fund the higher force levels. The Department would need roughly $20 billion in additional funds for the higher force levels described in the QDR—making it roughly $136 billion over the budget caps—or it would have to find offsetting cuts elsewhere in the President's budget request.

In his explanation of this apparent discrepancy between the QDR and the budget, the DoD Comptroller, Bob Hale, noted that the decisions on Army and Marine Corps end strength and completing the carrier refueling do not have to be made immediately. As a risk reduction measure, the Department has chosen to put itself on a trajectory toward these lower numbers in case Congress does not raise the budget caps for FY 2016 and beyond.[24] But the consequence of these decisions is that the budget request does not actually fund the force levels advertised in the QDR.

Personnel

Personnel costs are just over half ($258 billion) of the DoD base budget in FY 2015. This includes $183 billion for pay and benefits of 1,308,600 active military personnel and 820,800 Guard and Reserve personnel as well as $75 billion for pay and benefits of 782,000 full-time equivalent civilian employees.[25] It does not include the $258 billion in additional military personnel-related costs outside the DoD budget, such as veterans benefits and services, tax exemptions, and unfunded liabilities in the retirement funds detailed in Chapter 1.

The largest components of military personnel-related costs in DoD's budget, shown in Figure 11, are basic pay for active service members ($52 billion), the Defense Health Program ($32 billion), and allowances for housing and subsistence ($28 billion). Non-cash and deferred compensation, such as healthcare, retirement, and in-kind benefits, are nearly half of the total compensation costs for active duty military personnel. In comparison, non-cash and deferred compensation account for only 20 percent of total compensation costs in the private sector, meaning DoD's compensation system is weighted much more heavily toward healthcare and retirement benefits.[26]

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[23] See: DoD, *Quadrennial Defense Review 2014* (Washington, DC: DoD, March 2014), p. 40 and DoD, *Estimated Impacts of Sequestration-Level Funding* (Washington, DC: DoD, April 2014), pp. 3-1 to 3-3.

[24] DoD, "Department of Defense Briefing on the Fiscal Year 2015 Department of Defense Budget and the 2014 Quadrennial Defense Review in the Pentagon Briefing Room," news transcript, March 4, 2014, accessed on July 25, 2014 at:http://www.defense.gov/Transcripts/Transcript.aspx?TranscriptID=5384.

[25] These figures do not include contractors or other support personnel. See: Office of the Under Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 2015*, p. 43, 256.

[26] Bureau of Labor Statistics, "Employer Costs for Employee Compensation," news release, June 11, 2014, accessed on August 25, 2014 at: http://www.bls.gov/news.release/ecec.nr0.htm.

FIGURE 11: DOD'S SHARE OF MILITARY COMPENSATION COSTS

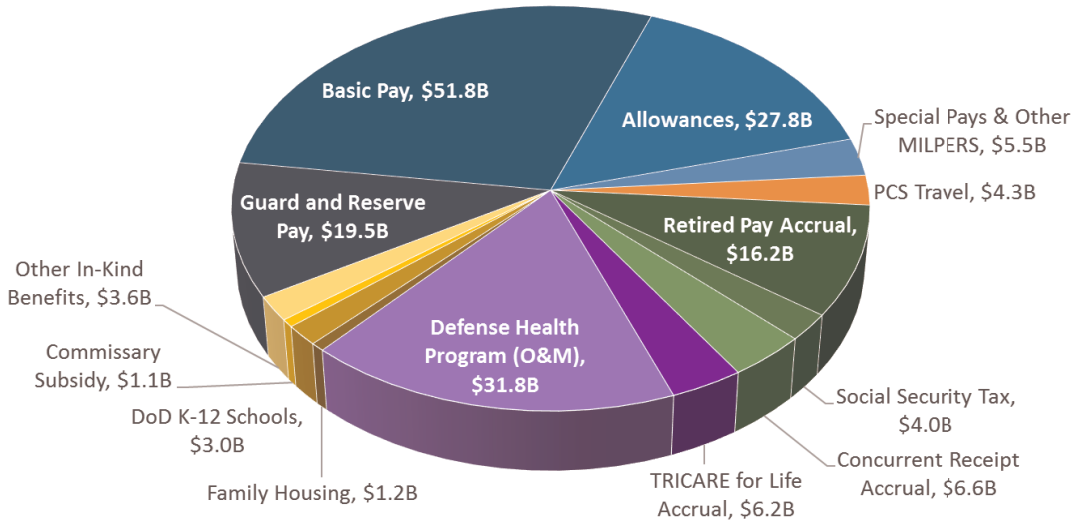
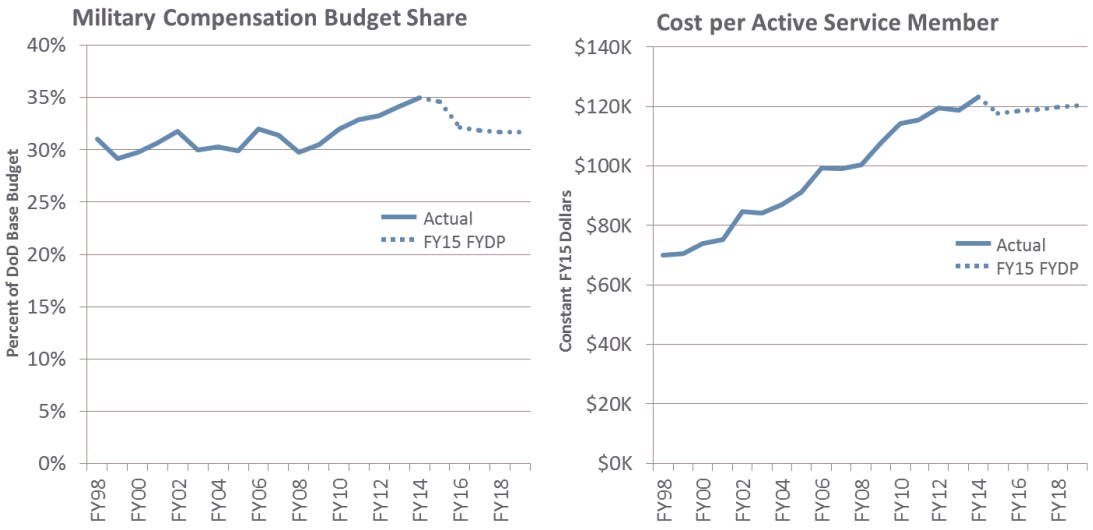


FIGURE 12: MILITARY COMPENSATION BUDGET SHARE AND COST PER ACTIVE SERVICE MEMBER



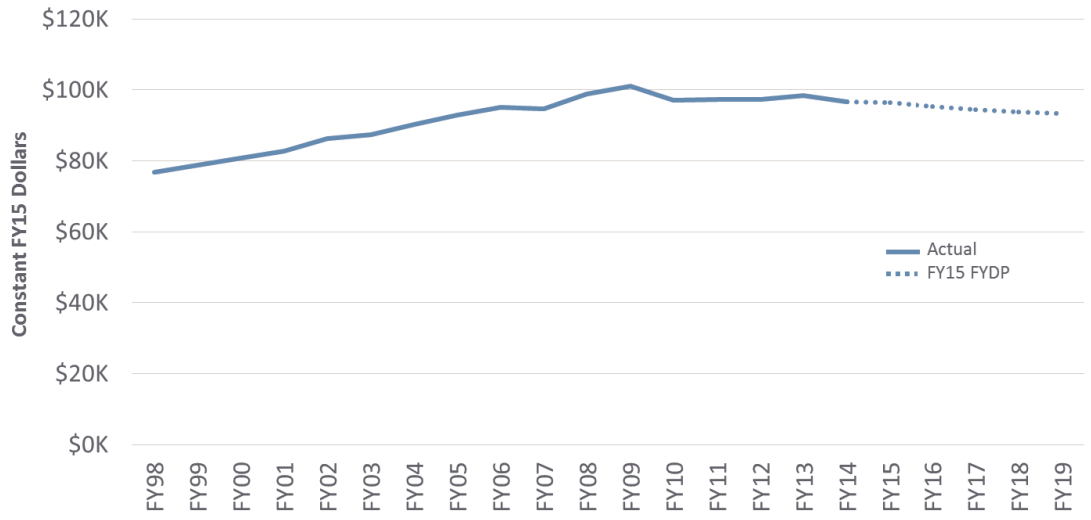
As shown in Figure 12, military compensation costs (not including the in-kind benefits shown in Figure 11) have hovered near one-third of the budget for many years. Viewing military personnel costs as a percent of the budget, however, obscures the fact that personnel costs have risen significantly. The base DoD budget grew by 61 percent in real terms from the previous low in FY 1998 to the high in FY 2010, and military personnel costs grew roughly in proportion. The size of the force, however, did not grow in proportion to the budget, increasing by less than 2 percent. On a per person basis, the cost of active military personnel grew by 63 percent during the upward phase of this budget cycle. Since the budget peaked in FY 2010, costs have continued growing, bringing the total growth in the cost per active service member to 76 percent from FY 1998 to FY 2014 (all figures

adjusted for inflation using the GDP price index). A more detailed explanation of how the cost per service member is calculated is included in Appendix 2.

The FY 2015 FYDP aims to arrest this trend in two ways. First, it proposes several reforms to the military compensation system that would slow the growth in the cost per service member. It proposes a smaller pay raise than would normally be afforded by following the employment cost index (e.g., a 1 percent raise in FY 2015 rather than 1.8 percent). The budget also slows the rate of growth in the basic allowance for housing and reduces funding for the commissary system by $1 billion annually. Perhaps the most significant change proposed is a consolidation of TRICARE into a single plan, which includes gradual increases in out of pocket expenses for military retirees and dependents. The FYDP assumes roughly $31 billion in savings over the next five years from these changes to military compensation. If Congress rejects some or all of these proposals, DoD will have to find offsetting reductions in other areas, which would likely involve further reductions in force structure, personnel, and modernization programs. Moreover, military compensation as a share of the budget would rise well above the FYDP projections.

Personnel costs also decline as a share of the budget due to reductions in the size of the force. The Services plan to cut active component military personnel by nearly 100,000 (7 percent) and reserve component by 63,000 (8 percent) by FY 2019. Most of the reductions come from the Army, which plans to cut personnel by 70,000 in the active component and 52,000 in the reserve component between FY 2015 and FY 2019.

FIGURE 13: DOD CIVILIAN COST PER PERSON



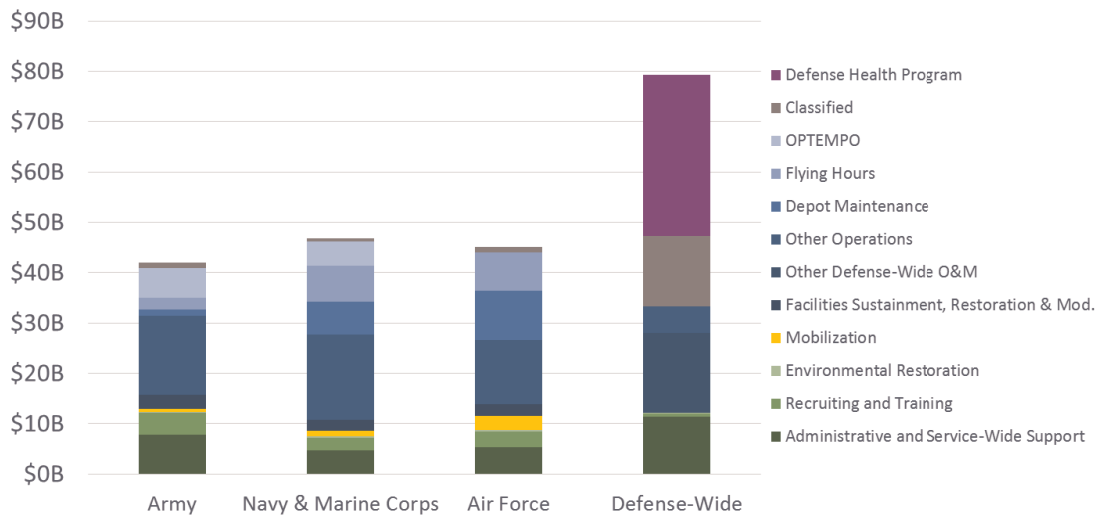
DoD has also made efforts to control civilian personnel costs, which are primarily funded through the operation and maintenance budget. Just as the cost per active service member grew during the build-up, the cost per DoD civilian also grew, albeit more modestly. As shown in Figure 13, the cost per DoD civilian grew 26 percent in real terms from FY 1998 to FY 2010, compared to the 63 percent growth for military personnel over the same period. Civilians received lower pay raises than military personnel in 2002, 2003, and 2004, and civilians did not receive the same expansion in benefits as military personnel. DoD civilian costs have leveled off since FY 2010, due in part to a three-year pay

freeze and reductions in civil service retirement benefits.[27] In the FY 2015 FYDP, DoD proposes the same pay raise reduction for civilians as military personnel. It projects that the cost per civilian will decline by 3.5 percent in real terms by FY 2019. DoD also plans to reduce the size of the civilian workforce by 31,000 full-time equivalents (4 percent) by FY 2019, which is a smaller reduction than planned for military personnel over the same period.

Operation and Maintenance

The base budget request includes $199 billion in funding for operation and maintenance, a real increase of 0.3 percent from the level enacted in the FY 2014 base budget. The largest share of O&M funding is for defense-wide activities, which includes $32 billion for the Defense Health Program (discussed in the previous section) and $14 billion for classified programs, shown in Figure 14. Defense-wide administrative and service-wide activities fund the various defense agencies, such as the Defense Contract Management Agency, Defense Information Systems Agency, and the DoD Education Activity for K-12 schools. The majority of each of the Services' O&M budgets is for operating forces (shown in shades of blue), which funds core readiness activities such as training, peacetime operations, and equipment maintenance. Overall base budget funding for operating forces is up 1.6 percent compared to FY 2014, with the largest increases in ship and air operations.

FIGURE 14: OPERATION AND MAINTENANCE FUNDING IN THE FY 2015 REQUEST



Despite this increase in O&M funding for operating forces, the Services report that readiness inputs remain underfunded in the FY 2015 request relative to targeted levels. For example, Army Operational Tempo (OPTEMPO) and flying hours are funded at 87 percent of requirements. Depot maintenance is funded at 74 percent of requirements for the Army, 80 percent for the Navy and Marine Corps, and 78 percent for the Air Force over the FYDP.[28] Reduced funding for depot

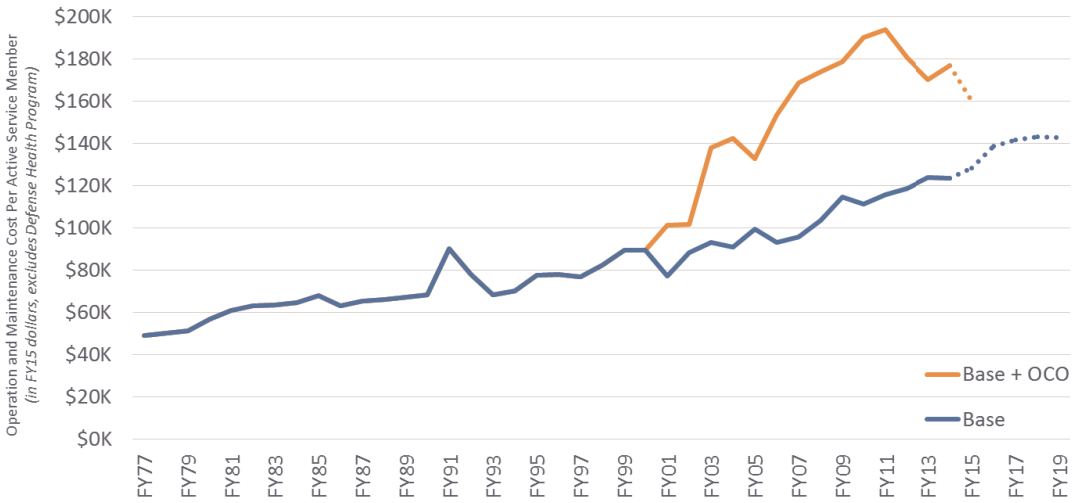
[27] Employee contributions to their retirement plan increased for new employees due to the Middle Class Tax Relief and Job Creation Act of 2012 and the Bipartisan Budget Act of 2013, thus reducing the value of the benefit to employees and the cost to the government. The savings from these changes will continue to increase as more new employees enter the civilian workforce.

[28] DoD, *Estimated Impacts of Sequestration-Level Funding*, pp. 5-1 to 5-5.

maintenance, for example, means that less equipment can be serviced or repaired each year, causing a backlog of equipment awaiting maintenance in future years.

However, the fact that the budget funds readiness inputs like OPTEMPO, flying hours, and maintenance below the Services' stated requirements does not necessarily mean readiness will decline proportionately. The requirements could be too high or too low, and many other factors play a role in readiness, such as the level of unit manning and the skill levels of personnel. To better understand the effects of changes in readiness funding on the actual readiness of forces, DoD first needs to establish and begin reporting quantifiable performance metrics for forces, ideally based on the mission essential tasks assigned to them. Fighter squadrons, for example, could report data on average bomb miss distances and successful air-to-air missile launches in training exercises. Armed with measures of readiness outputs, the Services could then use controlled experiments to test current assumptions about the resource levels required to achieve the desired level of readiness.[29]

FIGURE 15: OPERATION AND MAINTENANCE PER SERVICE MEMBER



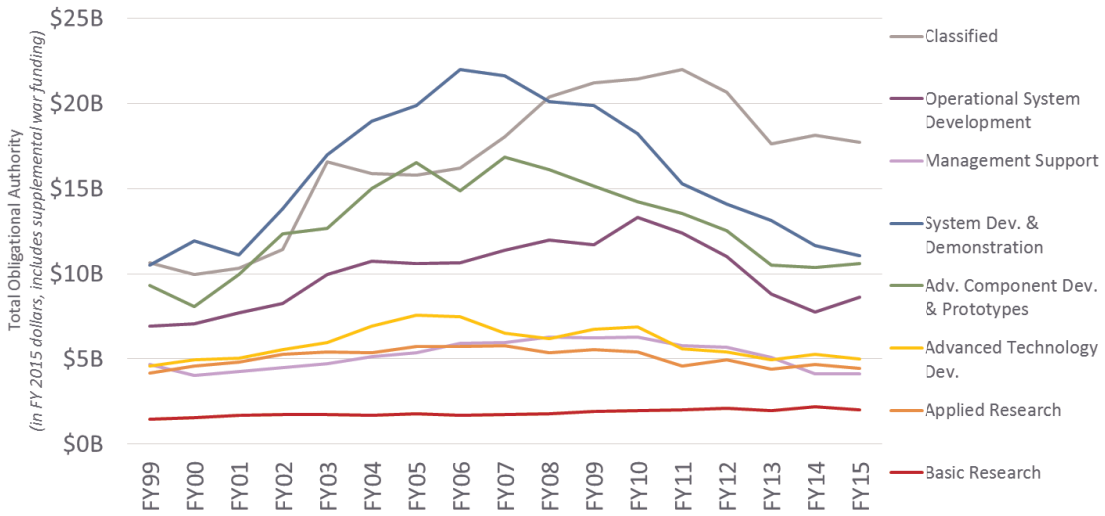
When normalized for the size of the force, the base budget level of O&M funding per active service member in the FY 2015 FYDP is roughly consistent with historical trends, as shown in Figure 15. The exception is war-related O&M costs for Iraq and Afghanistan, which trended higher than previous conflicts. Iraq and Afghanistan were the first major, protracted conflicts the United States fought with an all-volunteer force, and O&M costs were higher in part due to an increased use of contractors (paid with O&M funds) to offset demands for military personnel. When normalized for the size of the force and excluding the Defense Health Program, base budget O&M costs on a per service member basis have grown steadily since the end of World War II at an annual rate of 2.6 percent above inflation. Over the past twenty years, the growth has trended higher at a rate of 2.9 percent annually. The FY 2015 FYDP, shown in dashed lines, projects that O&M per service member will grow at a real annual rate of 3.0 percent through FY 2019, in line with recent trends.

[29] For further discussion of readiness metrics and the use of controlled experiments to understand the relationship between readiness inputs and outputs, see: Todd Harrison, "Rethinking Readiness," *Strategic Studies Quarterly*, 8, No.3, Fall 2014, pp. 38–68.

Acquisitions

Acquisition funding totals $154 billion in the FY 2015 base budget, which includes $63.5 billion for RDT&E and $90.4 billion for procurement. RDT&E funding is generally used to pay for basic and applied research, technology and component development, and system development. Procurement funding generally supports the purchase of weapon systems that have already been developed and are in production. At times, however, RDT&E funding is used to procure early production articles for testing purposes that are in fact fully operational systems, and procurement funds can be used to pay for further development and testing of systems.

FIGURE 16: RDT&E FUNDING BY BUDGET ACTIVITY

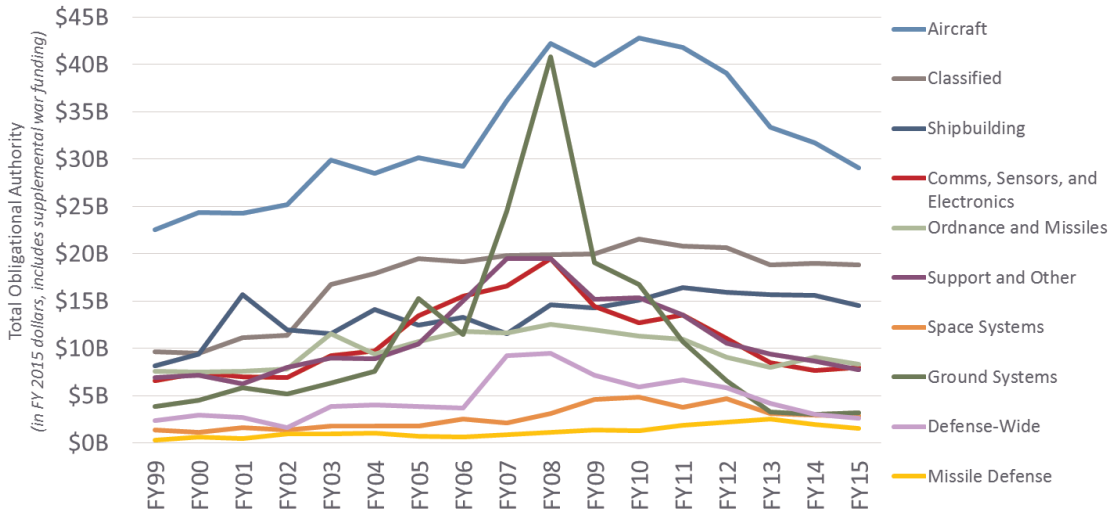


The FY 2015 request of $63.5 billion for RDT&E is slightly less, in real terms, than the level appropriated in FY 2014, and 28 percent less than the peak RDT&E funding reached in FY 2009. OCO funding has been less than 1 percent of overall RDT&E since FY 2001, and only $80 million is included for RDT&E in the FY 2015 OCO request. While the RDT&E budget has generally followed the overall budget cycle for DoD, growing during the buildup and declining during the drawdown, not all components of RDT&E have experienced the same level of cyclic behavior. As shown in Figure 16, science and technology funding, generally defined as the budget activities for basic research, applied research, and advanced technology development, has tended to be less cyclic than funding for the later stages of development. Science and technology funding supports early research activities to develop new technologies and is often not connected to any specific program. Funding for later development activities, such as advanced component development as well as prototypes and system development and demonstration, is generally tied to a particular acquisition program and thus is tightly coupled to overall acquisition funding. For example, funding for system development and demonstration (shown in blue) more than doubled from FY 1999 to FY 2006, and it is projected to return to roughly the level it was in FY 1999 by FY 2015. Likewise, advanced component development and prototype funding (shown in green) increased by 81 percent from its FY 1999 level, but has returned to near its FY 1999 level.

Two areas of RDT&E funding have trended upward throughout the overall budget cycle: classified R&D and basic research. While both areas are cut slightly in FY 2015 (by 2 percent and 8 percent,

respectively), they remain well above their pre-buildup levels. Classified R&D funding is 66 percent higher and basic research 38 percent higher in real terms than in FY 1999.

FIGURE 17: PROCUREMENT FUNDING BY SYSTEM TYPE

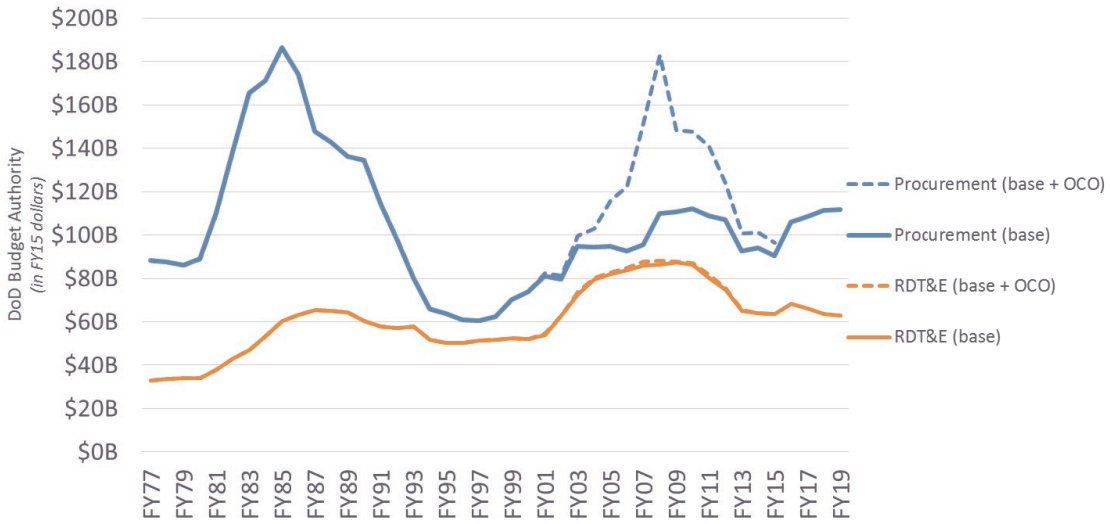


Procurement funding is down by 4 percent to $90.4 billion in the base budget request for FY 2015, the lowest level of procurement funding in real terms since FY 2002. Like RDT&E, procurement funding follows the overall DoD budget cycle, having peaked in FY 2010 when the overall base budget peaked. Unlike RDT&E, however, war-related supplemental funding has been a significant portion of procurement funding during this budget cycle, making up 40 percent of total procurement funding in FY 2008. The FY 2015 OCO request includes an additional $6.0 billion in procurement funding, bringing the total procurement request to $96.4 billion.

Similar to RDT&E, not all types of procurement funding have grown and declined at the same rate. Funding for ground systems procurement grew ten-fold, due in part to MRAP vehicles procured using supplemental funding. Ground vehicle funding declined precipitously in recent years, and it is the only category of procurement funding to fall below its FY 1999 level. Aircraft procurement funding peaked in FY 2010, due in part to war-related procurements of MQ-1 Predator and MQ-9 Reaper unmanned aircraft. Despite a downward trajectory in recent years, aircraft procurement funding remains 29 percent higher than in FY 1999. Funding for shipbuilding, space systems, and classified procurements have been less cyclic, growing by a net of 78 percent, 102 percent, and 94 percent, respectively, since FY 1999.

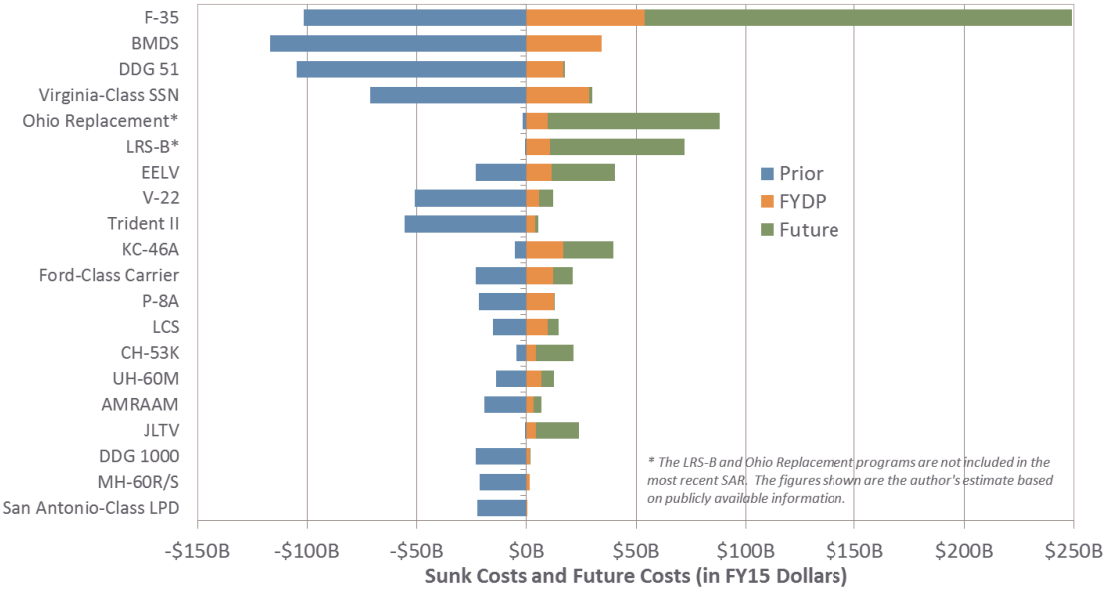
Overall acquisition funding in this budget cycle fared differently than in the previous budget cycle of the 1980s. Procurement funding in the base budget peaked at a much lower level in this budget cycle as compared to the 1980s, while RDT&E peaked at a substantially higher level, shown in Figure 18. This is in part due to the different natures of the two buildups. The 1980s buildup was driven largely by the procurement of large quantities of weapon systems, many of which remain in service today. In contrast, the base budget growth in the 2000s was driven in part by Secretary Rumsfeld's transformation initiative, which started a number of new programs in the research and development phase. Many of these programs were subsequently terminated or truncated as the budget began to decline, leaving parts of the force structure still in need of recapitalization.

FIGURE 18: TRENDS IN PROCUREMENT AND RDT&E FUNDING



The FY 2015 FYDP projects that procurement funding will continue growing through FY 2019 while RDT&E will remain near its current level. Looking beyond the FYDP, DoD has roughly eighty major acquisition programs currently in progress, most of which have funding planned well beyond the FYDP. Figure 19 lists the top twenty major acquisition programs in DoD's latest Selected Acquisition Report (SAR) and author estimates for the Long-Range Strike–Bomber (LRS-B) and the Ohio-Class Replacement programs, both of which are in progress but not reported in the SAR.

FIGURE 19: TOP 20 ACQUISITION PROGRAMS BY TOTAL COST



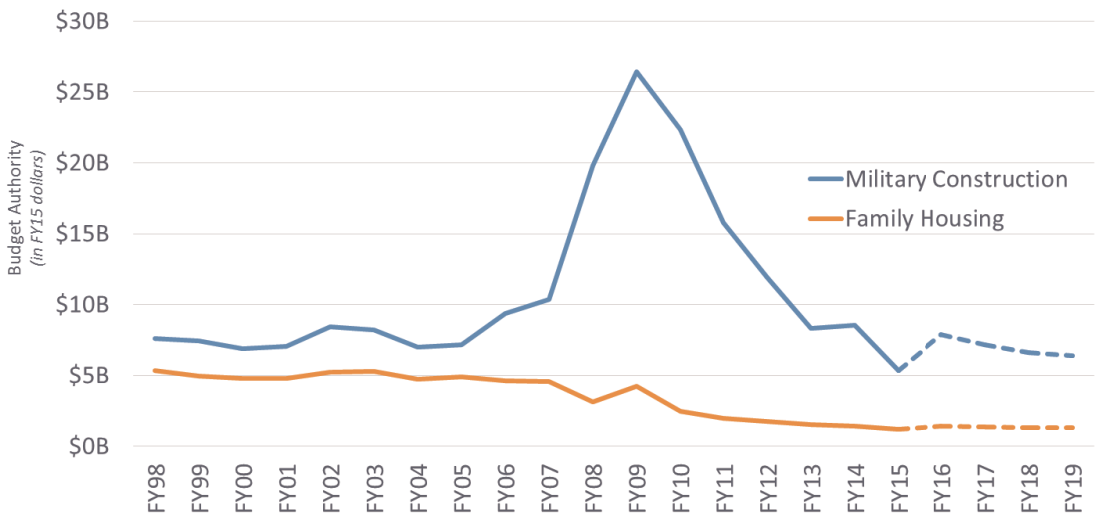
The largest acquisition program in DoD's portfolio is the F-35 Joint Strike Fighter. The total cost of this program, in FY 2015 dollars, is projected to be $351 billion for 2,443 aircraft and engines. (The cost commonly quoted for this program, $399 billion, is in nominal dollars and thus does not adjust for the effects of inflation over the four decades this program spans.) The second largest program is Ballistic Missile Defense Systems (BMDS), with a total cost of $151 billion in the SAR, which does

not include any cost projections beyond the FYDP and thus is well below the likely total program cost. BMDS includes a number of missile defense programs, such as the Ground-based Midcourse Defense system (GMD), Aegis Ballistic Missile Defense, Terminal High Altitude Area Defense (THAAD), and others. The largest programs, in terms of future costs, (behind the F-35) are the Ohio-Class Replacement submarine and the LRS-B, with total projected costs of roughly $90 billion and $73 billion, respectively. A more detailed description of each major acquisition program and its projected costs are included in a separate CSBA volume entitled *Weapon Systems Factbook*.

Military Construction and Family Housing

The budget requests $5.3 billion for military construction and $1.2 billion for family housing in FY 2015. The combined total of these accounts is 35 percent lower in real terms than the level enacted in FY 2014. While these accounts do not typically follow the overall budget cycle, MILCON grew significantly beginning in FY 2006 due to the 2005 Base Realignment and Closure (BRAC). The 2005 BRAC has been the most expensive BRAC to date, costing more than all previous BRACs combined.[30] Now that the BRAC has been completed, MILCON funding has returned to slightly below the level experienced prior to the BRAC. Funding for family housing, however, has fallen by nearly 75 percent from its pre-BRAC level. This is a result of a shift in housing policy, with more service members now expected to live off-base in private housing paid with the basic allowance for housing (BAH) provided through the MILPERS title of the budget.

FIGURE 20: MILITARY CONSTRUCTION AND FAMILY HOUSING FUNDING



The FY 2015 FYDP, shown in dashed lines in Figure 20, projects that both MILCON and family housing funding will rebound in FY 2016, increasing by 48 percent and 17 percent respectively. The FYDP projection also assumes Congress will authorize another round of base closures, beginning in FY 2017. Base closures require an upfront investment of resources to achieve long-term savings. With the exception of the 2005 BRAC, a BRAC's implementation costs are largely offset by the savings achieved during the implementation period. BRACs result in net savings over the long-term because

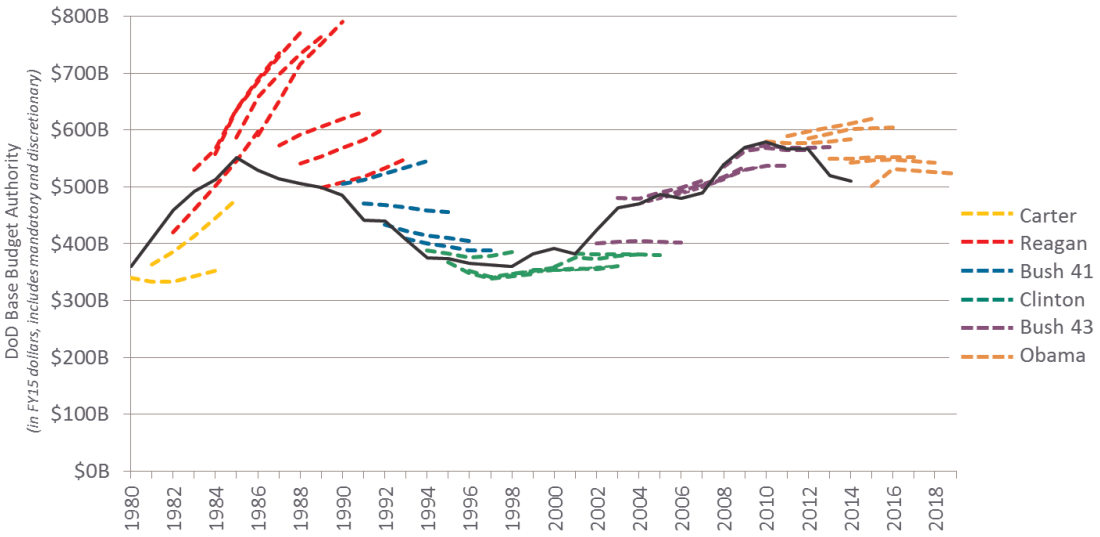
[30] DoD, *DoD Base Realignment and Closure Executive Summary Program Year 2015* (Washington, DC: DoD, March 2014), available at: http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/budget_justification/pdfs/05_BRAC/FINAL_FY15_BRAC_Summary_Book.pdf.

the savings achieved during the implementation period continue to accrue while the costs do not. The FYDP includes $590 million in FY 2018 and $1,054 million in FY 2019 to begin another BRAC.[31] If approved, additional funding would likely be required in FY 2020 to FY 2022, and net savings could begin accruing in FY 2023 and beyond.

FYDP as a Lagging Indicator

The future force levels, programs, and activities shown in each of the previous sections are dependent on DoD receiving the funding it expects to be made available in future years as well as the policy changes it requested, such as compensation reductions and retirements of legacy systems. However, history suggests that DoD is unlikely to receive the level of funding it is projecting in future years, particularly during a time when the budget is declining, nor is Congress likely to approve all the requested policy changes. As shown in Figure 21, the FYDP projection submitted with each budget request (shown in colored dashed lines) has differed significantly in many years from the actual funding the Department received (shown in the solid black line). For the first five years of the last drawdown (FY 1986 to FY 1990), DoD submitted budget requests that projected growth while the budget was actually declining. It was not until the FY 1991 request, the second budget submitted by the George H. W. Bush administration, that DoD began planning for a downturn in spending, and even then it overestimated the resources it would have in future years.

FIGURE 21: FYDP PROJECTIONS VERSUS ACTUAL BUDGET AUTHORITY



The current drawdown appears to be following a similar pattern. As the budget started to decline in FY 2010, the Department submitted FYDPs for FY 2011 and FY 2012 that projected continued growth. The FY 2013 and FY 2014 FYDPs projected a relatively flat budget, albeit at a lower level. The FY 2015 FYDP starts at an even lower level, but grows substantially in FY 2016 to well above DoD's share of the budget caps currently in effect.

The FYDP is, at best, a lagging indicator for the defense budget. Rather than showing where the budget is likely to go in future years, it indicates what level of funding the Department is assuming and, more importantly, the degree to which the current program of record may be at risk because of these assumptions.

[31] Ibid., p. 8.

CONCLUSIONS

How much is enough? This is the perennial question that members of Congress, the military, and the public should ask with each defense budget request. The answer, of course, is not a number, but rather another more difficult question: enough for what? The level of defense spending needed depends on one's strategy, risk tolerance, and the roles and missions assigned to the military.

The FY 2015 budget does not appear to be sufficient to execute the defense program articulated in the 2014 QDR and 2012 DSG for several reasons. First, the budget request does not fund the force levels the QDR says are necessary. In particular, the budget does not fund Army and Marine Corps end strength and Navy aircraft carriers to the levels stated in the QDR. Assuming these force levels are needed to execute the strategy at an "acceptable" level of risk, the budget appears to be roughly $20 billion short over the FYDP.

The budget further assumes that OCO funding for Afghanistan can be used to offset some of costs typically funded in the base budget. The OCO budgets for FY 2014 and FY 2015 appear to be roughly $35 billion higher than required for operations in Afghanistan. DoD has not submitted a FYDP projection for OCO funding through FY 2019, so it is not possible to know precisely how much its future plans depend on being able to use OCO funding to cover other activities. Given recent trends, it is reasonable to assume that DoD may be counting on receiving an average of $10–20 billion in annual OCO funding for base budget activities, for a total of $50–100 billion over the FYDP.

The budget also assumes many savings that are unlikely to materialize in future years. So-called efficiency savings have been included in successive budget requests, now totaling hundreds of billions over the FYDP. The budget also assumes savings from the proposed changes to military compensation, totaling roughly $31 billion over the FYDP. These savings are effectively "spent" within the budget on programs, activities, and forces. If some portion of these savings does not materialize as anticipated, the defense program will be further under-resourced.

Acquisition programs funded in the budget are also likely to exceed their projected costs. Historically, major acquisition programs often exceed their initial cost estimates by 20 to 50 percent.[32] Because these programs are not budgeted for future cost overruns, the acquisition funding included in the budget is likely to be insufficient to execute all of the currently planned acquisition programs.

[32] Michael O'Hanlon, *The Science of War* (Princeton: Princeton University Press, 2009) p. 30.

Similarly, O&M funding has historically grown beyond DoD's FYDP projections. Thus, the level of O&M funding in the budget may also be insufficient to fund training, maintenance, and peacetime activities at the levels currently planned.

Perhaps the most important assumption in the FY 2015 request is that DoD will be allowed to exceed the BCA budget caps by $116 billion over the FYDP. While Congress has twice altered the budget caps since they were enacted, DoD's share of the budget caps for FY 2015 was only raised by roughly $6 billion from the original level. In the FYDP, DoD implicitly assumes Congress will raise the FY 2016 cap by $35 billion, effectively granting DoD a real increase in funding of 6 percent from the FY 2015 level. If Congress acts as it has in the recent past, it may again wait until the last possible moment to raise the FY 2016 budget caps, but only marginally, leaving the caps for subsequent years unchanged.

To execute the defense program and support the strategy and force levels detailed in the QDR and DSG, DoD could require $200–300 billion more over the FYDP than the BCA budget caps currently allow. The shortfall could be more or less depending on the success of DoD's efficiency initiatives, Congress' willingness to enact some of the proposed changes to military compensation, and the ability of DoD to continue using OCO funding to offset reductions in the base budget. If the budget caps are not raised by Congress, DoD will be forced to fund this shortfall by making additional cuts to force structure, personnel, acquisitions, and readiness beyond what is proposed in the request—meaning greater risk in executing the defense strategy.

Alternatively, DoD could adjust its strategy to fit within the budget constraints set by Congress. It could revisit the 2012 DSG and narrow its strategic objectives by shedding missions, developing innovative concepts to execute existing missions with fewer resources, accepting a greater degree of risk in some areas, or simply divesting some commitments. Over the past three years, CSBA has conducted a number of strategic choices exercises throughout the defense community challenging participants to develop a BCA-constrained strategy and defense program. Rather than simply cutting programs and forces to meet the budget constraints, most teams have used the cuts as a forcing function to rebalance DoD's portfolio of capabilities, protecting or increasing funding for high priority capabilities while divesting or accepting greater risk in low priority capabilities. While the strategies and associated priorities pursued by teams have differed, a common theme has been the need to make strategically informed investment and divestment decisions rather than just shrinking the size of the current force.

The Department appears to be caught between two approaches for addressing its strategy-resource mismatch. It has not budgeted enough to fully resource the defense program called for by its strategy nor has it revised its strategy and defense program to fit within the budget constraints set by Congress. Much like the chicken-or-the-egg question, it matters less whether the strategy or the budget comes first in the process and more that there is a process to reconcile mismatches between the two. Strategy should inform one's budget, and budget constraints should inform one's strategy. With an unlimited budget, the military could simply buy more of everything without regard for priorities. Yet resources are always constrained in one way or another, whether by industrial output, the number of personnel that can be recruited, or the politics of defense spending. Budget constraints drive the need for strategy to guide how resources are allocated, and strategy drives the justification for resources.

As the RAND strategist Bernard Brodie noted nearly six decades ago, no amount of defense spending can ensure one's absolute security. Rather, "the best we can hope to do is lessen our insecurity."[33] He went on to write, "Because our security needs are essentially limitless while our resources are definitely limited, the categories of items which go to make up our national military establishment inevitably compete intensely with one another for funds."[34] To better inform this competition for resources within the defense budget, DoD should either submit a budget that fully funds the strategy and clearly communicates the difference between the BCA budget caps and the needs of the strategy, or it should revise its defense strategy to fit within the resource constraints of the BCA and communicate the strategic risks and limitations this would impose. Without such a stark choice, it appears unlikely that Congress will remove the BCA budget caps or grant DoD the flexibility it needs to manage within the caps.

[33] Bernard Brodie, *Strategy in the Missile Age* (Santa Monica, CA: RAND, 1959), p. 365.

[34] Brodie, p. 364.

APPENDIX 1: AFGHANISTAN FUNDING AND TROOP LEVELS

	Average # of Troops Deployed in Afghanistan	**Budget Authority** *(in billions of then-year dollars)*	**Inflation Adjusted Budget Authority** *(in billions of FY15 dollars)*	**Inflation Adjusted Cost per Troop in Afghanistan** *(in millions of FY15 dollars)*
FY05	19,850	$20.0B	$24.0B	$1.21M
FY06	22,100	$19.0B	$22.1B	$1.00M
FY07	24,080	$39.2B	$44.4B	$1.84M
FY08	33,000	$39.0B	$43.3B	$1.31M
FY09	44,000	$52.0B	$57.0B	$1.30M
FY10	84,000	$100.0B	$108.7B	$1.29M
FY11	98,000	$114.0B	$121.6B	$1.24M
FY12	89,446	$105.0B	$110.0B	$1.23M
FY13	62,763	$85.3B	$88.0B	$1.40M
FY14	37,234	$84.5B	$86.0B	$2.31M
FY15	11,661	$53.4B	$53.4B	$4.58M

APPENDIX 2: COST PER ACTIVE SERVICE MEMBER

The average cost per active service member in Chapter 2 is calculated using the following formula:

$$Cost = \frac{(MILPERS\ Disc.) + (MILPERS\ Mand.) + (DHP) - (OCO\ MILPERS) - (Guard/Reserve\ MILPERS)}{\#\ Active\ Service\ Members}$$

MILPERS Disc. is the discretionary portion of military personnel accounts that must be appropriated annually by Congress. This is typically what DoD reports in its budget justification documents.

MILPERS Mand. is the additional mandatory funding in military personnel accounts that does not require an annual appropriation by Congress. This is primarily funding for the concurrent receipt benefit which allows service members to draw military retirement pay and a VA disability pension at the same time without a corresponding reduction in military retirement pay.

DHP is the Defense Health Program. It is the main source of funding for the military healthcare system for active duty troops, dependents, and retirees under the age of 65. It is funded through the operation and maintenance title of the budget and is therefore not included in the MILPERS accounts.

OCO MILPERS is the portion of military personnel funding enacted through supplemental appropriations for the wars in Iraq and Afghanistan. This funds the extra pay and benefits service members received for deployments, and it is subtracted from the numerator because these expenditures are temporary in nature and not part of core compensation.

Guard & Reserve MILPERS is the funding for pay and benefits of Guard and Reserve personnel. This is subtracted from the numerator because the calculation is for the average cost per active service members only.

# of Active Service Members is the total active end strength for the year, excluding the portion of end strength funded through the OCO budget (since OCO MILPERS is excluded from the numerator).

The starting point used is FY 1998, because this was the bottom of the last defense draw down and the point at which personnel costs began to grow significantly. If one uses a later starting point, the growth would be smaller. If one uses an earlier starting point the growth be larger.

The data can be found in the DoD Green Book,[35] M-1 budget justification,[36] and OMB's Budget Database.[37] The figures shown below are in budget authority rather than total obligational authority or outlays, although the results would only differ slightly using these other measures.

	FY 1998	FY 2014
Total MILPERS Discretionary	$69,822 M	$144,007 M
Total MILPERS Mandatory	$0 M	$6,337 M
Defense Health Program	$10,349 M	$33,181 M
Guard/Reserve MILPERS	$9,475 M	$19,843 M
OCO MILPERS	$0 M	$8,083 M
Active End-Strength in Base Budget	1,406 K	1,285 K
Cost per Active Service Member (then-year)	$50,282	$121,070
GDP Price Index (2015 base year)	0.7188	0.9831
Cost per Active Service Member (2015 dollars)	$69,955	$123,147
Growth from FY 1998 to FY 2014:		***76.0%***

The adjustment for inflation uses the GDP price index published by OMB in Historical Table 10.1. This measure of inflation is used because it is a broad measure of the change in prices in the overall economy. DoD's internal inflation measure for personnel costs tends to overstate inflation relative to the GDP price index because it counts pay raises as inflation even if the raise is well above the rate of inflation. In other words, DoD's inflation metric counts much of the growth in personnel costs as inflation rather than cost growth. While DoD's inflation metric is useful for planning future budgets, it is not useful for understanding how much personnel costs have grown above general inflation.

It is also worth noting the personnel costs that are not included in this calculation. This does not include in-kind benefits such as commissaries, DoD's K-12 schools, childcare, etc. It also does not include personnel-related costs paid outside of DoD's budget, such as the GI Bill and other veterans benefits and services, tax exemptions for military personnel, and Treasury payments to cover the unfunded liabilities in the military retirement and healthcare funds. The benefits funded outside of DoD's budget total some $258 billion in the FY 2015 budget request—more than the personnel costs within DoD's budget.

[35] Office of the Under Secretary of Defense (Comptroller), *National Defense Budget Estimates for FY 2015*.

[36] Office of the Under Secretary of Defense (Comptroller), *Military Personnel Programs (M-1)* (Washington, DC: DoD, March 2014), available at: http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2015/fy2015_m1.pdf.

[37] OMB, *Fiscal Year 2015 Historical Tables: Budget of the U.S. Government*, Table 10-1.

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